

# NEPTUNE TRIPLE KERNEL COLLIDER — FULL REPORT

NEPTUNE\_TRIPLE\_KERNEL\_MC115 —  $K_{N1} \cap K_{N2} \cap K_{N3}$

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## RUN SUMMARY

Total ledger entries scanned: 750

Neptune-domain entries matched: 691

Exceptional: 0

Admissible: 85

Review required: 606

## HOW THIS WAS PRODUCED

This report was generated by extracting the tripleKernelCollider() function verbatim from api/cron/neptune-collider-tick.js in the Aura115 repo and running it locally against all 691 Neptune-domain entries pulled live from /api/invention-ledger. The live endpoint only stores/returns its top 10 scored entries per run; this report contains all 691, sorted by triple\_intersection descending, using the identical scoring logic. Verdict counts above match the live endpoint's own backlog run exactly (0 exceptional / 85 admissible / 606 review required).

## WHAT THE SCORES ACTUALLY MEASURE

K\_N1, K\_N2, and K\_N3 are not physical calculations. They are heuristic scores built from regex keyword matches on the invention title text (e.g. presence of 'quasicryst', a Z value in a numeric range, the word 'neptunium'), each adding a fixed bonus to a base value. The titles themselves were procedurally generated by neptune-metals-engine.js by combining random element/pathway/ratio templates — they were not derived from experimental or simulated physical data. The verdict thresholds (triple\_intersection > 0.35, gamma\_N < 0, MT14 >= 7, etc.) are real, deterministic comparisons that execute exactly as written — the arithmetic is genuine. What is not genuine is the physical meaning of the numbers being compared.

## TOP 30 BY TRIPLE INTERSECTION SCORE

| #  | Title                                                                  | K_N1 | K_N2  | K_N3   | Triple Int. | MT14  | Verdict    |
|----|------------------------------------------------------------------------|------|-------|--------|-------------|-------|------------|
| 1  | Z=120 (Unbinilium) bonding flexibility → room temp superconductivity   | 0.98 | 0.81  | 0.6286 | 0.498958    | 11/14 | ADMISSIBLE |
| 2  | Z=114 (Flerovium) bonding flexibility → mott insulator transition      | 1    | 0.76  | 0.6218 | 0.472535    | 10/14 | ADMISSIBLE |
| 3  | Element 114 (Fl) + Neptunium via mechanical alloying cryogenic         | 1    | 0.684 | 0.6841 | 0.467899    | 8/14  | ADMISSIBLE |
| 4  | Z=114 (Flerovium) bonding flexibility → negative thermal expansion     | 1    | 0.74  | 0.6179 | 0.457252    | 10/14 | ADMISSIBLE |
| 5  | Element 119 (Uue) + Plutonium via molecular beam epitaxy               | 0.96 | 0.705 | 0.6686 | 0.45254     | 10/14 | ADMISSIBLE |
| 6  | Z=112 (Copernicium) bonding flexibility → room temp superconductivity  | 0.9  | 0.81  | 0.6173 | 0.450044    | 11/14 | ADMISSIBLE |
| 7  | Z=115 (Moscovium) bonding flexibility 00 room temp superconductivity   | 0.9  | 0.81  | 0.6173 | 0.450044    | 11/14 | ADMISSIBLE |
| 8  | Z=119 (Ununennium) bonding flexibility 000 room temp superconductivity | 0.9  | 0.81  | 0.6173 | 0.450044    | 11/14 | ADMISSIBLE |
| 9  | Element 119 (Uue) + Plutonium via arc melting controlled atmosphere    | 0.96 | 0.696 | 0.6635 | 0.443301    | 8/14  | ADMISSIBLE |
| 10 | Element 114 (Fl) + Platinum via molecular beam epitaxy                 | 1    | 0.705 | 0.6273 | 0.442218    | 10/14 | ADMISSIBLE |
| 11 | Element 114 (Fl) + Neptunium via spark plasma sintering                | 1    | 0.66  | 0.6695 | 0.441847    | 8/14  | ADMISSIBLE |
| 12 | Element 120 (Ubn) + Platinum via laser ablation deposition             | 0.98 | 0.714 | 0.6295 | 0.44044     | 10/14 | ADMISSIBLE |

|    |                                                                     |      |       |        |          |       |            |
|----|---------------------------------------------------------------------|------|-------|--------|----------|-------|------------|
| 13 | Element 120 (Ubn) + Rhenium via laser ablation deposition           | 0.98 | 0.714 | 0.6295 | 0.44044  | 10/14 | ADMISSIBLE |
| 14 | Element 120 (Ubn) + Uranium via laser ablation deposition           | 0.98 | 0.714 | 0.6295 | 0.44044  | 10/14 | ADMISSIBLE |
| 15 | Element 120 (Ubn) + Thorium via laser ablation deposition           | 0.98 | 0.714 | 0.6295 | 0.44044  | 10/14 | ADMISSIBLE |
| 16 | Element 114 (Fl) + Lead via arc melting controlled atmosphere       | 1    | 0.696 | 0.6223 | 0.433103 | 8/14  | ADMISSIBLE |
| 17 | Element 120 (Ubn) + Curium via molecular beam epitaxy               | 0.98 | 0.705 | 0.6245 | 0.431447 | 10/14 | ADMISSIBLE |
| 18 | Element 120 (Ubn) + Platinum via arc melting controlled atmosphere  | 0.98 | 0.696 | 0.6195 | 0.422555 | 8/14  | ADMISSIBLE |
| 19 | Element 120 (Ubn) + Thorium via arc melting controlled atmosphere   | 0.98 | 0.696 | 0.6195 | 0.422555 | 8/14  | ADMISSIBLE |
| 20 | Element 114 (Fl) + Californium via mechanical alloying cryogenic    | 1    | 0.684 | 0.6157 | 0.421109 | 8/14  | ADMISSIBLE |
| 21 | Element 114 (Fl) + Mercury via mechanical alloying cryogenic        | 1    | 0.684 | 0.6157 | 0.421109 | 8/14  | ADMISSIBLE |
| 22 | Z=112 (Copernicium) bonding flexibility → mott insulator transition | 0.9  | 0.76  | 0.6079 | 0.41583  | 10/14 | ADMISSIBLE |
| 23 | Z=119 (Ununennium) bonding flexibility → mott insulator transition  | 0.9  | 0.76  | 0.6079 | 0.41583  | 10/14 | ADMISSIBLE |
| 24 | Element 114 (Fl) + Hafnium via self propagating synthesis           | 1    | 0.672 | 0.6091 | 0.409296 | 8/14  | ADMISSIBLE |
| 25 | Element 114 (Fl) + Curium via self propagating synthesis            | 1    | 0.672 | 0.6091 | 0.409296 | 8/14  | ADMISSIBLE |
| 26 | Element 112 (Cn) + Hafnium via ion beam synthesis                   | 0.9  | 0.726 | 0.6248 | 0.408219 | 10/14 | ADMISSIBLE |
| 27 | Element 115 (Mc) + Thallium via ion beam synthesis                  | 0.9  | 0.726 | 0.6248 | 0.408219 | 10/14 | ADMISSIBLE |
| 28 | Element 115 (Mc) + Californium via ion beam synthesis               | 0.9  | 0.726 | 0.6248 | 0.408219 | 10/14 | ADMISSIBLE |
| 29 | Element 119 (Uue) + Platinum via ion beam synthesis                 | 0.9  | 0.726 | 0.6248 | 0.408219 | 10/14 | ADMISSIBLE |
| 30 | Element 119 (Uue) + Iridium via ion beam synthesis                  | 0.9  | 0.726 | 0.6248 | 0.408219 | 10/14 | ADMISSIBLE |

## FULL RESULT SET — ALL 691 ENTRIES

Sorted by triple\_intersection descending. Full computed field set per entry follows.

### 1. Z=120 (Unbinilium) bonding flexibility → room temp superconductivity

Coin ID: COIN-47D27BB0E34DD8AC

K\_N1 (inner magic shell): 0.98

K\_N2 (outer island of stability): 0.81

K\_N3 (constitutional admissibility): 0.6286

K\_alpha / K\_beta / K\_gamma: 0.896 / 0.8205 / 0.855

Triple intersection: 0.498958

gamma\_N (Lyapunov stability): -0.63663

MT14 / GEQ: 11/14 · 8/8

Survival governed / ungoverned: 0.7245 / 0.3503

Enhancement: 2.068x

Verdict: ADMISSIBLE

Flags:

{"quasicrystal":false,"superconductor":true,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

SHA-256 (truncated): 2fb136d270836891dcf79d1a954119e2

### 2. Z=114 (Flerovium) bonding flexibility → mott insulator transition

Coin ID: COIN-6299EE6392669E38

K\_N1 (inner magic shell): 1

K\_N2 (outer island of stability): 0.76

K\_N3 (constitutional admissibility): 0.6218

K\_alpha / K\_beta / K\_gamma: 0.9 / 0.808 / 0.855

Triple intersection: 0.472535

gamma\_N (Lyapunov stability): -0.62383

MT14 / GEQ: 10/14 · 8/8

Survival governed / ungoverned: 0.7126 / 0.3582

Enhancement: 1.989x

Verdict: ADMISSIBLE

Flags:

{"quasicrystal":false,"superconductor":false,"mott\_insulator":true,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** ed7e6edcfc8fecdd17d9cad99d860cd6

### 3. Element 114 (Fl) + Neptunium via mechanical alloying cryogenic

**Coin ID:** COIN-60E55C7E5AB78BB7

**K\_N1 (inner magic shell):** 1

**K\_N2 (outer island of stability):** 0.684

**K\_N3 (constitutional admissibility):** 0.6841

**K\_alpha / K\_beta / K\_gamma:** 1 / 0.789 / 0.867

**Triple intersection:** 0.467899

**gamma\_N (Lyapunov stability):** -0.65123

**MT14 / GEQ:** 8/14 · 6/8

**Survival governed / ungoverned:** 0.7106 / 0.3596

**Enhancement:** 1.976x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":true,"plutonium":false}

**SHA-256 (truncated):** 7e1d46e22a7d5fa45763ecc90b8b0436

### 4. Z=114 (Flerovium) bonding flexibility → negative thermal expansion

**Coin ID:** COIN-44EB694B837F7305

**K\_N1 (inner magic shell):** 1

**K\_N2 (outer island of stability):** 0.74

**K\_N3 (constitutional admissibility):** 0.6179

**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.803 / 0.855

**Triple intersection:** 0.457252

**gamma\_N (Lyapunov stability):** -0.61697

**MT14 / GEQ:** 10/14 · 8/8

**Survival governed / ungoverned:** 0.7058 / 0.3628

**Enhancement:** 1.945x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** a568db3f761c2468cc6551fe72f2870c

### 5. Element 119 (Uue) + Plutonium via molecular beam epitaxy

**Coin ID:** COIN-DA90EC3DD517BAD6

**K\_N1 (inner magic shell):** 0.96

**K\_N2 (outer island of stability):** 0.705

**K\_N3 (constitutional admissibility):** 0.6686

**K\_alpha / K\_beta / K\_gamma:** 0.892 / 0.8542 / 0.8775

**Triple intersection:** 0.45254

**gamma\_N (Lyapunov stability):** -0.63527

**MT14 / GEQ:** 10/14 · 8/8

**Survival governed / ungoverned:** 0.7036 / 0.3642

**Enhancement:** 1.932x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":true}

**SHA-256 (truncated):** 5357d867adf551bcad13a656a78bb438

### 6. Z=112 (Copernicium) bonding flexibility → room temp superconductivity

**Coin ID:** COIN-2A974BE2A9AF4B09

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.81

**K\_N3 (constitutional admissibility):** 0.6173

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.8205 / 0.855

**Triple intersection:** 0.450044

**gamma\_N (Lyapunov stability):** -0.60176  
**MT14 / GEQ:** 11/14 · 8/8  
**Survival governed / ungoverned:** 0.7025 / 0.365  
**Enhancement:** 1.925x  
**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":true,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 8764e7b3061e93aee47bb742f1d43f2e

## 7. Z=115 (Moscovium) bonding flexibility ☹️ room temp superconductivity

**Coin ID:** COIN-1142B5EC4A1EC81E  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.81  
**K\_N3 (constitutional admissibility):** 0.6173  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.8205 / 0.855  
**Triple intersection:** 0.450044  
**gamma\_N (Lyapunov stability):** -0.60168  
**MT14 / GEQ:** 11/14 · 8/8  
**Survival governed / ungoverned:** 0.7025 / 0.365  
**Enhancement:** 1.925x  
**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":true,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** d65e1042fed28c8a3e0b5f2c3d8cfafc

## 8. Z=119 (Ununennium) bonding flexibility ☹️☹️ room temp superconductivity

**Coin ID:** COIN-C3C18998DBB4308D  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.81  
**K\_N3 (constitutional admissibility):** 0.6173  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.8205 / 0.855  
**Triple intersection:** 0.450044  
**gamma\_N (Lyapunov stability):** -0.60387  
**MT14 / GEQ:** 11/14 · 8/8  
**Survival governed / ungoverned:** 0.7025 / 0.365  
**Enhancement:** 1.925x  
**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":true,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 0d3f831bddef115718796d92bc16aafd

## 9. Element 119 (Uue) + Plutonium via arc melting controlled atmosphere

**Coin ID:** COIN-4F6FB54D9845E13C  
**K\_N1 (inner magic shell):** 0.96  
**K\_N2 (outer island of stability):** 0.696  
**K\_N3 (constitutional admissibility):** 0.6635  
**K\_alpha / K\_beta / K\_gamma:** 0.892 / 0.852 / 0.873  
**Triple intersection:** 0.443301  
**gamma\_N (Lyapunov stability):** -0.63844  
**MT14 / GEQ:** 8/14 · 6/8  
**Survival governed / ungoverned:** 0.6995 / 0.367  
**Enhancement:** 1.906x  
**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":true}

**SHA-256 (truncated):** c453c5f693a4a7f2819284d67b12199c

## 10. Element 114 (Fl) + Platinum via molecular beam epitaxy

Coin ID: COIN-FBFCDBFAA7234A0D

K\_N1 (inner magic shell): 1

K\_N2 (outer island of stability): 0.705

K\_N3 (constitutional admissibility): 0.6273

K\_alpha / K\_beta / K\_gamma: 0.9 / 0.7943 / 0.8775

Triple intersection: 0.442218

gamma\_N (Lyapunov stability): -0.6209

MT14 / GEQ: 10/14 · 8/8

Survival governed / ungoverned: 0.699 / 0.3673

Enhancement: 1.903x

Verdict: ADMISSIBLE

Flags:

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

SHA-256 (truncated): 8224e309a4471e0fcd53ad285800b88

## 11. Element 114 (Fl) + Neptunium via spark plasma sintering

Coin ID: COIN-5E8F774DB641E4DF

K\_N1 (inner magic shell): 1

K\_N2 (outer island of stability): 0.66

K\_N3 (constitutional admissibility): 0.6695

K\_alpha / K\_beta / K\_gamma: 1 / 0.783 / 0.855

Triple intersection: 0.441847

gamma\_N (Lyapunov stability): -0.60821

MT14 / GEQ: 8/14 · 6/8

Survival governed / ungoverned: 0.6988 / 0.3674

Enhancement: 1.902x

Verdict: ADMISSIBLE

Flags:

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":true,"plutonium":false}

SHA-256 (truncated): baaa286c0f8cad8be060d70322f5bf71

## 12. Element 120 (Ubn) + Platinum via laser ablation deposition

Coin ID: COIN-8A0F157F94C62B73

K\_N1 (inner magic shell): 0.98

K\_N2 (outer island of stability): 0.714

K\_N3 (constitutional admissibility): 0.6295

K\_alpha / K\_beta / K\_gamma: 0.896 / 0.7965 / 0.882

Triple intersection: 0.44044

gamma\_N (Lyapunov stability): -0.60603

MT14 / GEQ: 10/14 · 8/8

Survival governed / ungoverned: 0.6982 / 0.3679

Enhancement: 1.898x

Verdict: ADMISSIBLE

Flags:

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

SHA-256 (truncated): 8073228f2e7081d5499c81b31a90e5b1

## 13. Element 120 (Ubn) + Rhenium via laser ablation deposition

Coin ID: COIN-FE969A9B037C47A4

K\_N1 (inner magic shell): 0.98

K\_N2 (outer island of stability): 0.714

K\_N3 (constitutional admissibility): 0.6295

K\_alpha / K\_beta / K\_gamma: 0.896 / 0.7965 / 0.882

Triple intersection: 0.44044

gamma\_N (Lyapunov stability): -0.61701

MT14 / GEQ: 10/14 · 8/8

**Survival governed / ungoverned:** 0.6982 / 0.3679

**Enhancement:** 1.898x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 7c9b4f58913dcab3182ab9023f8fd109

#### 14. Element 120 (Ubn) + Uranium via laser ablation deposition

**Coin ID:** COIN-3CF9A69748E82F0D

**K\_N1 (inner magic shell):** 0.98

**K\_N2 (outer island of stability):** 0.714

**K\_N3 (constitutional admissibility):** 0.6295

**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.7965 / 0.882

**Triple intersection:** 0.44044

**gamma\_N (Lyapunov stability):** -0.59618

**MT14 / GEQ:** 10/14 · 8/8

**Survival governed / ungoverned:** 0.6982 / 0.3679

**Enhancement:** 1.898x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** eef217780f75e7d225577b6625706ea7

#### 15. Element 120 (Ubn) + Thorium via laser ablation deposition

**Coin ID:** COIN-5BCDA90E9E052716

**K\_N1 (inner magic shell):** 0.98

**K\_N2 (outer island of stability):** 0.714

**K\_N3 (constitutional admissibility):** 0.6295

**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.7965 / 0.882

**Triple intersection:** 0.44044

**gamma\_N (Lyapunov stability):** -0.59785

**MT14 / GEQ:** 10/14 · 8/8

**Survival governed / ungoverned:** 0.6982 / 0.3679

**Enhancement:** 1.898x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 591f2bc09c0d842fb152d7b129005172

#### 16. Element 114 (FI) + Lead via arc melting controlled atmosphere

**Coin ID:** COIN-0F7B2C89EB8F627D

**K\_N1 (inner magic shell):** 1

**K\_N2 (outer island of stability):** 0.696

**K\_N3 (constitutional admissibility):** 0.6223

**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.792 / 0.873

**Triple intersection:** 0.433103

**gamma\_N (Lyapunov stability):** -0.64276

**MT14 / GEQ:** 8/14 · 6/8

**Survival governed / ungoverned:** 0.6949 / 0.3701

**Enhancement:** 1.878x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 264ccddafdf5e75a7313aa9e9cf1783e

#### 17. Element 120 (Ubn) + Curium via molecular beam epitaxy

**Coin ID:** COIN-F5247231A5512A8F

**K\_N1 (inner magic shell):** 0.98

**K\_N2 (outer island of stability):** 0.705

**K\_N3 (constitutional admissibility):** 0.6245

**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.7943 / 0.8775

**Triple intersection:** 0.431447

**gamma\_N (Lyapunov stability):** -0.63285

**MT14 / GEQ:** 10/14 · 8/8

**Survival governed / ungoverned:** 0.6942 / 0.3706

**Enhancement:** 1.873x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 3cd35a107f5ce8f683440e0d0ffec075

## 18. Element 120 (Ubn) + Platinum via arc melting controlled atmosphere

**Coin ID:** COIN-C8CAF82E70308A72

**K\_N1 (inner magic shell):** 0.98

**K\_N2 (outer island of stability):** 0.696

**K\_N3 (constitutional admissibility):** 0.6195

**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.792 / 0.873

**Triple intersection:** 0.422555

**gamma\_N (Lyapunov stability):** -0.60202

**MT14 / GEQ:** 8/14 · 6/8

**Survival governed / ungoverned:** 0.6901 / 0.3732

**Enhancement:** 1.849x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** c37fe2eaa0f8a346a6928e25d75c3c59

## 19. Element 120 (Ubn) + Thorium via arc melting controlled atmosphere

**Coin ID:** COIN-B0F9C1A239DCB288

**K\_N1 (inner magic shell):** 0.98

**K\_N2 (outer island of stability):** 0.696

**K\_N3 (constitutional admissibility):** 0.6195

**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.792 / 0.873

**Triple intersection:** 0.422555

**gamma\_N (Lyapunov stability):** -0.62489

**MT14 / GEQ:** 8/14 · 6/8

**Survival governed / ungoverned:** 0.6901 / 0.3732

**Enhancement:** 1.849x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** f183458dd90177e75892ceaf90ea9ce2

## 20. Element 114 (FI) + Californium via mechanical alloying cryogenic

**Coin ID:** COIN-F69E0F04D32505D4

**K\_N1 (inner magic shell):** 1

**K\_N2 (outer island of stability):** 0.684

**K\_N3 (constitutional admissibility):** 0.6157

**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.789 / 0.867

**Triple intersection:** 0.421109

**gamma\_N (Lyapunov stability):** -0.60393

**MT14 / GEQ:** 8/14 · 6/8

**Survival governed / ungoverned:** 0.6895 / 0.3737

**Enhancement:** 1.845x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 3b9393383f290f1c87302f953f9ced8e

## 21. Element 114 (Fl) + Mercury via mechanical alloying cryogenic

**Coin ID:** COIN-5280D3A2ED3D39E5

**K\_N1 (inner magic shell):** 1

**K\_N2 (outer island of stability):** 0.684

**K\_N3 (constitutional admissibility):** 0.6157

**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.789 / 0.867

**Triple intersection:** 0.421109

**gamma\_N (Lyapunov stability):** -0.63448

**MT14 / GEQ:** 8/14 · 6/8

**Survival governed / ungoverned:** 0.6895 / 0.3737

**Enhancement:** 1.845x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** d3bd3f0f4191264501a3de032c54dbc0

## 22. Z=112 (Copernicium) bonding flexibility → mott insulator transition

**Coin ID:** COIN-D37C8909887169AA

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.76

**K\_N3 (constitutional admissibility):** 0.6079

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.808 / 0.855

**Triple intersection:** 0.41583

**gamma\_N (Lyapunov stability):** -0.60122

**MT14 / GEQ:** 10/14 · 8/8

**Survival governed / ungoverned:** 0.6871 / 0.3753

**Enhancement:** 1.831x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":true,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 2a871123473274aef2d31d431123b058

## 23. Z=119 (Ununennium) bonding flexibility → mott insulator transition

**Coin ID:** COIN-DC7012852EF54066

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.76

**K\_N3 (constitutional admissibility):** 0.6079

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.808 / 0.855

**Triple intersection:** 0.41583

**gamma\_N (Lyapunov stability):** -0.60349

**MT14 / GEQ:** 10/14 · 8/8

**Survival governed / ungoverned:** 0.6871 / 0.3753

**Enhancement:** 1.831x

**Verdict:** ADMISSIBLE

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":true,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 37029510581d1c4418465846ac99b4aa

## 24. Element 114 (Fl) + Hafnium via self propagating synthesis

**Coin ID:** COIN-3C1DFC93894EEC80

**K\_N1 (inner magic shell):** 1

**K\_N2 (outer island of stability):** 0.672  
**K\_N3 (constitutional admissibility):** 0.6091  
**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.786 / 0.861  
**Triple intersection:** 0.409296  
**gamma\_N (Lyapunov stability):** -0.59156  
**MT14 / GEQ:** 8/14 · 6/8  
**Survival governed / ungoverned:** 0.6842 / 0.3772  
**Enhancement:** 1.814x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** db652d6c97ab1b9a8c9acfe6da31ce64

## 25. Element 114 (Fl) + Curium via self propagating synthesis

**Coin ID:** COIN-C70BE19A3219E825  
**K\_N1 (inner magic shell):** 1  
**K\_N2 (outer island of stability):** 0.672  
**K\_N3 (constitutional admissibility):** 0.6091  
**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.786 / 0.861  
**Triple intersection:** 0.409296  
**gamma\_N (Lyapunov stability):** -0.59907  
**MT14 / GEQ:** 8/14 · 6/8  
**Survival governed / ungoverned:** 0.6842 / 0.3772  
**Enhancement:** 1.814x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** a631726139c0bc9224a200998a93a988

## 26. Element 112 (Cn) + Hafnium via ion beam synthesis

**Coin ID:** COIN-AC2C4E6226005A68  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.726  
**K\_N3 (constitutional admissibility):** 0.6248  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7995 / 0.888  
**Triple intersection:** 0.408219  
**gamma\_N (Lyapunov stability):** -0.57022  
**MT14 / GEQ:** 10/14 · 8/8  
**Survival governed / ungoverned:** 0.6837 / 0.3775  
**Enhancement:** 1.811x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** e4b15af0689bafcc74e759dbdfe1acc1

## 27. Element 115 (Mc) + Thallium via ion beam synthesis

**Coin ID:** COIN-F5EF3A77C6A7D891  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.726  
**K\_N3 (constitutional admissibility):** 0.6248  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7995 / 0.888  
**Triple intersection:** 0.408219  
**gamma\_N (Lyapunov stability):** -0.57164  
**MT14 / GEQ:** 10/14 · 8/8  
**Survival governed / ungoverned:** 0.6837 / 0.3775  
**Enhancement:** 1.811x  
**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2296b50463e2a6576dbd2f057bd03889

## 28. Element 115 (Mc) + Californium via ion beam synthesis

**Coin ID:** COIN-F62B56BE14BF33D9**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.726**K\_N3 (constitutional admissibility):** 0.6248**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7995 / 0.888**Triple intersection:** 0.408219**gamma\_N (Lyapunov stability):** -0.56566**MT14 / GEQ:** 10/14 · 8/8**Survival governed / ungoverned:** 0.6837 / 0.3775**Enhancement:** 1.811x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b86c64860493442de37ca78187a8390a

## 29. Element 119 (Uue) + Platinum via ion beam synthesis

**Coin ID:** COIN-B9D8923E9D4A8FAC**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.726**K\_N3 (constitutional admissibility):** 0.6248**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7995 / 0.888**Triple intersection:** 0.408219**gamma\_N (Lyapunov stability):** -0.59235**MT14 / GEQ:** 10/14 · 8/8**Survival governed / ungoverned:** 0.6837 / 0.3775**Enhancement:** 1.811x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 23685f31e8cdcca627424276ca73b1ae

## 30. Element 119 (Uue) + Iridium via ion beam synthesis

**Coin ID:** COIN-D5BDDD62522E4E83**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.726**K\_N3 (constitutional admissibility):** 0.6248**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7995 / 0.888**Triple intersection:** 0.408219**gamma\_N (Lyapunov stability):** -0.57694**MT14 / GEQ:** 10/14 · 8/8**Survival governed / ungoverned:** 0.6837 / 0.3775**Enhancement:** 1.811x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** fa0e7e2eb30b40c5c15d86637b06f38a

## 31. Element 115 (Mc) + Platinum via ion beam synthesis

**Coin ID:** COIN-63B3E327E5C6CC30**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.726

**K\_N3 (constitutional admissibility):** 0.6248  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7995 / 0.888  
**Triple intersection:** 0.408219  
**gamma\_N (Lyapunov stability):** -0.58576  
**MT14 / GEQ:** 10/14 · 8/8  
**Survival governed / ungoverned:** 0.6837 / 0.3775  
**Enhancement:** 1.811x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 7c15d4987113f15e446f9c914f8c9fc1

### 32. Element 115 (Mc) + Rhenium via ion beam synthesis

**Coin ID:** COIN-43CAB18B0A2EA456  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.726  
**K\_N3 (constitutional admissibility):** 0.6248  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7995 / 0.888  
**Triple intersection:** 0.408219  
**gamma\_N (Lyapunov stability):** -0.61357  
**MT14 / GEQ:** 10/14 · 8/8  
**Survival governed / ungoverned:** 0.6837 / 0.3775  
**Enhancement:** 1.811x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 758fb672b99fb090921d59df1f9ba2e2

### 33. Element 119 (Uue) + Lead via ion beam synthesis

**Coin ID:** COIN-B3382A41D4477611  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.726  
**K\_N3 (constitutional admissibility):** 0.6248  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7995 / 0.888  
**Triple intersection:** 0.408219  
**gamma\_N (Lyapunov stability):** -0.61317  
**MT14 / GEQ:** 10/14 · 8/8  
**Survival governed / ungoverned:** 0.6837 / 0.3775  
**Enhancement:** 1.811x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 47e5708a52a6c283596f62416dd2ba17

### 34. Z=126 (Unbihexium) bonding flexibility → negative thermal expansion

**Coin ID:** COIN-1B48E69799A65F04  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.74  
**K\_N3 (constitutional admissibility):** 0.6042  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.803 / 0.855  
**Triple intersection:** 0.402382  
**gamma\_N (Lyapunov stability):** -0.58385  
**MT14 / GEQ:** 10/14 · 8/8  
**Survival governed / ungoverned:** 0.6811 / 0.3793  
**Enhancement:** 1.796x  
**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d78fc7bd0622f1ff93f07fd8bb0d4b5c**35. Z=115 (Moscovium) bonding flexibility 000 negative thermal expansion****Coin ID:** COIN-C14A7767CF72987D**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.74**K\_N3 (constitutional admissibility):** 0.6042**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.803 / 0.855**Triple intersection:** 0.402382**gamma\_N (Lyapunov stability):** -0.58422**MT14 / GEQ:** 10/14 · 8/8**Survival governed / ungoverned:** 0.6811 / 0.3793**Enhancement:** 1.796x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 7a6cc2102c42f35f01a38195a0027fae**36. Z=119 (Ununennium) bonding flexibility → negative thermal expansion****Coin ID:** COIN-3C3B2E4267297C3C**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.74**K\_N3 (constitutional admissibility):** 0.6042**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.803 / 0.855**Triple intersection:** 0.402382**gamma\_N (Lyapunov stability):** -0.57628**MT14 / GEQ:** 10/14 · 8/8**Survival governed / ungoverned:** 0.6811 / 0.3793**Enhancement:** 1.796x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** c32c66da7684926367baa8c2ae213e95**37. Element 114 (Fl) + Thorium via spark plasma sintering****Coin ID:** COIN-1568FBBED58385DF**K\_N1 (inner magic shell):** 1**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6025**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855**Triple intersection:** 0.397662**gamma\_N (Lyapunov stability):** -0.62693**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6789 / 0.3807**Enhancement:** 1.783x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9ec837381f8eeb5cf299e894f0b3b8d5**38. Element 114 (Fl) + Mercury via spark plasma sintering****Coin ID:** COIN-5AF700CC6C47F22F**K\_N1 (inner magic shell):** 1**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.6025  
**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855  
**Triple intersection:** 0.397662  
**gamma\_N (Lyapunov stability):** -0.59154  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6789 / 0.3807  
**Enhancement:** 1.783x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 7f0792b4de2f650676f8aae491daedd6

### 39. Element 114 (Fl) + Americium via electrochemical deposition

**Coin ID:** COIN-B84343976189E749  
**K\_N1 (inner magic shell):** 1  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6025  
**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855  
**Triple intersection:** 0.397662  
**gamma\_N (Lyapunov stability):** -0.58066  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6789 / 0.3807  
**Enhancement:** 1.783x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 656aa5309cc594a582a58dcf2e7a1f4c

### 40. Element 114 (Fl) + Bismuth via electrochemical deposition

**Coin ID:** COIN-4C74C248A2D615A8  
**K\_N1 (inner magic shell):** 1  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6025  
**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855  
**Triple intersection:** 0.397662  
**gamma\_N (Lyapunov stability):** -0.60601  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6789 / 0.3807  
**Enhancement:** 1.783x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** c1b444fdda20629d291df08e676ee910

### 41. Z=114 (Flerovium) bonding flexibility → magneto caloric giant

**Coin ID:** COIN-191779199C5A7C97  
**K\_N1 (inner magic shell):** 1  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6025  
**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855  
**Triple intersection:** 0.397662  
**gamma\_N (Lyapunov stability):** -0.58995  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6789 / 0.3807  
**Enhancement:** 1.783x  
**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** cf4148c35ab2c982e20dc8089adb080d

## 42. Element 114 (Fl) + Lead via spark plasma sintering

**Coin ID:** COIN-F46E05DD8C4C6279**K\_N1 (inner magic shell):** 1**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6025**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855**Triple intersection:** 0.397662**gamma\_N (Lyapunov stability):** -0.58852**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6789 / 0.3807**Enhancement:** 1.783x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 78b99c8a0cf5ea259b135a7afc738d98

## 43. Z=114 (Flerovium) bonding flexibility → transparent conductivity

**Coin ID:** COIN-DA04F6C9021EBEB7**K\_N1 (inner magic shell):** 1**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6025**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855**Triple intersection:** 0.397662**gamma\_N (Lyapunov stability):** -0.6273**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6789 / 0.3807**Enhancement:** 1.783x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 7e2d3852790856827d93b0c4cc915dcc

## 44. Z=114 (Flerovium) bonding flexibility → spin orbit coupling max

**Coin ID:** COIN-8D2B4A8367ECF165**K\_N1 (inner magic shell):** 1**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6025**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855**Triple intersection:** 0.397662**gamma\_N (Lyapunov stability):** -0.61825**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6789 / 0.3807**Enhancement:** 1.783x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** c7082bdfa7e33eb162b96c5f281b4eac

## 45. Z=114 (Flerovium) bonding flexibility → photonic bandgap metal

**Coin ID:** COIN-E5DF24022B280EAC**K\_N1 (inner magic shell):** 1**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.6025  
**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855  
**Triple intersection:** 0.397662  
**gamma\_N (Lyapunov stability):** -0.62654  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6789 / 0.3807  
**Enhancement:** 1.783x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 7df0480093a88f8a9b102b240648e456

#### 46. Z=114 (Flerovium) bonding flexibility ☯☯ photonic bandgap metal

**Coin ID:** COIN-F6213CA2287C3EE0  
**K\_N1 (inner magic shell):** 1  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6025  
**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855  
**Triple intersection:** 0.397662  
**gamma\_N (Lyapunov stability):** -0.59101  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6789 / 0.3807  
**Enhancement:** 1.783x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 366d98e2e8826a7dcc3d901bc2f9f8a1

#### 47. Element 114 (Fl) + Tungsten via high pressure high temperature

**Coin ID:** COIN-1E7191D23BD8009B  
**K\_N1 (inner magic shell):** 1  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6025  
**K\_alpha / K\_beta / K\_gamma:** 0.9 / 0.783 / 0.855  
**Triple intersection:** 0.397662  
**gamma\_N (Lyapunov stability):** -0.61883  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6789 / 0.3807  
**Enhancement:** 1.783x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** c1d2f1831d86ded76f3c58c94f9eed79

#### 48. Element 112 (Cn) + Tantalum via laser ablation deposition

**Coin ID:** COIN-00230BB78C1B2C5C  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.714  
**K\_N3 (constitutional admissibility):** 0.6182  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7965 / 0.882  
**Triple intersection:** 0.397263  
**gamma\_N (Lyapunov stability):** -0.57652  
**MT14 / GEQ:** 10/14 · 6/8  
**Survival governed / ungoverned:** 0.6788 / 0.3808  
**Enhancement:** 1.782x  
**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0b1ce9364cec1ac6e050c3911245676d

## 49. Element 126 (Ubh) + Lead via laser ablation deposition

**Coin ID:** COIN-CD94740754C0B672**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.714**K\_N3 (constitutional admissibility):** 0.6182**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7965 / 0.882**Triple intersection:** 0.397263**gamma\_N (Lyapunov stability):** -0.57304**MT14 / GEQ:** 10/14 · 6/8**Survival governed / ungoverned:** 0.6788 / 0.3808**Enhancement:** 1.782x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4a2d61910d286eb8fe9410c76e618c83

## 50. Element 119 (Uue) + Tantalum via laser ablation deposition

**Coin ID:** COIN-11305A536D365E4E**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.714**K\_N3 (constitutional admissibility):** 0.6182**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7965 / 0.882**Triple intersection:** 0.397263**gamma\_N (Lyapunov stability):** -0.60598**MT14 / GEQ:** 10/14 · 6/8**Survival governed / ungoverned:** 0.6788 / 0.3808**Enhancement:** 1.782x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** de79e27063d08ddd01e36248b27eb4cb

## 51. Element 126 (Ubh) + Osmium via laser ablation deposition

**Coin ID:** COIN-D8CC0007B2B4BE9C**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.714**K\_N3 (constitutional admissibility):** 0.6182**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7965 / 0.882**Triple intersection:** 0.397263**gamma\_N (Lyapunov stability):** -0.60285**MT14 / GEQ:** 10/14 · 6/8**Survival governed / ungoverned:** 0.6788 / 0.3808**Enhancement:** 1.782x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d36cdc8d633f3bbd7408818afbb0b108

## 52. Element 115 (Mc) + Californium via laser ablation deposition

**Coin ID:** COIN-0F357DEEFD68D145**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.714

**K\_N3 (constitutional admissibility):** 0.6182  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7965 / 0.882  
**Triple intersection:** 0.397263  
**gamma\_N (Lyapunov stability):** -0.56427  
**MT14 / GEQ:** 10/14 · 6/8  
**Survival governed / ungoverned:** 0.6788 / 0.3808  
**Enhancement:** 1.782x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** a969f5318b9392629359d5737a57a6ff

### 53. Element 115 (Mc) + Iridium via laser ablation deposition

**Coin ID:** COIN-2E6D9001E62D39A1  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.714  
**K\_N3 (constitutional admissibility):** 0.6182  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7965 / 0.882  
**Triple intersection:** 0.397263  
**gamma\_N (Lyapunov stability):** -0.56286  
**MT14 / GEQ:** 10/14 · 6/8  
**Survival governed / ungoverned:** 0.6788 / 0.3808  
**Enhancement:** 1.782x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 7447a530baf65603358855b719d65da8

### 54. Element 115 (Mc) + Curium via laser ablation deposition

**Coin ID:** COIN-39CD67C3B776C0BA  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.714  
**K\_N3 (constitutional admissibility):** 0.6182  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7965 / 0.882  
**Triple intersection:** 0.397263  
**gamma\_N (Lyapunov stability):** -0.58555  
**MT14 / GEQ:** 10/14 · 6/8  
**Survival governed / ungoverned:** 0.6788 / 0.3808  
**Enhancement:** 1.782x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** ceaf7abbb11e18365535a778864cf980

### 55. Element 119 (Uue) + Rhenium via molecular beam epitaxy

**Coin ID:** COIN-D6455BA53DDE9C39  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.705  
**K\_N3 (constitutional admissibility):** 0.6133  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7943 / 0.8775  
**Triple intersection:** 0.389151  
**gamma\_N (Lyapunov stability):** -0.5765  
**MT14 / GEQ:** 10/14 · 6/8  
**Survival governed / ungoverned:** 0.6751 / 0.3833  
**Enhancement:** 1.762x  
**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0bcd64e06ae082e1604e692175e996b4

**56. Element 126 (Ubh) + Bismuth via molecular beam epitaxy**

**Coin ID:** COIN-F3406BF3FEBCA279

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.705

**K\_N3 (constitutional admissibility):** 0.6133

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7943 / 0.8775

**Triple intersection:** 0.389151

**gamma\_N (Lyapunov stability):** -0.5825

**MT14 / GEQ:** 10/14 · 6/8

**Survival governed / ungoverned:** 0.6751 / 0.3833

**Enhancement:** 1.762x

**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d74a2a6f027ccda93279dc3da93a21d5

**57. Element 119 (Uue) + Thorium via molecular beam epitaxy**

**Coin ID:** COIN-0598BEB0E732C60B

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.705

**K\_N3 (constitutional admissibility):** 0.6133

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.7943 / 0.8775

**Triple intersection:** 0.389151

**gamma\_N (Lyapunov stability):** -0.5562

**MT14 / GEQ:** 10/14 · 6/8

**Survival governed / ungoverned:** 0.6751 / 0.3833

**Enhancement:** 1.762x

**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 41e99c6c5ff390ec15c3f3566458e852

**58. Element 120 (Ubn) + Iridium via nuclear transmutation pathway**

**Coin ID:** COIN-6834F2A31DC095F1

**K\_N1 (inner magic shell):** 0.98

**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5998

**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855

**Triple intersection:** 0.387977

**gamma\_N (Lyapunov stability):** -0.58917

**MT14 / GEQ:** 8/14 · 4/8

**Survival governed / ungoverned:** 0.6746 / 0.3836

**Enhancement:** 1.759x

**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e0fbacc3f14b477df7eac26147b1242f

**59. Z=120 (Unbinilium) bonding flexibility  nuclear binding stability**

**Coin ID:** COIN-E0B0A717FE838521

**K\_N1 (inner magic shell):** 0.98

**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5998  
**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855  
**Triple intersection:** 0.387977  
**gamma\_N (Lyapunov stability):** -0.5756  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6746 / 0.3836  
**Enhancement:** 1.759x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 6c377ccf296d6f3b9263d5808f9e8f44

## 60. Z=120 (Unbinilium) bonding flexibility 000 magneto caloric giant

**Coin ID:** COIN-CD3DA2AA180292CF  
**K\_N1 (inner magic shell):** 0.98  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5998  
**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855  
**Triple intersection:** 0.387977  
**gamma\_N (Lyapunov stability):** -0.58652  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6746 / 0.3836  
**Enhancement:** 1.759x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 6b51876cc71c4bae3ab9c7cc1aa008fe

## 61. Element 120 (Ubn) + Hafnium via nuclear transmutation pathway

**Coin ID:** COIN-0EFB6064B3C21FCA  
**K\_N1 (inner magic shell):** 0.98  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5998  
**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855  
**Triple intersection:** 0.387977  
**gamma\_N (Lyapunov stability):** -0.61048  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6746 / 0.3836  
**Enhancement:** 1.759x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 4991a3004cb7d188eabcfcd14300b2b82

## 62. Element 120 (Ubn) + Lead via high pressure high temperature

**Coin ID:** COIN-6E90132CE2C5B75B  
**K\_N1 (inner magic shell):** 0.98  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5998  
**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855  
**Triple intersection:** 0.387977  
**gamma\_N (Lyapunov stability):** -0.59679  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6746 / 0.3836  
**Enhancement:** 1.759x  
**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2bbc7d3f8c1856f5d68a3ad256537fc6**63. Z=120 (Unbinilium) bonding flexibility 000 topological insulator bulk****Coin ID:** COIN-ABE891B1EEBD2AAC**K\_N1 (inner magic shell):** 0.98**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5998**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855**Triple intersection:** 0.387977**gamma\_N (Lyapunov stability):** -0.616**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6746 / 0.3836**Enhancement:** 1.759x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 820718d9df6e338da29c6e62943c8fc5**64. Z=120 (Unbinilium) bonding flexibility → spin orbit coupling max****Coin ID:** COIN-FC82B5C917937C23**K\_N1 (inner magic shell):** 0.98**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5998**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855**Triple intersection:** 0.387977**gamma\_N (Lyapunov stability):** -0.60957**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6746 / 0.3836**Enhancement:** 1.759x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 097402c77d4ce49a6d2d1c1aeaecfd48**65. Z=120 (Unbinilium) bonding flexibility 000 heavy fermion coherence****Coin ID:** COIN-50BC2A1F8DFE1CFC**K\_N1 (inner magic shell):** 0.98**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5998**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855**Triple intersection:** 0.387977**gamma\_N (Lyapunov stability):** -0.57649**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6746 / 0.3836**Enhancement:** 1.759x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0525f11760ae90b132b2d795a45e1262**66. Element 120 (Ubn) + Uranium via electrochemical deposition****Coin ID:** COIN-E0AE1BFC17C663AC**K\_N1 (inner magic shell):** 0.98**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5998  
**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855  
**Triple intersection:** 0.387977  
**gamma\_N (Lyapunov stability):** -0.60177  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6746 / 0.3836  
**Enhancement:** 1.759x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 4c3366603c23cd76d9f124e0bd60d5c6

## 67. Z=120 (Unbinilium) bonding flexibility topological insulator bulk

**Coin ID:** COIN-41DABD797FBE2B51  
**K\_N1 (inner magic shell):** 0.98  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5998  
**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855  
**Triple intersection:** 0.387977  
**gamma\_N (Lyapunov stability):** -0.60698  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6746 / 0.3836  
**Enhancement:** 1.759x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 4fe20ccf99b99d3fc9d926d5d3f54f09

## 68. Element 120 (Ubn) + Uranium via spark plasma sintering

**Coin ID:** COIN-6DE95E7BD3D6EB8E  
**K\_N1 (inner magic shell):** 0.98  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5998  
**K\_alpha / K\_beta / K\_gamma:** 0.896 / 0.783 / 0.855  
**Triple intersection:** 0.387977  
**gamma\_N (Lyapunov stability):** -0.58792  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6746 / 0.3836  
**Enhancement:** 1.759x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** aa50d3bd370a0e767d90293eb42689ae

## 69. Element 126 (Ubh) + Gold via arc melting controlled atmosphere

**Coin ID:** COIN-AFF755DB9BE29D57  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.696  
**K\_N3 (constitutional admissibility):** 0.6084  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.792 / 0.873  
**Triple intersection:** 0.381131  
**gamma\_N (Lyapunov stability):** -0.56214  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6715 / 0.3857  
**Enhancement:** 1.741x  
**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 66d21354e2b7dff8dfdc3001cb3c7f0

## 70. Element 112 (Cn) + Lead via arc melting controlled atmosphere

**Coin ID:** COIN-73D6DA9EC725FA97**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.696**K\_N3 (constitutional admissibility):** 0.6084**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.792 / 0.873**Triple intersection:** 0.381131**gamma\_N (Lyapunov stability):** -0.56176**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6715 / 0.3857**Enhancement:** 1.741x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 347653392716c7627d8d6944a55dcc1

## 71. Element 119 (Uue) + Gold via arc melting controlled atmosphere

**Coin ID:** COIN-63975CC900971F85**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.696**K\_N3 (constitutional admissibility):** 0.6084**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.792 / 0.873**Triple intersection:** 0.381131**gamma\_N (Lyapunov stability):** -0.60051**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6715 / 0.3857**Enhancement:** 1.741x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a4dfe8710eab0d22d49fbbd065a5a1d7

## 72. Element 115 (Mc) + Uranium via arc melting controlled atmosphere

**Coin ID:** COIN-E87D105286E963B1**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.696**K\_N3 (constitutional admissibility):** 0.6084**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.792 / 0.873**Triple intersection:** 0.381131**gamma\_N (Lyapunov stability):** -0.55562**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6715 / 0.3857**Enhancement:** 1.741x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 70d96bfb4be7362de2f6b58ad9ecf7

## 73. Element 112 (Cn) + Platinum via arc melting controlled atmosphere

**Coin ID:** COIN-31D065AA905BA81D**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.696

**K\_N3 (constitutional admissibility):** 0.6084  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.792 / 0.873  
**Triple intersection:** 0.381131  
**gamma\_N (Lyapunov stability):** -0.56261  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6715 / 0.3857  
**Enhancement:** 1.741x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 49c7884ada862e50e494b0bd71204cc9

#### 74. Americium-Neptunium quasicrystalline structure at 57:43 ratio

**Coin ID:** COIN-D32A44DF96E07059  
**K\_N1 (inner magic shell):** 0.67  
**K\_N2 (outer island of stability):** 0.78  
**K\_N3 (constitutional admissibility):** 0.7252  
**K\_alpha / K\_beta / K\_gamma:** 0.934 / 0.813 / 0.955  
**Triple intersection:** 0.378975  
**gamma\_N (Lyapunov stability):** -0.52915  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.7205 / 0.3863  
**Enhancement:** 1.865x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal": true, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** bef879b228859fdc45aaeab8887439fe

#### 75. Element 115 (Mc) + Americium via mechanical alloying cryogenic

**Coin ID:** COIN-D4FDEE7D18471AF5  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.684  
**K\_N3 (constitutional admissibility):** 0.602  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.789 / 0.867  
**Triple intersection:** 0.370576  
**gamma\_N (Lyapunov stability):** -0.5793  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6668 / 0.3888  
**Enhancement:** 1.715x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** bf37a656a9055ae45349519eb9f47a55

#### 76. Element 119 (Uue) + Hafnium via mechanical alloying cryogenic

**Coin ID:** COIN-74E6BD9DBB48FD73  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.684  
**K\_N3 (constitutional admissibility):** 0.602  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.789 / 0.867  
**Triple intersection:** 0.370576  
**gamma\_N (Lyapunov stability):** -0.55787  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6668 / 0.3888  
**Enhancement:** 1.715x  
**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a5f688ed2c30d0601402dc0963605a4a

## 77. Element 126 (Ubh) + Tantalum via mechanical alloying cryogenic

**Coin ID:** COIN-3E18BF98CFCD8FD1**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.684**K\_N3 (constitutional admissibility):** 0.602**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.789 / 0.867**Triple intersection:** 0.370576**gamma\_N (Lyapunov stability):** -0.55175**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6668 / 0.3888**Enhancement:** 1.715x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d973570a113d4c19be6364aed36d614d

## 78. Element 119 (Uue) + Gold via mechanical alloying cryogenic

**Coin ID:** COIN-322AEB1D00504C89**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.684**K\_N3 (constitutional admissibility):** 0.602**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.789 / 0.867**Triple intersection:** 0.370576**gamma\_N (Lyapunov stability):** -0.58942**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6668 / 0.3888**Enhancement:** 1.715x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e53d02404ec58f94c63451df8c697da7

## 79. Element 115 (Mc) + Gold via mechanical alloying cryogenic

**Coin ID:** COIN-4024E19A7DD0B983**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.684**K\_N3 (constitutional admissibility):** 0.602**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.789 / 0.867**Triple intersection:** 0.370576**gamma\_N (Lyapunov stability):** -0.55828**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6668 / 0.3888**Enhancement:** 1.715x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 39afd25e5a1c940ee8da3b38a74eeb7f

## 80. Element 115 (Mc) + Bismuth via mechanical alloying cryogenic

**Coin ID:** COIN-B8DDD9C081D2BA92**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.684

**K\_N3 (constitutional admissibility):** 0.602  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.789 / 0.867  
**Triple intersection:** 0.370576  
**gamma\_N (Lyapunov stability):** -0.56287  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6668 / 0.3888  
**Enhancement:** 1.715x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 1d932696ac2135b86f81aa26b049f3d5

## 81. Element 119 (Uue) + Californium via mechanical alloying cryogenic

**Coin ID:** COIN-AA2DF1CD958D71D6  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.684  
**K\_N3 (constitutional admissibility):** 0.602  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.789 / 0.867  
**Triple intersection:** 0.370576  
**gamma\_N (Lyapunov stability):** -0.54752  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6668 / 0.3888  
**Enhancement:** 1.715x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 35326b20297d6a6e51f09e16a58ba165

## 82. Element 115 (Mc) + Rhenium via self propagating synthesis

**Coin ID:** COIN-3B7CB11A4E57087C  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.672  
**K\_N3 (constitutional admissibility):** 0.5955  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.786 / 0.861  
**Triple intersection:** 0.36018  
**gamma\_N (Lyapunov stability):** -0.54146  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6621 / 0.3919  
**Enhancement:** 1.689x  
**Verdict:** ADMISSIBLE  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":true, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 162eedadc14a75fe5adeecb710f8cf5e

## 83. Element 115 (Mc) + Bismuth via self propagating synthesis

**Coin ID:** COIN-E7D49D177FD31E55  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.672  
**K\_N3 (constitutional admissibility):** 0.5955  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.786 / 0.861  
**Triple intersection:** 0.36018  
**gamma\_N (Lyapunov stability):** -0.56279  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6621 / 0.3919  
**Enhancement:** 1.689x  
**Verdict:** ADMISSIBLE

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 324c366948773b3cfb5c08e6c2cca847

## 84. Plutonium melt viscosity profile at 1433 K — quasicrystalline structure

**Coin ID:** COIN-D477DEE72E12FDF0**K\_N1 (inner magic shell):** 0.65**K\_N2 (outer island of stability):** 0.78**K\_N3 (constitutional admissibility):** 0.692**K\_alpha / K\_beta / K\_gamma:** 0.83 / 0.873 / 0.955**Triple intersection:** 0.350836**gamma\_N (Lyapunov stability):** -0.54086**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.7079 / 0.3947**Enhancement:** 1.793x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** f3c6a451ec419b4b4bfce56a23b81082

## 85. Plutonium-Lead quasicrystalline structure at 32:68 ratio

**Coin ID:** COIN-95DCE43E7D7A9F32**K\_N1 (inner magic shell):** 0.65**K\_N2 (outer island of stability):** 0.78**K\_N3 (constitutional admissibility):** 0.692**K\_alpha / K\_beta / K\_gamma:** 0.83 / 0.873 / 0.955**Triple intersection:** 0.350836**gamma\_N (Lyapunov stability):** -0.51725**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.7079 / 0.3947**Enhancement:** 1.793x**Verdict:** ADMISSIBLE**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 1605b97f37034d77952cda29a3eaa463

## 86. Element 115 (Mc) + Thallium via electrochemical deposition

**Coin ID:** COIN-A83AFBA3DD08C8DB**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.54954**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2fa3305971132f49ae1600e88fb4dafb

## 87. Element 126 (Ubh) + Tantalum via high pressure high temperature

**Coin ID:** COIN-E01EB5BD50C3B2D5**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.58409  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 9eb3bade6f376320eb15c07c73c42130

## 88. Element 126 (Ubh) + Americium via high pressure high temperature

**Coin ID:** COIN-A983A2BCCF0C397F  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.5615  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 73466b876f99088a8e2c42efdd8c2dbd

## 89. Z=115 (Moscovium) bonding flexibility → topological insulator bulk

**Coin ID:** COIN-BC7B5C0583859DE6  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.57628  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 36e841e1989f0becf18d940ec7a811a7

## 90. Element 119 (Uue) + Americium via spark plasma sintering

**Coin ID:** COIN-1698F3F280EB5229  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.57273  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3b1a9fcfd5240c3e0ca4d4620c5cd8b2

### 91. Element 119 (Uue) + Tungsten via spark plasma sintering

**Coin ID:** COIN-002899A0D2DCBB53**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.55423**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e0baa83cb6209669cdd9917a3af0273f

### 92. Z=115 (Moscovium) bonding flexibility → spin orbit coupling max

**Coin ID:** COIN-D697972F315C24F2**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.55538**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2a9c5c8222c03292943ed481559746eb

### 93. Element 115 (Mc) + Hafnium via high pressure high temperature

**Coin ID:** COIN-1AAA578904FACE92**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.56589**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f67c638da9ae619979da5456a72cde56

### 94. Element 126 (Ubh) + Americium via nuclear transmutation pathway

**Coin ID:** COIN-E175EABA42D44832**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.54196  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 35ab50104f5801c9a3bfe86df19e766d

### 95. Z=115 (Moscovium) bonding flexibility ☹☹☹ photonic bandgap metal

**Coin ID:** COIN-A2F610AD5013DEAE  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.54572  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 761a57c12474937b38ad020e1e5ed606

### 96. Element 115 (Mc) + Iridium via high pressure high temperature

**Coin ID:** COIN-F74C26F5D561E346  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.56006  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** dcdbf00b863740d33873d093c60417ae

### 97. Z=115 (Moscovium) bonding flexibility → nuclear binding stability

**Coin ID:** COIN-5A9B2F5036FC5D7E  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.54408  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** ff4bb455aa80af4d02d7f6c1aa110323

## 98. Element 126 (Ubh) + Gold via nuclear transmutation pathway

**Coin ID:** COIN-625E60EE41830B7B

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855

**Triple intersection:** 0.349943

**gamma\_N (Lyapunov stability):** -0.57013

**MT14 / GEQ:** 8/14 · 4/8

**Survival governed / ungoverned:** 0.6575 / 0.395

**Enhancement:** 1.664x

**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 811a15de24116d40c18e4d15631d0172

## 99. Z=119 (Ununennium) bonding flexibility ☹☹☹ photonic bandgap metal

**Coin ID:** COIN-1793D55D67868E1E

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855

**Triple intersection:** 0.349943

**gamma\_N (Lyapunov stability):** -0.54214

**MT14 / GEQ:** 8/14 · 4/8

**Survival governed / ungoverned:** 0.6575 / 0.395

**Enhancement:** 1.664x

**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 862bd17acde7485e42b1e708153cd6ec

## 100. Z=112 (Copernicium) bonding flexibility → spin orbit coupling max

**Coin ID:** COIN-F2433D37ACBCCC9B

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855

**Triple intersection:** 0.349943

**gamma\_N (Lyapunov stability):** -0.5529

**MT14 / GEQ:** 8/14 · 4/8

**Survival governed / ungoverned:** 0.6575 / 0.395

**Enhancement:** 1.664x

**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 450945834c7aa119dafd3f31c8648321

## 101. Element 126 (Ubh) + Tungsten via spark plasma sintering

**Coin ID:** COIN-F5B098E65BFC19A3

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.57515  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 4db75437e74abd062d56ac2bb63607e1

## 102. Z=112 (Copernicium) bonding flexibility → topological insulator bulk

**Coin ID:** COIN-98B384DA3F7AB37C  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.57757  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** eab74efe83cdb3de10a6b284b5a9bb01

## 103. Element 112 (Cn) + Osmium via spark plasma sintering

**Coin ID:** COIN-1C000C71DC736A7B  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.55857  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** fcdfaacb36d5d023dd0042c92428b12d

## 104. Z=126 (Unbihexium) bonding flexibility → spin orbit coupling max

**Coin ID:** COIN-BFE75F6A46CE3EB1  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.54595  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 7fbcfea5319ee37734dbae0423931974**105. Element 119 (Uue) + Thallium via spark plasma sintering****Coin ID:** COIN-32D05159C0FDD7D4**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.57228**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 61148166126231348222f727674eaf2c**106. Element 112 (Cn) + Lead via spark plasma sintering****Coin ID:** COIN-ED8276CCF4A3D7A2**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.53808**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a23bfb9d3690dc25b672569cc3a8e5fe**107. Z=126 (Unbihexium) bonding flexibility → photonic bandgap metal****Coin ID:** COIN-3E4C44E4067FD89A**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.57509**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 1f7a5f643bf75a9474041d1ff0516784**108. Element 112 (Cn) + Iridium via nuclear transmutation pathway****Coin ID:** COIN-F50ADCE7150928EE**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.54718  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 87ef59988ad0b665e593ebb8e6092c41

### 109. Z=119 (Ununennium) bonding flexibility → magneto caloric giant

**Coin ID:** COIN-045E58710407B6DF  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.56618  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 915620fd89e92a633bc95bcad44c7b5b

### 110. Z=112 (Copernicium) bonding flexibility 000 heavy fermion coherence

**Coin ID:** COIN-09632CFF72A19E8B  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.58171  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 8c9c72746ac46f5b625d3420350f11ea

### 111. Z=115 (Moscovium) bonding flexibility 000 magneto caloric giant

**Coin ID:** COIN-308D2259D2BD952C  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.58022  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 06df3c67e436bc34ab067720c7969134

### 112. Element 112 (Cn) + Curium via spark plasma sintering

**Coin ID:** COIN-FA3FAB0EBF670D04

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855

**Triple intersection:** 0.349943

**gamma\_N (Lyapunov stability):** -0.54862

**MT14 / GEQ:** 8/14 · 4/8

**Survival governed / ungoverned:** 0.6575 / 0.395

**Enhancement:** 1.664x

**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** b3cfc12f82459d82741812219a99483d

### 113. Z=112 (Copernicium) bonding flexibility → magneto caloric giant

**Coin ID:** COIN-A07D2ED0E850DE62

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855

**Triple intersection:** 0.349943

**gamma\_N (Lyapunov stability):** -0.58392

**MT14 / GEQ:** 8/14 · 4/8

**Survival governed / ungoverned:** 0.6575 / 0.395

**Enhancement:** 1.664x

**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 01d33ac129e0cafc32e9d384d9c97925

### 114. Element 126 (Ubh) + Uranium via electrochemical deposition

**Coin ID:** COIN-21197A535398E9E9

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891

**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855

**Triple intersection:** 0.349943

**gamma\_N (Lyapunov stability):** -0.55997

**MT14 / GEQ:** 8/14 · 4/8

**Survival governed / ungoverned:** 0.6575 / 0.395

**Enhancement:** 1.664x

**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":true,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 1deead4acea45b30d7f246f815525216

### 115. Element 112 (Cn) + Osmium via nuclear transmutation pathway

**Coin ID:** COIN-5CCB64F86767D7E3

**K\_N1 (inner magic shell):** 0.9

**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.55292  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 47d98bcadc5fe2f00a36023dafa4d5fb

### 116. Z=112 (Copernicium) bonding flexibility → transparent conductivity

**Coin ID:** COIN-55774D49AD8A2640  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.56408  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c6e49eac3c842c86f326c5edbd300fc0

### 117. Z=115 (Moscovium) bonding flexibility → transparent conductivity

**Coin ID:** COIN-2D63053F6E5D9DB2  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.53951  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 53995689958f936093c9cfc8bdb71291

### 118. Element 112 (Cn) + Tungsten via high pressure high temperature

**Coin ID:** COIN-E053B4504E56FA12  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.55271  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 03543a03dd1bc313a8701ead268a2d70**119. Z=126 (Unbihexium) bonding flexibility → magneto caloric giant****Coin ID:** COIN-BFB6954129360C5E**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.58093**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0b39027a977052191cd9cdc137031275**120. Z=112 (Copernicium) bonding flexibility ☞ photonic bandgap metal****Coin ID:** COIN-19810617E79A5D6B**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.5502**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 90299f14783ab212976429755dc53f81**121. Element 112 (Cn) + Uranium via spark plasma sintering****Coin ID:** COIN-CA1BD57D23126DFB**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.54125**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 141d244a403d4827c798be23321dca02**122. Z=126 (Unbihexium) bonding flexibility → transparent conductivity****Coin ID:** COIN-336A98DCFF13EE99**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.55635  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** a216ea1642b8e3b29bf443108b7381c4

### 123. Z=126 (Unbihexium) bonding flexibility → topological insulator bulk

**Coin ID:** COIN-406B8938E4273899  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.54456  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** e943642be72e9c080931cbbca669dd13

### 124. Z=119 (Ununennium) bonding flexibility → topological insulator bulk

**Coin ID:** COIN-420994BD8E20AF00  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.5804  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** a1b5aafa7776f64ae5adf9239440e739

### 125. Element 115 (Mc) + Americium via electrochemical deposition

**Coin ID:** COIN-896A6E946F0C7A44  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.57919  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 563cc5d49c125418c2806b6a57663ce3**126. Element 112 (Cn) + Bismuth via nuclear transmutation pathway****Coin ID:** COIN-0886847E6E35BC69**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.54689**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 13f579e17e682dfffed837e2a3475457**127. Element 119 (Uue) + Lead via spark plasma sintering****Coin ID:** COIN-E07866111D62E1A0**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.58182**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** acc494f8d2a474d6d51164cfcf7f6064**128. Z=112 (Copernicium) bonding flexibility → magneto caloric giant****Coin ID:** COIN-1CEB3AB4135BA406**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5891**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855**Triple intersection:** 0.349943**gamma\_N (Lyapunov stability):** -0.55825**MT14 / GEQ:** 8/14 · 4/8**Survival governed / ungoverned:** 0.6575 / 0.395**Enhancement:** 1.664x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 5389555c68a58f05a478148021e84b80**129. Element 126 (Ubh) + Tungsten via nuclear transmutation pathway****Coin ID:** COIN-DE7378D1283E8FFC**K\_N1 (inner magic shell):** 0.9**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.58238  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 2e4528f14f65dd2e1a2d0b66c166132f

### 130. Z=112 (Copernicium) bonding flexibility → nuclear binding stability

**Coin ID:** COIN-E78A286542116EAA  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.54997  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** d5fbeb578467cd79f270030f1f147fee

### 131. Z=119 (Ununennium) bonding flexibility ☹️ photonic bandgap metal

**Coin ID:** COIN-C858C05749999DDC  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.57128  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": true, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** d79a32e15843eb3b0fcc8efbb36b98f0

### 132. Z=112 (Copernicium) bonding flexibility → transparent conductivity

**Coin ID:** COIN-D729259BA6A9FECE  
**K\_N1 (inner magic shell):** 0.9  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5891  
**K\_alpha / K\_beta / K\_gamma:** 0.88 / 0.783 / 0.855  
**Triple intersection:** 0.349943  
**gamma\_N (Lyapunov stability):** -0.5571  
**MT14 / GEQ:** 8/14 · 4/8  
**Survival governed / ungoverned:** 0.6575 / 0.395  
**Enhancement:** 1.664x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":true,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 74065255290fc1d33c26d2680d17953f

### 133. Neptunium room temp superconductivity via molecular beam epitaxy

**Coin ID:** COIN-A60F1F7A80B1DAA6**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.855**K\_N3 (constitutional admissibility):** 0.6686**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.8317 / 0.8775**Triple intersection:** 0.331535**gamma\_N (Lyapunov stability):** -0.53026**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.6492 / 0.4005**Enhancement:** 1.621x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 354477565f3e7fae7060ac9edf89fafa

### 134. Californium melt viscosity profile at 1597 K — quasicrystalline structure

**Coin ID:** COIN-D18A591B696411E3**K\_N1 (inner magic shell):** 0.59**K\_N2 (outer island of stability):** 0.83**K\_N3 (constitutional admissibility):** 0.6449**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.8255 / 0.955**Triple intersection:** 0.315794**gamma\_N (Lyapunov stability):** -0.52836**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.6921 / 0.4053**Enhancement:** 1.708x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** aa61edfd9db7ac92b0630a1285989873

### 135. Tantalum melt viscosity profile at 2636 K — quasicrystalline structure

**Coin ID:** COIN-E57D6ACF6FD9ACBA**K\_N1 (inner magic shell):** 0.59**K\_N2 (outer island of stability):** 0.83**K\_N3 (constitutional admissibility):** 0.6449**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.8255 / 0.955**Triple intersection:** 0.315794**gamma\_N (Lyapunov stability):** -0.50951**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.6921 / 0.4053**Enhancement:** 1.708x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 7c82a1dab90b06f33defae515a0391b3

### 136. Gold melt viscosity profile at 2014 K — quasicrystalline structure

**Coin ID:** COIN-C754C2181A1A4BBD**K\_N1 (inner magic shell):** 0.59**K\_N2 (outer island of stability):** 0.83

**K\_N3 (constitutional admissibility):** 0.6449  
**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.8255 / 0.955  
**Triple intersection:** 0.315794  
**gamma\_N (Lyapunov stability):** -0.50021  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.6921 / 0.4053  
**Enhancement:** 1.708x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": true, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 076e32df6b5cc9cdd288810e91eb1e60

### 137. Hafnium melt viscosity profile at 1628 K — quasicrystalline structure

**Coin ID:** COIN-6ACA8395175C3485  
**K\_N1 (inner magic shell):** 0.59  
**K\_N2 (outer island of stability):** 0.83  
**K\_N3 (constitutional admissibility):** 0.6449  
**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.8255 / 0.955  
**Triple intersection:** 0.315794  
**gamma\_N (Lyapunov stability):** -0.50853  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.6921 / 0.4053  
**Enhancement:** 1.708x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": true, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c6e9965f8af87c92da1d0c090c87e2c7

### 138. Tantalum melt viscosity profile at 2026 K — quasicrystalline structure

**Coin ID:** COIN-7E061359A9CCA69B  
**K\_N1 (inner magic shell):** 0.59  
**K\_N2 (outer island of stability):** 0.83  
**K\_N3 (constitutional admissibility):** 0.6449  
**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.8255 / 0.955  
**Triple intersection:** 0.315794  
**gamma\_N (Lyapunov stability):** -0.48239  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.6921 / 0.4053  
**Enhancement:** 1.708x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": true, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** dd1927874c05b8fbacf038df61392d6b

### 139. Tungsten melt viscosity profile at 2728 K — quasicrystalline structure

**Coin ID:** COIN-343F31765D5D6900  
**K\_N1 (inner magic shell):** 0.59  
**K\_N2 (outer island of stability):** 0.83  
**K\_N3 (constitutional admissibility):** 0.6449  
**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.8255 / 0.955  
**Triple intersection:** 0.315794  
**gamma\_N (Lyapunov stability):** -0.49949  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.6921 / 0.4053  
**Enhancement:** 1.708x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 5e641f1a165d7ae68a353d3b5de8593a

### 140. Californium-Mercury quasicrystalline structure at 85:15 ratio

**Coin ID:** COIN-A3991A1DCF0D6EDB**K\_N1 (inner magic shell):** 0.59**K\_N2 (outer island of stability):** 0.78**K\_N3 (constitutional admissibility):** 0.6351**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.813 / 0.955**Triple intersection:** 0.292276**gamma\_N (Lyapunov stability):** -0.49829**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.6815 / 0.4123**Enhancement:** 1.653x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 809ba429b444c75897366dfcf6ad4749

### 141. Thorium-Tantalum quasicrystalline structure at 74:26 ratio

**Coin ID:** COIN-59CFC2B183038B73**K\_N1 (inner magic shell):** 0.59**K\_N2 (outer island of stability):** 0.78**K\_N3 (constitutional admissibility):** 0.6351**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.813 / 0.955**Triple intersection:** 0.292276**gamma\_N (Lyapunov stability):** -0.49868**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.6815 / 0.4123**Enhancement:** 1.653x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b2d1cb8f197cce1faad7a4fe5d19b9be

### 142. Bismuth-Uranium quasicrystalline structure at 82:18 ratio

**Coin ID:** COIN-B601FE37A7B47FF6**K\_N1 (inner magic shell):** 0.59**K\_N2 (outer island of stability):** 0.78**K\_N3 (constitutional admissibility):** 0.6351**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.813 / 0.955**Triple intersection:** 0.292276**gamma\_N (Lyapunov stability):** -0.50038**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.6815 / 0.4123**Enhancement:** 1.653x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** ed5a69a9be8c2226e8c3e8fda07333f6

### 143. Osmium-Uranium quasicrystalline structure at 86:14 ratio

**Coin ID:** COIN-195D936D7DE441AF**K\_N1 (inner magic shell):** 0.59**K\_N2 (outer island of stability):** 0.78

**K\_N3 (constitutional admissibility):** 0.6351  
**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.813 / 0.955  
**Triple intersection:** 0.292276  
**gamma\_N (Lyapunov stability):** -0.50218  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.6815 / 0.4123  
**Enhancement:** 1.653x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": true, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 23395fabbb1a23dbfe54827018a56973

#### 144. Thorium-Gold quasicrystalline structure at 39:61 ratio

**Coin ID:** COIN-7030C1A014183CB0  
**K\_N1 (inner magic shell):** 0.59  
**K\_N2 (outer island of stability):** 0.78  
**K\_N3 (constitutional admissibility):** 0.6351  
**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.813 / 0.955  
**Triple intersection:** 0.292276  
**gamma\_N (Lyapunov stability):** -0.47086  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.6815 / 0.4123  
**Enhancement:** 1.653x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": true, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 42a496e0f20676584640d74cae113701

#### 145. Lead-Thorium quasicrystalline structure at 63:37 ratio

**Coin ID:** COIN-E8FAB65F0C3C6A74  
**K\_N1 (inner magic shell):** 0.59  
**K\_N2 (outer island of stability):** 0.78  
**K\_N3 (constitutional admissibility):** 0.6351  
**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.813 / 0.955  
**Triple intersection:** 0.292276  
**gamma\_N (Lyapunov stability):** -0.49677  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.6815 / 0.4123  
**Enhancement:** 1.653x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": true, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** d8fd77e7b8cc62c8dd8aa9a08c92a995

#### 146. Rhenium-Mercury quasicrystalline structure at 87:13 ratio

**Coin ID:** COIN-38AA2523DECE3A9C  
**K\_N1 (inner magic shell):** 0.59  
**K\_N2 (outer island of stability):** 0.78  
**K\_N3 (constitutional admissibility):** 0.6351  
**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.813 / 0.955  
**Triple intersection:** 0.292276  
**gamma\_N (Lyapunov stability):** -0.47529  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.6815 / 0.4123  
**Enhancement:** 1.653x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** c275934603efbcc55d017ab011f907ea**147. Iridium-Californium quasicrystalline structure at 12:88 ratio****Coin ID:** COIN-7909DAB025CDBB85**K\_N1 (inner magic shell):** 0.59**K\_N2 (outer island of stability):** 0.78**K\_N3 (constitutional admissibility):** 0.6351**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.813 / 0.955**Triple intersection:** 0.292276**gamma\_N (Lyapunov stability):** -0.49515**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.6815 / 0.4123**Enhancement:** 1.653x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2ed390e225bcc63e60f6e5e3a5e2c75a**148. Gold-Americium quasicrystalline structure at 86:14 ratio****Coin ID:** COIN-B055EDCCF26827F3**K\_N1 (inner magic shell):** 0.59**K\_N2 (outer island of stability):** 0.78**K\_N3 (constitutional admissibility):** 0.6351**K\_alpha / K\_beta / K\_gamma:** 0.818 / 0.813 / 0.955**Triple intersection:** 0.292276**gamma\_N (Lyapunov stability):** -0.46604**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.6815 / 0.4123**Enhancement:** 1.653x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":true,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 97801b70fa3df21bc310a2c5e2a87f1b**149. Z=110 (Darmstadtium) bonding flexibility → room temp superconductivity****Coin ID:** COIN-31920A16973686B1**K\_N1 (inner magic shell):** 0.62**K\_N2 (outer island of stability):** 0.81**K\_N3 (constitutional admissibility):** 0.5781**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.8205 / 0.855**Triple intersection:** 0.290301**gamma\_N (Lyapunov stability):** -0.47081**MT14 / GEQ:** 6/14 · 4/8**Survival governed / ungoverned:** 0.6306 / 0.4129**Enhancement:** 1.527x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":false,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 82ea15cf7c7dd55b60c7f040dd70839f**150. Plutonium negative thermal expansion via ion beam synthesis****Coin ID:** COIN-61652A66C7A9E045**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.806

**K\_N3 (constitutional admissibility):** 0.6342  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8795 / 0.888  
**Triple intersection:** 0.286238  
**gamma\_N (Lyapunov stability):** -0.47479  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6288 / 0.4141  
**Enhancement:** 1.518x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 7b2c56c583e0c37aab46eea45091e171

### 151. Plutonium-Neptunium thermal transition state at 609 K

**Coin ID:** COIN-36A4FBB85430E70B  
**K\_N1 (inner magic shell):** 0.64  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6689  
**K\_alpha / K\_beta / K\_gamma:** 0.928 / 0.843 / 0.855  
**Triple intersection:** 0.282531  
**gamma\_N (Lyapunov stability):** -0.4878  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6271 / 0.4152  
**Enhancement:** 1.51x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": true }  
**SHA-256 (truncated):** 71e35fb2d829ab0f8c54cde21038a791

### 152. Neptunium phase boundary at 416 GPa / 2226 K

**Coin ID:** COIN-92494DA3C6134261  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.6328  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.808 / 0.855  
**Triple intersection:** 0.278942  
**gamma\_N (Lyapunov stability):** -0.49748  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6255 / 0.4163  
**Enhancement:** 1.503x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 129e888104e90fb8174c6f0f228ae843

### 153. Neptunium-Americium interface tension → mott insulator transition

**Coin ID:** COIN-649549E27DBB4E6E  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.6328  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.808 / 0.855  
**Triple intersection:** 0.278942  
**gamma\_N (Lyapunov stability):** -0.45178  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6255 / 0.4163  
**Enhancement:** 1.503x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 86eb94d062bfcc3b960135761d14d394

### 154. Iridium-Plutonium interface tension → room temp superconductivity

**Coin ID:** COIN-312FBDA99BB38A74**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.81**K\_N3 (constitutional admissibility):** 0.6113**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8805 / 0.855**Triple intersection:** 0.277284**gamma\_N (Lyapunov stability):** -0.47079**MT14 / GEQ:** 6/14 · 4/8**Survival governed / ungoverned:** 0.6248 / 0.4168**Enhancement:** 1.499x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 1223e9388ed635b7db13666c4b72a9d0

### 155. Rhenium-Plutonium interface tension room temp superconductivity

**Coin ID:** COIN-425B7367644B5AF4**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.81**K\_N3 (constitutional admissibility):** 0.6113**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8805 / 0.855**Triple intersection:** 0.277284**gamma\_N (Lyapunov stability):** -0.45954**MT14 / GEQ:** 6/14 · 4/8**Survival governed / ungoverned:** 0.6248 / 0.4168**Enhancement:** 1.499x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 9441596cb91f710f2340e0fd5cbaac6c

### 156. Neptunium spin orbit coupling max via ion beam synthesis

**Coin ID:** COIN-65AAF9D7A6718369**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.726**K\_N3 (constitutional admissibility):** 0.6503**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.7995 / 0.888**Triple intersection:** 0.273837**gamma\_N (Lyapunov stability):** -0.4586**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6232 / 0.4178**Enhancement:** 1.492x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 08a2356cb9aa2cc6921b0280c725de93

### 157. Neptunium heavy fermion coherence via laser ablation deposition

**Coin ID:** COIN-42CB50F7C723AC3B**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.714

**K\_N3 (constitutional admissibility):** 0.6435  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.7965 / 0.882  
**Triple intersection:** 0.266487  
**gamma\_N (Lyapunov stability):** -0.47327  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6199 / 0.4201  
**Enhancement:** 1.476x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 15d9dc002db01844757f13a5a8e646d8

### 158. Hafnium room temp superconductivity via ion beam synthesis

**Coin ID:** COIN-F23BA6396D04B7E2  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.876  
**K\_N3 (constitutional admissibility):** 0.5946  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.837 / 0.888  
**Triple intersection:** 0.260437  
**gamma\_N (Lyapunov stability):** -0.44977  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.6172 / 0.4219  
**Enhancement:** 1.463x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": true, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** a3fad8f48fcdf801f46f966ebda6037f

### 159. Z=110 (Darmstadtium) bonding flexibility → negative thermal expansion

**Coin ID:** COIN-309751AB3D40E22A  
**K\_N1 (inner magic shell):** 0.62  
**K\_N2 (outer island of stability):** 0.74  
**K\_N3 (constitutional admissibility):** 0.5657  
**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.803 / 0.855  
**Triple intersection:** 0.259557  
**gamma\_N (Lyapunov stability):** -0.48417  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6168 / 0.4221  
**Enhancement:** 1.461x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": false, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 806b3efe28f7a31421d81456d220090b

### 160. Neptunium-Mercury thermal transition state at 1571 K

**Coin ID:** COIN-05AFBD5025E6399B  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.623  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.7955 / 0.855  
**Triple intersection:** 0.25656  
**gamma\_N (Lyapunov stability):** -0.44225  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6155 / 0.423  
**Enhancement:** 1.455x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** b6b275fd560718ef5c58d4cb31866fa9

### 161. Bismuth-Neptunium thermal transition state at 1824 K

**Coin ID:** COIN-4A92AEBB0AE84BB2**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.623**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.7955 / 0.855**Triple intersection:** 0.25656**gamma\_N (Lyapunov stability):** -0.47703**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6155 / 0.423**Enhancement:** 1.455x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 0ba099cb7d53652bc45d7965a39ddfc7

### 162. Neptunium melt viscosity profile at 1885 K — heusler alloy

**Coin ID:** COIN-5B52522B2765524C**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.623**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.7955 / 0.855**Triple intersection:** 0.25656**gamma\_N (Lyapunov stability):** -0.45093**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6155 / 0.423**Enhancement:** 1.455x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 103b57f91f6af2b693d6904e8a82ce1a

### 163. Mercury-Neptunium thermal transition state at 1752 K

**Coin ID:** COIN-48923D6D4D091F83**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.623**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.7955 / 0.855**Triple intersection:** 0.25656**gamma\_N (Lyapunov stability):** -0.43413**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6155 / 0.423**Enhancement:** 1.455x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 3c1ea1aab914ba213334a0c3ff133f30

### 164. Neptunium melt viscosity profile at 2587 K eutectic composition

**Coin ID:** COIN-763CBC9C51E68826**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.623  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.7955 / 0.855  
**Triple intersection:** 0.25656  
**gamma\_N (Lyapunov stability):** -0.46949  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6155 / 0.423  
**Enhancement:** 1.455x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** f6f8d72f7adc4e01af723165a379aaab

### 165. Lead-Neptunium thermal transition state at 2374 K

**Coin ID:** COIN-0F6B2C752F4F8F94  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.623  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.7955 / 0.855  
**Triple intersection:** 0.25656  
**gamma\_N (Lyapunov stability):** -0.45583  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6155 / 0.423  
**Enhancement:** 1.455x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 5110e605270321cd607bd79d7b23be96

### 166. Plutonium-Osmium interface tension → mott insulator transition

**Coin ID:** COIN-CAF602FFCF26822D  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.6026  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.868 / 0.855  
**Triple intersection:** 0.256474  
**gamma\_N (Lyapunov stability):** -0.47007  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6154 / 0.4231  
**Enhancement:** 1.455x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": true, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** fa02ca5d8e06a4e671f8a6f21a612dd9

### 167. Element 110 (Ds) + Bismuth via laser ablation deposition

**Coin ID:** COIN-8D0FEAB1F92C5F88  
**K\_N1 (inner magic shell):** 0.62  
**K\_N2 (outer island of stability):** 0.714  
**K\_N3 (constitutional admissibility):** 0.5789  
**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.7965 / 0.882  
**Triple intersection:** 0.256254  
**gamma\_N (Lyapunov stability):** -0.45218  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6153 / 0.4231  
**Enhancement:** 1.454x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":false,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 8b109e4c40fe39b2a9c702fb126069b3

### 168. Tantalum room temp superconductivity via laser ablation deposition

**Coin ID:** COIN-BA904202EFBA5622**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.864**K\_N3 (constitutional admissibility):** 0.5885**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.834 / 0.882**Triple intersection:** 0.254219**gamma\_N (Lyapunov stability):** -0.45301**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.6144 / 0.4237**Enhancement:** 1.45x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 76d67bd57aa9135634f9f0a0038c0529

### 169. Hafnium room temp superconductivity via laser ablation deposition

**Coin ID:** COIN-4F26529701A1118B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.864**K\_N3 (constitutional admissibility):** 0.5885**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.834 / 0.882**Triple intersection:** 0.254219**gamma\_N (Lyapunov stability):** -0.47851**MT14 / GEQ:** 7/14 · 4/8**Survival governed / ungoverned:** 0.6144 / 0.4237**Enhancement:** 1.45x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0e9ed109bca76d424b911494d8a9172a

### 170. Element 110 (Ds) + Bismuth via molecular beam epitaxy

**Coin ID:** COIN-924348C52BFF8701**K\_N1 (inner magic shell):** 0.62**K\_N2 (outer island of stability):** 0.705**K\_N3 (constitutional admissibility):** 0.5743**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.7943 / 0.8775**Triple intersection:** 0.251022**gamma\_N (Lyapunov stability):** -0.4441**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.613 / 0.4247**Enhancement:** 1.443x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":false,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3d661922ca17412c2e4d29907f2b21d0

### 171. Rhenium room temp superconductivity via molecular beam epitaxy

**Coin ID:** COIN-04BF7C6383DBFD17**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.855

**K\_N3 (constitutional admissibility):** 0.5839  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8317 / 0.8775  
**Triple intersection:** 0.249612  
**gamma\_N (Lyapunov stability):** -0.4605  
**MT14 / GEQ:** 7/14 · 4/8  
**Survival governed / ungoverned:** 0.6123 / 0.4251  
**Enhancement:** 1.44x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": true, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** a7ceaba6e83475ee7781c66acce1c0d2

## 172. Neptunium topological insulator bulk via mechanical alloying cryogenic

**Coin ID:** COIN-B0FC3B90F5F8E17B  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.684  
**K\_N3 (constitutional admissibility):** 0.6266  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.789 / 0.867  
**Triple intersection:** 0.248585  
**gamma\_N (Lyapunov stability):** -0.43306  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6119 / 0.4254  
**Enhancement:** 1.438x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 9a4943dabd72e659961bf234ec043541

## 173. Element 110 (Ds) + Americium via arc melting controlled atmosphere

**Coin ID:** COIN-3726715FDCFF90FD  
**K\_N1 (inner magic shell):** 0.62  
**K\_N2 (outer island of stability):** 0.696  
**K\_N3 (constitutional admissibility):** 0.5697  
**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.792 / 0.873  
**Triple intersection:** 0.245849  
**gamma\_N (Lyapunov stability):** -0.44941  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6106 / 0.4262  
**Enhancement:** 1.433x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": false, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 7cce34a3cd5b464ee5a615dd132d6e6c

## 174. Iridium mott insulator transition via ion beam synthesis

**Coin ID:** COIN-AA91ED699C9660B9  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.826  
**K\_N3 (constitutional admissibility):** 0.5857  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8245 / 0.888  
**Triple intersection:** 0.241904  
**gamma\_N (Lyapunov stability):** -0.45423  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6089 / 0.4274  
**Enhancement:** 1.424x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 249e1ed39cbb30b30b4918822daec

### 175. Neptunium nuclear binding stability via self propagating synthesis

**Coin ID:** COIN-535CAD0E78E20A5C**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.672**K\_N3 (constitutional admissibility):** 0.6199**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.786 / 0.861**Triple intersection:** 0.241612**gamma\_N (Lyapunov stability):** -0.44148**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6087 / 0.4275**Enhancement:** 1.424x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** f6c09f5b45b7fef81214394e4d8c5243

### 176. Plutonium magneto caloric giant via molecular beam epitaxy

**Coin ID:** COIN-7F71C5EECEDD51A8**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.705**K\_N3 (constitutional admissibility):** 0.6087**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8542 / 0.8775**Triple intersection:** 0.240306**gamma\_N (Lyapunov stability):** -0.43083**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6081 / 0.4279**Enhancement:** 1.421x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 8949a7f44dce66609e164b2d8ce9e085

### 177. Tantalum room temp superconductivity via mechanical alloying cryogenic

**Coin ID:** COIN-948E0FB431185AA5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.834**K\_N3 (constitutional admissibility):** 0.5733**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8265 / 0.867**Triple intersection:** 0.23905**gamma\_N (Lyapunov stability):** -0.44375**MT14 / GEQ:** 6/14 · 4/8**Survival governed / ungoverned:** 0.6076 / 0.4283**Enhancement:** 1.419x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4edeb83f2720f798799519b9533c2d7a

### 178. Element 110 (Ds) + Tantalum via mechanical alloying cryogenic

**Coin ID:** COIN-367942051C5C9253**K\_N1 (inner magic shell):** 0.62**K\_N2 (outer island of stability):** 0.684

**K\_N3 (constitutional admissibility):** 0.5637  
**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.789 / 0.867  
**Triple intersection:** 0.23904  
**gamma\_N (Lyapunov stability):** -0.44223  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6076 / 0.4283  
**Enhancement:** 1.419x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":false, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 48e0cf14ca1a93f56ade551b229a9925

### 179. Element 110 (Ds) + Bismuth via mechanical alloying cryogenic

**Coin ID:** COIN-B4F8DA97AFDB5946  
**K\_N1 (inner magic shell):** 0.62  
**K\_N2 (outer island of stability):** 0.684  
**K\_N3 (constitutional admissibility):** 0.5637  
**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.789 / 0.867  
**Triple intersection:** 0.23904  
**gamma\_N (Lyapunov stability):** -0.46257  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6076 / 0.4283  
**Enhancement:** 1.419x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":false, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 346e0f64a558e65f2220ea2c311b5e35

### 180. Plutonium phase boundary at 144 GPa / 3189 K

**Coin ID:** COIN-486538BEB47F0DC9  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5939  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855  
**Triple intersection:** 0.23615  
**gamma\_N (Lyapunov stability):** -0.4449  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6063 / 0.4292  
**Enhancement:** 1.413x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":null, "neptunium":false, "plutonium":true }  
**SHA-256 (truncated):** 4a4aa46e497c12d6e8c816d41a056c7c

### 181. Americium-Plutonium thermal transition state at 1805 K

**Coin ID:** COIN-F0BBBDC97E792344  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5939  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855  
**Triple intersection:** 0.23615  
**gamma\_N (Lyapunov stability):** -0.43686  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6063 / 0.4292  
**Enhancement:** 1.413x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 0f67c2cf452211c824773f49ecab7e

### 182. Plutonium phase boundary at 20 GPa / 2999 K

**Coin ID:** COIN-10A61932607D3FFF**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5939**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855**Triple intersection:** 0.23615**gamma\_N (Lyapunov stability):** -0.44318**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6063 / 0.4292**Enhancement:** 1.413x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** efecdedfab19e19b56f868198c1d66e7

### 183. Plutonium phase boundary at 90 GPa / 2382 K

**Coin ID:** COIN-13AAA1A3EF9A20B9**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5939**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855**Triple intersection:** 0.23615**gamma\_N (Lyapunov stability):** -0.42834**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6063 / 0.4292**Enhancement:** 1.413x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** dee9114175e8c359bff8529f46157a7a

### 184. Plutonium-Lead thermal transition state at 1776 K

**Coin ID:** COIN-AFE41B03A056C09E**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5939**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855**Triple intersection:** 0.23615**gamma\_N (Lyapunov stability):** -0.4495**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6063 / 0.4292**Enhancement:** 1.413x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 6ab22c6b6e181738dccc36314f53f9bf

### 185. Osmium-Plutonium thermal transition state at 2232 K

**Coin ID:** COIN-DD8E1B3320F7AD4B**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5939  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855  
**Triple intersection:** 0.23615  
**gamma\_N (Lyapunov stability):** -0.43853  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6063 / 0.4292  
**Enhancement:** 1.413x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** a06f7f62a88643e6150b7244b7f73d7c

### 186. Californium-Plutonium thermal transition state at 1912 K

**Coin ID:** COIN-04D22A0B3C2A884F  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5939  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855  
**Triple intersection:** 0.23615  
**gamma\_N (Lyapunov stability):** -0.4227  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6063 / 0.4292  
**Enhancement:** 1.413x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 6239df31fce3aaa64fcfab9ffc327dc

### 187. Plutonium-Americium thermal transition state at 1548 K

**Coin ID:** COIN-F1FB5F9810A39C1D  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5939  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855  
**Triple intersection:** 0.23615  
**gamma\_N (Lyapunov stability):** -0.42793  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6063 / 0.4292  
**Enhancement:** 1.413x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 224dd60a6c508fba6d40bd988d9726c0

### 188. Plutonium-Lead thermal transition state at 2207 K

**Coin ID:** COIN-90AFA8AD71F1BD40  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5939  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855  
**Triple intersection:** 0.23615  
**gamma\_N (Lyapunov stability):** -0.46424  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6063 / 0.4292  
**Enhancement:** 1.413x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 828fea03f2d11e0698b533720bbbae4

### 189. Plutonium phase boundary at 87 GPa / 1963 K

**Coin ID:** COIN-6D30D29F9BDFD22C**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5939**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855**Triple intersection:** 0.23615**gamma\_N (Lyapunov stability):** -0.42575**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6063 / 0.4292**Enhancement:** 1.413x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** fce858b003329a21f8909c997f53cded

### 190. Plutonium phase boundary at 45 GPa / 2677 K

**Coin ID:** COIN-FF10B99D3639AA55**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5939**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855**Triple intersection:** 0.23615**gamma\_N (Lyapunov stability):** -0.43234**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6063 / 0.4292**Enhancement:** 1.413x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 9d04467243567d0fc4ee85b65c2e86de

### 191. Plutonium phase boundary at 348 GPa / 710 K

**Coin ID:** COIN-8BF3788FE31C7D00**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5939**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855**Triple intersection:** 0.23615**gamma\_N (Lyapunov stability):** -0.42111**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6063 / 0.4292**Enhancement:** 1.413x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** c0eee3fb34cac04b85235141b1ebf399

### 192. Plutonium melt viscosity profile at 2430 K — frank kasper phase

**Coin ID:** COIN-4047CBA5FC75041B**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5939  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.8555 / 0.855  
**Triple intersection:** 0.23615  
**gamma\_N (Lyapunov stability):** -0.46233  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6063 / 0.4292  
**Enhancement:** 1.413x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 18019df4e426ee1965f97b87571760b3

### 193. Gold mott insulator transition via laser ablation deposition

**Coin ID:** COIN-B2FD49219C9A7B43  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.814  
**K\_N3 (constitutional admissibility):** 0.5797  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8215 / 0.882  
**Triple intersection:** 0.235918  
**gamma\_N (Lyapunov stability):** -0.46498  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6062 / 0.4292  
**Enhancement:** 1.412x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": true, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 3ee7b08f53b96b433ce1caa3bddbc889

### 194. Plutonium photonic bandgap metal via arc melting controlled atmosphere

**Coin ID:** COIN-5FF5DCA1C9C1CFCF  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.696  
**K\_N3 (constitutional admissibility):** 0.604  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.852 / 0.873  
**Triple intersection:** 0.2354  
**gamma\_N (Lyapunov stability):** -0.45974  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6059 / 0.4294  
**Enhancement:** 1.411x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 2d0d6c3e1b1df97437282e1b87ddca86

### 195. Uranium-Neptunium spinodal decomposition product at 44:56 ratio

**Coin ID:** COIN-987DE34562CEDEBA  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.43777  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** de9625a9a1745ecd000c6fbe8ab32d5a

### 196. Neptunium-Bismuth spinodal decomposition product at 91:9 ratio

**Coin ID:** COIN-A07277410A44AFEC**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.41861**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 453f6c2d3bb9bcbef9db78de19ecc1ee

### 197. Neptunium-Curium interface tension → photonic bandgap metal

**Coin ID:** COIN-15F0C958D3A7EC59**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.43815**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** b228873ddb0170b937ec86b19ae4d66

### 198. Neptunium phase boundary at 8 GPa / 1346 K

**Coin ID:** COIN-508CA118B0509373**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.46298**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** ba5698b19d7489592e5cb9af26a5322a

### 199. Osmium-Neptunium interface tension → nuclear binding stability

**Coin ID:** COIN-F4B009898E19C7D6**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.44516  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 580220fcae552c988b1e5ac56cfc312d

## 200. Neptunium phase boundary at 82 GPa / 1220 K

**Coin ID:** COIN-17496FA35247C714  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.46081  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 0ddf72984065e2c8df5486002382b42b

## 201. Tantalum-Neptunium thermal transition state at 1174 K

**Coin ID:** COIN-31C81F072311FCB7  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.46293  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** a6d6d6e8aa0b305a0e3ba98208e0add9

## 202. Thorium-Neptunium interface tension → photonic bandgap metal

**Coin ID:** COIN-11F950460E8CC2D9  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.42739  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 7ffa0dfd46c979f95e931be03140457f

### 203. Neptunium-Bismuth thermal transition state at 1139 K

**Coin ID:** COIN-77481C8001C2C542**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.43661**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 6db7eeda426ef02a613a8b609b2e4a2a

### 204. Neptunium melt viscosity profile at 1045 K laves phase

**Coin ID:** COIN-2D031D258525AA73**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.44777**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** dd97f723dfb7c4bd1c7642af99b379f1

### 205. Neptunium-Thallium spinodal decomposition product at 71:29 ratio

**Coin ID:** COIN-67CAFBA2506632F0**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.44644**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 136c729ceb332dfe70adbbaa197ccbed

### 206. Osmium-Neptunium thermal transition state at 783 K

**Coin ID:** COIN-62331F0DBDD9D3DF**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.46367  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 545361bf8cd383e68c7dd984dba40ca5

## 207. Neptunium-Americium frank kasper phase at 90:10 ratio

**Coin ID:** COIN-6FA6E69CF91FAA3A  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.43839  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 9de7b55d2c91b56134000eb87715f481

## 208. Rhenium-Neptunium interface tension → nuclear binding stability

**Coin ID:** COIN-5C5C30BB158F0DD4  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.42538  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 83c8b27ed49d05863d3212675e24c661

## 209. Neptunium-Californium interface tension → nuclear binding stability

**Coin ID:** COIN-1F90C78720683DDD  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.46183  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** baad727bd4032315b2cb60949b43889e

## 210. Thallium-Neptunium eutectic composition at 72:28 ratio

**Coin ID:** COIN-058764D2B0AB4532**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.45371**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 5c4e64dfff423fdab2e6127fd7f25907

## 211. Neptunium-Neptunium interface tension → heavy fermion coherence

**Coin ID:** COIN-DA063F6E1E3B047C**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.4281**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 07105675e585bc8c1a6203654afae061

## 212. Tungsten-Neptunium laves phase at 21:79 ratio

**Coin ID:** COIN-984E5803EED170E9**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.42813**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 0789da1cbfe3c6e6c52b267f5b7ae2a3

## 213. Neptunium melt viscosity profile at 1268 K — heusler alloy

**Coin ID:** COIN-CFE7836109DC6B49**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.46353  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** d62ce55e48d9b3cc461487be6ad5ac1d

## 214. Hafnium-Neptunium interface tension 000 transparent conductivity

**Coin ID:** COIN-19F8D60CAF388BFB  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.43793  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** f8df5ab429d82a7c77d99c00b4b90261

## 215. Neptunium-Iridium laves phase at 48:52 ratio

**Coin ID:** COIN-D1ED6F2E723A17EB  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.42685  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 7d93aa418a73e1e725417ac09d7b12f9

## 216. Neptunium-Curium interface tension 00 spin orbit coupling max

**Coin ID:** COIN-205BCCAB16C28EEB  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.429  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 544f87d85ac3e632fdbfad478356f19f

## 217. Neptunium-Tantalum thermal transition state at 1272 K

**Coin ID:** COIN-A9172F4C05D13A9D**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.44699**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** f768e7c6cf0cda09022ca3afe33fbf0d

## 218. Neptunium melt viscosity profile at 1241 K spinodal decomposition product

**Coin ID:** COIN-9621F5336A5F0699**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.42867**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 256b9fb14ec50ef0f25bb585676927b3

## 219. Platinum-Neptunium interface tension → photonic bandgap metal

**Coin ID:** COIN-3559979749BC9614**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.6132**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855**Triple intersection:** 0.234744**gamma\_N (Lyapunov stability):** -0.44793**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6056 / 0.4296**Enhancement:** 1.41x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** d79c0c43b0c05732dd462806ac769f8b

## 220. Bismuth-Neptunium spinodal decomposition product at 86:14 ratio

**Coin ID:** COIN-5395858C0EE61E2E**K\_N1 (inner magic shell):** 0.58**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.45121  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 4d64f84ab976d679928f6808680572be

## 221. Neptunium-Platinum interface tension topological insulator bulk

**Coin ID:** COIN-42D8598660FFF30B  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.43417  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** 7a36009dd9ecb7df2118417b1cd0a04b

## 222. Neptunium-Iridium interface tension → photonic bandgap metal

**Coin ID:** COIN-0889FEA5F747A18A  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.4158  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": true, "plutonium": false }  
**SHA-256 (truncated):** e2c0465112611da932c652a4b4ef90f5

## 223. Iridium-Neptunium spinodal decomposition product at 39:61 ratio

**Coin ID:** COIN-FC848C9E4F32C4BA  
**K\_N1 (inner magic shell):** 0.58  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.6132  
**K\_alpha / K\_beta / K\_gamma:** 0.916 / 0.783 / 0.855  
**Triple intersection:** 0.234744  
**gamma\_N (Lyapunov stability):** -0.41943  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6056 / 0.4296  
**Enhancement:** 1.41x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":true,"plutonium":false}
```

**SHA-256 (truncated):** 0382b0de66c586c58f936e54a80bd6b9

## 224. Thallium room temp superconductivity via self propagating synthesis

**Coin ID:** COIN-984579FADCE3F152**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.822**K\_N3 (constitutional admissibility):** 0.5672**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8235 / 0.861**Triple intersection:** 0.23313**gamma\_N (Lyapunov stability):** -0.44816**MT14 / GEQ:** 6/14 · 4/8**Survival governed / ungoverned:** 0.6049 / 0.4301**Enhancement:** 1.407x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b747697dc47e03cec47e52e924bc646e

## 225. Iridium mott insulator transition via molecular beam epitaxy

**Coin ID:** COIN-8CC3DF1B27A493E5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.805**K\_N3 (constitutional admissibility):** 0.5751**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8193 / 0.8775**Triple intersection:** 0.231483**gamma\_N (Lyapunov stability):** -0.43361**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6042 / 0.4306**Enhancement:** 1.403x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 51c9dd98fcffc960b6fb43477bec8919

## 226. Mercury mott insulator transition via molecular beam epitaxy

**Coin ID:** COIN-268D8EA8EAD0F72E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.805**K\_N3 (constitutional admissibility):** 0.5751**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8193 / 0.8775**Triple intersection:** 0.231483**gamma\_N (Lyapunov stability):** -0.42322**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.6042 / 0.4306**Enhancement:** 1.403x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 97fa9d47fcb571bdb0c3bf83b8495161

## 227. Californium mott insulator transition via molecular beam epitaxy

**Coin ID:** COIN-CA4784CC179A7D50**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.805

**K\_N3 (constitutional admissibility):** 0.5751  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8193 / 0.8775  
**Triple intersection:** 0.231483  
**gamma\_N (Lyapunov stability):** -0.41474  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6042 / 0.4306  
**Enhancement:** 1.403x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": true, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 2d8da7c71a916f4e28eadf84fd11a7f7

## 228. Mercury negative thermal expansion via laser ablation deposition

**Coin ID:** COIN-AA38AF1F69FF3D1D  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.794  
**K\_N3 (constitutional admissibility):** 0.5761  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8165 / 0.882  
**Triple intersection:** 0.228721  
**gamma\_N (Lyapunov stability):** -0.44627  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6029 / 0.4314  
**Enhancement:** 1.398x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ae3a0c2062204176ed9020d2547573ed

## 229. Americium negative thermal expansion via laser ablation deposition

**Coin ID:** COIN-C017B068AE40BBB5  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.794  
**K\_N3 (constitutional admissibility):** 0.5761  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8165 / 0.882  
**Triple intersection:** 0.228721  
**gamma\_N (Lyapunov stability):** -0.41434  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.6029 / 0.4314  
**Enhancement:** 1.398x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 6ec456b97826ec0820f7d90583bf6f7b

## 230. Thorium-Lead interface tension → room temp superconductivity

**Coin ID:** COIN-567F64ED3B2CD6E5  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.81  
**K\_N3 (constitutional admissibility):** 0.5612  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8205 / 0.855  
**Triple intersection:** 0.227295  
**gamma\_N (Lyapunov stability):** -0.46057  
**MT14 / GEQ:** 6/14 · 4/8  
**Survival governed / ungoverned:** 0.6023 / 0.4318  
**Enhancement:** 1.395x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** aeb0604721e119f29657fb8f64918fcd

### 231. Tantalum room temp superconductivity via spark plasma sintering

**Coin ID:** COIN-18F2CE2408DC40E5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.81**K\_N3 (constitutional admissibility):** 0.5612**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8205 / 0.855**Triple intersection:** 0.227295**gamma\_N (Lyapunov stability):** -0.44368**MT14 / GEQ:** 6/14 · 4/8**Survival governed / ungoverned:** 0.6023 / 0.4318**Enhancement:** 1.395x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 6c5ba931dc6cb0262ffbe070762e1aa1

### 232. Americium-Thorium interface tension room temp superconductivity

**Coin ID:** COIN-0312C644125D4DC5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.81**K\_N3 (constitutional admissibility):** 0.5612**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8205 / 0.855**Triple intersection:** 0.227295**gamma\_N (Lyapunov stability):** -0.4351**MT14 / GEQ:** 6/14 · 4/8**Survival governed / ungoverned:** 0.6023 / 0.4318**Enhancement:** 1.395x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 84d02cc67e69d4946a542c156138b945

### 233. Lead room temp superconductivity via spark plasma sintering

**Coin ID:** COIN-AF95470B79CBFE97**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.81**K\_N3 (constitutional admissibility):** 0.5612**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8205 / 0.855**Triple intersection:** 0.227295**gamma\_N (Lyapunov stability):** -0.43243**MT14 / GEQ:** 6/14 · 4/8**Survival governed / ungoverned:** 0.6023 / 0.4318**Enhancement:** 1.395x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9e8dc763cd768e148cdf324b8a6ecdd8

### 234. Tantalum-Uranium interface tension → room temp superconductivity

**Coin ID:** COIN-3ABE080D3D54F191**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.81

**K\_N3 (constitutional admissibility):** 0.5612  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8205 / 0.855  
**Triple intersection:** 0.227295  
**gamma\_N (Lyapunov stability):** -0.4321  
**MT14 / GEQ:** 6/14 · 4/8  
**Survival governed / ungoverned:** 0.6023 / 0.4318  
**Enhancement:** 1.395x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": true, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 1e868d2942a8cc4de0d8d11e587f03d3

### 235. Americium-Mercury interface tension → room temp superconductivity

**Coin ID:** COIN-53459A8E8F183305  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.81  
**K\_N3 (constitutional admissibility):** 0.5612  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8205 / 0.855  
**Triple intersection:** 0.227295  
**gamma\_N (Lyapunov stability):** -0.43322  
**MT14 / GEQ:** 6/14 · 4/8  
**Survival governed / ungoverned:** 0.6023 / 0.4318  
**Enhancement:** 1.395x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": true, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** b5657386fd9a85e987eab57fd7879b9

### 236. Thallium-Californium interface tension ??? room temp superconductivity

**Coin ID:** COIN-EBE159048586CADD  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.81  
**K\_N3 (constitutional admissibility):** 0.5612  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8205 / 0.855  
**Triple intersection:** 0.227295  
**gamma\_N (Lyapunov stability):** -0.41703  
**MT14 / GEQ:** 6/14 · 4/8  
**Survival governed / ungoverned:** 0.6023 / 0.4318  
**Enhancement:** 1.395x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": true, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 17ac17ae8a18c3a489dbd3534c8b6564

### 237. Americium room temp superconductivity via electrochemical deposition

**Coin ID:** COIN-03F8FCEE9B9DADFE  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.81  
**K\_N3 (constitutional admissibility):** 0.5612  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8205 / 0.855  
**Triple intersection:** 0.227295  
**gamma\_N (Lyapunov stability):** -0.41213  
**MT14 / GEQ:** 6/14 · 4/8  
**Survival governed / ungoverned:** 0.6023 / 0.4318  
**Enhancement:** 1.395x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a0b5f3b312b269ec58872344f7bd2dfa**238. Tantalum-Lead interface tension  room temp superconductivity****Coin ID:** COIN-B857BF9849376810**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.81**K\_N3 (constitutional admissibility):** 0.5612**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.8205 / 0.855**Triple intersection:** 0.227295**gamma\_N (Lyapunov stability):** -0.44788**MT14 / GEQ:** 6/14 · 4/8**Survival governed / ungoverned:** 0.6023 / 0.4318**Enhancement:** 1.395x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":true,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f784a693e58ebe9fe40f0d55b0d56578**239. Z=110 (Darmstadtium) bonding flexibility → transparent conductivity****Coin ID:** COIN-14E0EB1C7417C44E**K\_N1 (inner magic shell):** 0.62**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5516**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.783 / 0.855**Triple intersection:** 0.225731**gamma\_N (Lyapunov stability):** -0.45229**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6016 / 0.4323**Enhancement:** 1.392x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":false,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 1d61e1a3c747fea905a643d98b048976**240. Z=110 (Darmstadtium) bonding flexibility → photonic bandgap metal****Coin ID:** COIN-DB5557CB4A0B2BE6**K\_N1 (inner magic shell):** 0.62**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5516**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.783 / 0.855**Triple intersection:** 0.225731**gamma\_N (Lyapunov stability):** -0.43078**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6016 / 0.4323**Enhancement:** 1.392x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":false,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f05a831af6889c26d57b4827a80e55ed**241. Z=110 (Darmstadtium) bonding flexibility → topological insulator bulk****Coin ID:** COIN-6DCAEFFEF220D0EB**K\_N1 (inner magic shell):** 0.62**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5516  
**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.783 / 0.855  
**Triple intersection:** 0.225731  
**gamma\_N (Lyapunov stability):** -0.45836  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6016 / 0.4323  
**Enhancement:** 1.392x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":false, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** d845a58344850d9a755959378b8ae8b7

## 242. Z=110 (Darmstadtium) bonding flexibility → spin orbit coupling max

**Coin ID:** COIN-65C94552C5BDCED2  
**K\_N1 (inner magic shell):** 0.62  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5516  
**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.783 / 0.855  
**Triple intersection:** 0.225731  
**gamma\_N (Lyapunov stability):** -0.41763  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6016 / 0.4323  
**Enhancement:** 1.392x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":false, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** b9e66cf638d0929faa8bc45de7c8fb67

## 243. Z=110 (Darmstadtium) bonding flexibility → magneto caloric giant

**Coin ID:** COIN-8E00F6BA269BC1C9  
**K\_N1 (inner magic shell):** 0.62  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5516  
**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.783 / 0.855  
**Triple intersection:** 0.225731  
**gamma\_N (Lyapunov stability):** -0.42798  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6016 / 0.4323  
**Enhancement:** 1.392x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":false, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 0e07f1e53b9582112d20f33e997d0cdc

## 244. Z=110 (Darmstadtium) bonding flexibility → heavy fermion coherence

**Coin ID:** COIN-51E65F77A758FD1C  
**K\_N1 (inner magic shell):** 0.62  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5516  
**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.783 / 0.855  
**Triple intersection:** 0.225731  
**gamma\_N (Lyapunov stability):** -0.41888  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6016 / 0.4323  
**Enhancement:** 1.392x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":false,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 75dde406278324c6dd1d6447af9b5572**245. Element 110 (Ds) + Tungsten via high pressure high temperature****Coin ID:** COIN-A4DA31B6960BDCA4**K\_N1 (inner magic shell):** 0.62**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5516**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.783 / 0.855**Triple intersection:** 0.225731**gamma\_N (Lyapunov stability):** -0.44535**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6016 / 0.4323**Enhancement:** 1.392x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":false,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 671d5bcfeaa799d7972656956aee7327**246. Z=110 (Darmstadtium) bonding flexibility 000 topological insulator bulk****Coin ID:** COIN-CF3937D316073491**K\_N1 (inner magic shell):** 0.62**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5516**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.783 / 0.855**Triple intersection:** 0.225731**gamma\_N (Lyapunov stability):** -0.45607**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6016 / 0.4323**Enhancement:** 1.392x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":false,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2da4890cee9e6b5692091ac7c5ab6cb7**247. Z=110 (Darmstadtium) bonding flexibility 00 magneto caloric giant****Coin ID:** COIN-2A2842B773119D1B**K\_N1 (inner magic shell):** 0.62**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5516**K\_alpha / K\_beta / K\_gamma:** 0.824 / 0.783 / 0.855**Triple intersection:** 0.225731**gamma\_N (Lyapunov stability):** -0.45527**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.6016 / 0.4323**Enhancement:** 1.392x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":false,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 7dda4e63a4bfc0d255c19a5efd333e82**248. Plutonium topological insulator bulk via self propagating synthesis****Coin ID:** COIN-E9FEF48AB0C02430**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.672

**K\_N3 (constitutional admissibility):** 0.5915  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.846 / 0.861  
**Triple intersection:** 0.22258  
**gamma\_N (Lyapunov stability):** -0.40309  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.6002 / 0.4332  
**Enhancement:** 1.385x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** b8526fd249c14cc2f3620b9735a4ada5

## 249. Mercury negative thermal expansion via arc melting controlled atmosphere

**Coin ID:** COIN-6EE934B061341687  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.776  
**K\_N3 (constitutional admissibility):** 0.5671  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.812 / 0.873  
**Triple intersection:** 0.220035  
**gamma\_N (Lyapunov stability):** -0.40746  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.599 / 0.434  
**Enhancement:** 1.38x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** d07a087c9222dd82ac0926b156d55c70

## 250. Mercury-Plutonium thermal transition state at 1132 K

**Coin ID:** COIN-C0E7E1C8F27DD874  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.42335  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 55bc39351dc9fe311b3db020c042b2cd

## 251. Plutonium-Iridium interface tension → transparent conductivity

**Coin ID:** COIN-AEB91A35A756ACEC  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.42543  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** a88bc031938c5f5ad3510affa7cf915e

## 252. Plutonium-Tungsten interface tension → topological insulator bulk

**Coin ID:** COIN-DC110A405B5D20E4**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5853**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855**Triple intersection:** 0.216313**gamma\_N (Lyapunov stability):** -0.43266**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.5973 / 0.4351**Enhancement:** 1.373x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 8a38665a456776dbd63dbd867d49decc

## 253. Thorium-Plutonium supersaturated solid solution at 13:87 ratio

**Coin ID:** COIN-20F0AB3C726F3323**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5853**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855**Triple intersection:** 0.216313**gamma\_N (Lyapunov stability):** -0.40672**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.5973 / 0.4351**Enhancement:** 1.373x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** fac58fa4d9f89a3d6311bcd82cf08c8c

## 254. Curium-Plutonium eutectic composition at 23:77 ratio

**Coin ID:** COIN-721273300337129F**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5853**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855**Triple intersection:** 0.216313**gamma\_N (Lyapunov stability):** -0.43098**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.5973 / 0.4351**Enhancement:** 1.373x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 074f6f59a34e5d2bea1c9dba092d55bc

## 255. Plutonium-Lead high entropy alloy at 17:83 ratio

**Coin ID:** COIN-FFD1B41B7E3AABEB**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.40206  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** ddf2badfe38af1a66ddbe311261f6464

## 256. Americium-Plutonium supersaturated solid solution at 52:48 ratio

**Coin ID:** COIN-6756130330F7FF5A  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.42562  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 8c4491f2ccbc3fa61f0db5918a41b47f

## 257. Plutonium-Thorium high entropy alloy at 91:9 ratio

**Coin ID:** COIN-00E5BB889CD4F992  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.4275  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 029bd525a3cd1f08d319b602bc409796

## 258. Plutonium-Platinum interface tension → topological insulator bulk

**Coin ID:** COIN-BC0A281777FA0DFE  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.41842  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** b829105ef7318ff489063efb25006514

## 259. Plutonium nuclear binding stability via nuclear transmutation pathway

**Coin ID:** COIN-4C2A04FE77EC12BC**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5853**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855**Triple intersection:** 0.216313**gamma\_N (Lyapunov stability):** -0.40479**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.5973 / 0.4351**Enhancement:** 1.373x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** f658f2a2520c26bab0b544ce7828911d

## 260. Plutonium-Rhenium interface tension → topological insulator bulk

**Coin ID:** COIN-CEDCFA9747D88CE7**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5853**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855**Triple intersection:** 0.216313**gamma\_N (Lyapunov stability):** -0.42679**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.5973 / 0.4351**Enhancement:** 1.373x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** fe022451c9561231feb5bbcdade4384e9

## 261. Plutonium phase boundary at 176 GPa / 1151 K

**Coin ID:** COIN-5E4FD80C4B21A9C7**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5853**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855**Triple intersection:** 0.216313**gamma\_N (Lyapunov stability):** -0.43151**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.5973 / 0.4351**Enhancement:** 1.373x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** e056e2eb244cb7060b955503c32131e8

## 262. Plutonium-Bismuth thermal transition state at 612 K

**Coin ID:** COIN-54B74DF0B09B3C9E**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.42361  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 847c00d6556e7143a4cefe8110975726

### 263. Plutonium melt viscosity profile at 1359 K — frank kasper phase

**Coin ID:** COIN-3C29BA5833B3B0E8  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.42582  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** fdc414e8457ba98d2b519f0791f9b2c1

### 264. Plutonium-Osmium thermal transition state at 852 K

**Coin ID:** COIN-DDBDF0CABABEAD98  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.43384  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 2b798e28acc76af59161bdfa818d3d6e

### 265. Plutonium-Gold interface tension → heavy fermion coherence

**Coin ID:** COIN-5B5301F0E7695CFD  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.42159  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 9f50378f07543068693b40b984ce65aa**266. Hafnium-Plutonium thermal transition state at 1319 K****Coin ID:** COIN-CFCCA26DC22D077C**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5853**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855**Triple intersection:** 0.216313**gamma\_N (Lyapunov stability):** -0.43122**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.5973 / 0.4351**Enhancement:** 1.373x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 7d1533ac59cf067c3ac535fe8c452d5a**267. Thorium-Plutonium thermal transition state at 642 K****Coin ID:** COIN-5AE986041AA3CC7A**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5853**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855**Triple intersection:** 0.216313**gamma\_N (Lyapunov stability):** -0.41536**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.5973 / 0.4351**Enhancement:** 1.373x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 509a74af0244c3dbaff1f2f8dd37b4b4**268. Plutonium-Iridium interface tension → photonic bandgap metal****Coin ID:** COIN-5788775E39730639**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5853**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855**Triple intersection:** 0.216313**gamma\_N (Lyapunov stability):** -0.40818**MT14 / GEQ:** 3/14 · 4/8**Survival governed / ungoverned:** 0.5973 / 0.4351**Enhancement:** 1.373x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":true}
```

**SHA-256 (truncated):** 15d64e2c64441555b7ef1dbc2640c61b**269. Hafnium-Plutonium thermal transition state at 1377 K****Coin ID:** COIN-9CFBB09709617373**K\_N1 (inner magic shell):** 0.56**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.44696  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** b7c61e72ae2a8b4f4fab88802259b303

## 270. Plutonium-Uranium thermal transition state at 1261 K

**Coin ID:** COIN-BCDC3D0B75E52415  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.42734  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 37c65e25b29f9b60f97a93a312596f14

## 271. Plutonium-Tungsten interface tension → spin orbit coupling max

**Coin ID:** COIN-551B106B24A61B83  
**K\_N1 (inner magic shell):** 0.56  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5853  
**K\_alpha / K\_beta / K\_gamma:** 0.812 / 0.843 / 0.855  
**Triple intersection:** 0.216313  
**gamma\_N (Lyapunov stability):** -0.41933  
**MT14 / GEQ:** 3/14 · 4/8  
**Survival governed / ungoverned:** 0.5973 / 0.4351  
**Enhancement:** 1.373x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": true }  
**SHA-256 (truncated):** 047d4471766c0b682a3d99bbaf58feca

## 272. Osmium mott insulator transition via self propagating synthesis

**Coin ID:** COIN-3339ED5FCFF403CF  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.772  
**K\_N3 (constitutional admissibility):** 0.5586  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.811 / 0.861  
**Triple intersection:** 0.215626  
**gamma\_N (Lyapunov stability):** -0.43325  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.597 / 0.4353  
**Enhancement:** 1.372x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** ac6b322821fe168a23bdcb7795bf203d

### 273. Mercury mott insulator transition via self propagating synthesis

**Coin ID:** COIN-26167D62ED96A041**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.772**K\_N3 (constitutional admissibility):** 0.5586**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.811 / 0.861**Triple intersection:** 0.215626**gamma\_N (Lyapunov stability):** -0.41368**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.597 / 0.4353**Enhancement:** 1.372x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 490e6512baf2d93708bb399ad145a90d

### 274. Californium-Mercury interface tension → mott insulator transition

**Coin ID:** COIN-E27AC29647BAE380**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.42182**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 63349d26ae4a08ed3e8a38de3d7465ba

### 275. Thallium phase boundary at 479 GPa / 1743 K

**Coin ID:** COIN-AFC2503199873452**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.39967**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2c5cf692cb28e587c2b8be929487771f

### 276. Tantalum phase boundary at 305 GPa / 3099 K

**Coin ID:** COIN-DCD9B52FE30061EC**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76

**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.4203  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** a697708a289baa3a5cef921cc1a59c73

### 277. Lead phase boundary at 483 GPa / 2522 K

**Coin ID:** COIN-89E729E6AD6E4A1E  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.41762  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 72636c2fcc9f837a65cf01f930931568

### 278. Uranium phase boundary at 406 GPa / 1947 K

**Coin ID:** COIN-AD0924EAF5087B98  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.42816  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 8db884310a093a1349c28b7fd283921c

### 279. Platinum phase boundary at 223 GPa / 1813 K

**Coin ID:** COIN-36B42BEEF0E12E6  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.40422  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** cf992f10229599dc7cc71564dd2d70d4

## 280. Californium phase boundary at 249 GPa / 2034 K

**Coin ID:** COIN-72EBA1E5EE4745D8**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.40345**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4bdbfe2072dd0095a42f8b5efd4cfa97

## 281. Osmium-Iridium interface tension → mott insulator transition

**Coin ID:** COIN-DE0E5BA1FD515B70**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.44067**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 473ef77fa280e9ba19f62da20a80cccf

## 282. Bismuth mott insulator transition via nuclear transmutation pathway

**Coin ID:** COIN-9B4F35753A95CBCA**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.4293**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f09a759f65667e4dd4d2056d26829d1d

## 283. Iridium phase boundary at 352 GPa / 2806 K

**Coin ID:** COIN-FB5A70EE4D906C94**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76

**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.41229  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 5eff09d2b463b5bbacae035ad91f6166

## 284. Osmium phase boundary at 488 GPa / 2788 K

**Coin ID:** COIN-8FB539617C2379F9  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.40327  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c2faa2a0a671d226dd17b54e5004f8ea

## 285. Rhenium phase boundary at 483 GPa / 2530 K

**Coin ID:** COIN-D085BBE1B919232B  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.42998  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 7ecc1c92fb4554960d253b05e3a29df0

## 286. Rhenium-Thorium interface tension → mott insulator transition

**Coin ID:** COIN-C101904304BAB913  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.43256  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 833f3a1e92aa263febda3a5615ad0259**287. Americium phase boundary at 459 GPa / 2000 K****Coin ID:** COIN-274A64BAB5380C35**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.43165**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3a0f021413db3fab0e921087450feed2**288. Hafnium phase boundary at 235 GPa / 1680 K****Coin ID:** COIN-641D2C3ED0159DB2**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.4302**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 6520e1b799280ac1724a3417879f32f6**289. Platinum phase boundary at 449 GPa / 3033 K****Coin ID:** COIN-AAC5E46BC32EC3F9**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.43116**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 707bff97c2c58958ef1774a47a4373e6**290. Osmium phase boundary at 228 GPa / 2253 K****Coin ID:** COIN-3CBB13BCBB468FA1**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76

**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.40389  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 5cd4e1daf57275cdde0a62946e87604b

### 291. Uranium-Tungsten interface tension → mott insulator transition

**Coin ID:** COIN-B39CC9448E63C7F4  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.43928  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": true, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 57701b8012af5eedee8b58b05047f05c

### 292. Curium-Gold interface tension → mott insulator transition

**Coin ID:** COIN-A5701BD21303394A  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.40635  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": true, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ce2ac5111f8f9be326e5f1e458ffa811

### 293. Thorium phase boundary at 235 GPa / 1960 K

**Coin ID:** COIN-CF9F548EC0E9FA4C  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.42451  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** c6c6336c1a76074e21b6568eb0c2a34c**294. Thallium phase boundary at 496 GPa / 2189 K****Coin ID:** COIN-46AAFAF5F00EB6FD**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.43209**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 1b621213bf92b408d01621dcb281e54c**295. Thorium phase boundary at 408 GPa / 1965 K****Coin ID:** COIN-7DF583E0F901562A**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.40988**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 1edcbb5500eb1885873177d833ec8933**296. Osmium-Thorium interface tension → mott insulator transition****Coin ID:** COIN-55162921935DD29E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.39968**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3e869f2876953c3d52b9b3457bc72969**297. Californium phase boundary at 479 GPa / 1539 K****Coin ID:** COIN-9C4EC5B645CA5215**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76

**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.40792  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 4ea87293c748ecac8ea55d78b5f40a36

### 298. Thorium phase boundary at 373 GPa / 3297 K

**Coin ID:** COIN-EDB819875AFBEB09  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.44317  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c627f146ed53c6672db4adb642021819

### 299. Hafnium phase boundary at 288 GPa / 1581 K

**Coin ID:** COIN-26BB4E655DFD86BD  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.41444  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 47ce87e089df733a3f5024632d0ad2d7

### 300. Lead mott insulator transition via electrochemical deposition

**Coin ID:** COIN-603A0B8B7B3FF41E  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.41117  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b2b9e8ff7127fc0895b2580dfef60e30

### 301. Platinum phase boundary at 288 GPa / 2500 K

**Coin ID:** COIN-85727E683335FEC3**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.40788**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 88ea0e03371d5ec6d08b7bb1396b34f3

### 302. Osmium mott insulator transition via electrochemical deposition

**Coin ID:** COIN-A962AF980EFD5242**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.42804**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 32e3b79ee802cde923ab1ad1ed66ef1a

### 303. Uranium phase boundary at 264 GPa / 2973 K

**Coin ID:** COIN-4C6629755BA2A7B1**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.40465**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** aae3149df921440c5a8cab67cb204bf0

### 304. Iridium phase boundary at 280 GPa / 2058 K

**Coin ID:** COIN-D0EA6E522C9DA20D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76

**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.41284  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 12f80c97e0548eb1860b75385b8f3c33

### 305. Californium phase boundary at 468 GPa / 2284 K

**Coin ID:** COIN-CA7AED4436654024  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.44236  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** f641ee29b690237ae195d9aac1ff2211

### 306. Californium phase boundary at 403 GPa / 2187 K

**Coin ID:** COIN-F8CB26813B5A0810  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.41331  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 9b719cfab5c87610da033971c6acdce7

### 307. Gold phase boundary at 286 GPa / 2668 K

**Coin ID:** COIN-77CA7155B519B328  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.41513  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 199386642629503545ec5e9c8d6c24aa

### 308. Mercury phase boundary at 361 GPa / 2874 K

**Coin ID:** COIN-241613F46146428D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.42854**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d2d22b448e722622bda8bd7cd0c76c6c

### 309. Curium-Gold interface tension mott insulator transition

**Coin ID:** COIN-CCDCDE12B955805A**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.40085**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 156e9a9a020e0d3762a9529284fea4fe

### 310. Iridium mott insulator transition via spark plasma sintering

**Coin ID:** COIN-7C77FFD8EFC8276C**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76**K\_N3 (constitutional admissibility):** 0.5527**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855**Triple intersection:** 0.210015**gamma\_N (Lyapunov stability):** -0.42237**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5945 / 0.437**Enhancement:** 1.36x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":true,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 6865ef5a81a7503e31609e8ddb1b3bed

### 311. Californium phase boundary at 226 GPa / 3130 K

**Coin ID:** COIN-D4E4D7CB122D1CC4**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.76

**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.44058  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 4b125306675e3c32a827f2e028cf33c5

### 312. Platinum phase boundary at 248 GPa / 3277 K

**Coin ID:** COIN-8B70A3D26BDAB4A2  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.42539  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 7bcfef7e5d0d9a34c0fbd7aedfda7c13

### 313. Thallium mott insulator transition via spark plasma sintering

**Coin ID:** COIN-088872A8848390C3  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.76  
**K\_N3 (constitutional admissibility):** 0.5527  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.808 / 0.855  
**Triple intersection:** 0.210015  
**gamma\_N (Lyapunov stability):** -0.4002  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5945 / 0.437  
**Enhancement:** 1.36x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": true, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 4ee83ca7f3af8876fbddd37341876a3f

### 314. Tantalum spin orbit coupling max via ion beam synthesis

**Coin ID:** COIN-8B60462C68E56D99  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.726  
**K\_N3 (constitutional admissibility):** 0.568  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7995 / 0.888  
**Triple intersection:** 0.206171  
**gamma\_N (Lyapunov stability):** -0.42467  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5928 / 0.4381  
**Enhancement:** 1.353x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 600c40878ded0ab5ffb09346308b1700

### 315. Americium magneto caloric giant via ion beam synthesis

**Coin ID:** COIN-C5A258875A321436**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.726**K\_N3 (constitutional admissibility):** 0.568**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7995 / 0.888**Triple intersection:** 0.206171**gamma\_N (Lyapunov stability):** -0.39803**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5928 / 0.4381**Enhancement:** 1.353x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0fa2d9e7f63763cda4eb82c15775885f

### 316. Americium nuclear binding stability via ion beam synthesis

**Coin ID:** COIN-A5AA672BA72F1744**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.726**K\_N3 (constitutional admissibility):** 0.568**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7995 / 0.888**Triple intersection:** 0.206171**gamma\_N (Lyapunov stability):** -0.43814**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5928 / 0.4381**Enhancement:** 1.353x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 8e9a5319ba63faf15dff3c6a9f59b4d

### 317. Tungsten photonic bandgap metal via ion beam synthesis

**Coin ID:** COIN-AF526CCCFC0E9C4F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.726**K\_N3 (constitutional admissibility):** 0.568**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7995 / 0.888**Triple intersection:** 0.206171**gamma\_N (Lyapunov stability):** -0.3987**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5928 / 0.4381**Enhancement:** 1.353x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f663a2e35fbca850a14a3491c6b24106

### 318. Californium magneto caloric giant via ion beam synthesis

**Coin ID:** COIN-92464636183BC6C0**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.726

**K\_N3 (constitutional admissibility):** 0.568  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7995 / 0.888  
**Triple intersection:** 0.206171  
**gamma\_N (Lyapunov stability):** -0.40391  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5928 / 0.4381  
**Enhancement:** 1.353x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** a7df2cbd9600ea5fd4988ec9aad9cdab

### 319. Americium photonic bandgap metal via ion beam synthesis

**Coin ID:** COIN-63B74D7AF11E4033  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.726  
**K\_N3 (constitutional admissibility):** 0.568  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7995 / 0.888  
**Triple intersection:** 0.206171  
**gamma\_N (Lyapunov stability):** -0.42177  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5928 / 0.4381  
**Enhancement:** 1.353x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** d211b58920fa1b94ab8d2d078bf74df5

### 320. Curium photonic bandgap metal via ion beam synthesis

**Coin ID:** COIN-EAF70DB93A83D9F4  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.726  
**K\_N3 (constitutional admissibility):** 0.568  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7995 / 0.888  
**Triple intersection:** 0.206171  
**gamma\_N (Lyapunov stability):** -0.40911  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5928 / 0.4381  
**Enhancement:** 1.353x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** aa15002e15cea1576c0993dd2a09eedd

### 321. Iridium transparent conductivity via ion beam synthesis

**Coin ID:** COIN-7711B9DF484ED03D  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.726  
**K\_N3 (constitutional admissibility):** 0.568  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7995 / 0.888  
**Triple intersection:** 0.206171  
**gamma\_N (Lyapunov stability):** -0.39014  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5928 / 0.4381  
**Enhancement:** 1.353x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4d8b7527574f112471cbd53f65d62c10

### 322. Curium-Gold interface tension → negative thermal expansion

**Coin ID:** COIN-79F9DAADD557D55F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.74**K\_N3 (constitutional admissibility):** 0.5493**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855**Triple intersection:** 0.203223**gamma\_N (Lyapunov stability):** -0.39284**MT14 / GEQ:** 4/14 · 4/8**Survival governed / ungoverned:** 0.5915 / 0.439**Enhancement:** 1.347x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** fdb56fe092194be825289ffcb728c721

### 323. Curium-Curium interface tension → negative thermal expansion

**Coin ID:** COIN-7CC4F4476B310524**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.74**K\_N3 (constitutional admissibility):** 0.5493**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855**Triple intersection:** 0.203223**gamma\_N (Lyapunov stability):** -0.41547**MT14 / GEQ:** 4/14 · 4/8**Survival governed / ungoverned:** 0.5915 / 0.439**Enhancement:** 1.347x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0272c54c5611fd73af24727f97b3a9aa

### 324. Tantalum negative thermal expansion via spark plasma sintering

**Coin ID:** COIN-8AB054520183DE16**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.74**K\_N3 (constitutional admissibility):** 0.5493**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855**Triple intersection:** 0.203223**gamma\_N (Lyapunov stability):** -0.43244**MT14 / GEQ:** 4/14 · 4/8**Survival governed / ungoverned:** 0.5915 / 0.439**Enhancement:** 1.347x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** de21cd3af0919de6fa1ebd310e3550b0

### 325. Uranium-Gold interface tension → negative thermal expansion

**Coin ID:** COIN-58F35B97535F19B0**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.74

**K\_N3 (constitutional admissibility):** 0.5493  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855  
**Triple intersection:** 0.203223  
**gamma\_N (Lyapunov stability):** -0.4013  
**MT14 / GEQ:** 4/14 · 4/8  
**Survival governed / ungoverned:** 0.5915 / 0.439  
**Enhancement:** 1.347x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 4767d079b49401a4a79c32b098766c70

### 326. Tungsten-Americium interface tension → negative thermal expansion

**Coin ID:** COIN-2DE2F29E05FBE4F9  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.74  
**K\_N3 (constitutional admissibility):** 0.5493  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855  
**Triple intersection:** 0.203223  
**gamma\_N (Lyapunov stability):** -0.411  
**MT14 / GEQ:** 4/14 · 4/8  
**Survival governed / ungoverned:** 0.5915 / 0.439  
**Enhancement:** 1.347x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 601f5772893f9063a6da7510f7448869

### 327. Tungsten negative thermal expansion via nuclear transmutation pathway

**Coin ID:** COIN-E10FEDE257E30C9D  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.74  
**K\_N3 (constitutional admissibility):** 0.5493  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855  
**Triple intersection:** 0.203223  
**gamma\_N (Lyapunov stability):** -0.42744  
**MT14 / GEQ:** 4/14 · 4/8  
**Survival governed / ungoverned:** 0.5915 / 0.439  
**Enhancement:** 1.347x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 479a358a199d8128c2f7f63464829c6b

### 328. Rhenium-Tungsten interface tension → negative thermal expansion

**Coin ID:** COIN-D75747795BD2B9A3  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.74  
**K\_N3 (constitutional admissibility):** 0.5493  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855  
**Triple intersection:** 0.203223  
**gamma\_N (Lyapunov stability):** -0.43211  
**MT14 / GEQ:** 4/14 · 4/8  
**Survival governed / ungoverned:** 0.5915 / 0.439  
**Enhancement:** 1.347x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 8dd2c75cd5ab6a54c3171bfca588f093

### 329. Americium negative thermal expansion via electrochemical deposition

**Coin ID:** COIN-0DAAAF58D8DEAB21**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.74**K\_N3 (constitutional admissibility):** 0.5493**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855**Triple intersection:** 0.203223**gamma\_N (Lyapunov stability):** -0.42457**MT14 / GEQ:** 4/14 · 4/8**Survival governed / ungoverned:** 0.5915 / 0.439**Enhancement:** 1.347x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 40961cf7462ebd3507f2f50cc4aef9d2

### 330. Thorium-Rhenium interface tension → negative thermal expansion

**Coin ID:** COIN-CBE6A24B11C443A4**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.74**K\_N3 (constitutional admissibility):** 0.5493**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855**Triple intersection:** 0.203223**gamma\_N (Lyapunov stability):** -0.40867**MT14 / GEQ:** 4/14 · 4/8**Survival governed / ungoverned:** 0.5915 / 0.439**Enhancement:** 1.347x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0b8bbd024f0ace2628369a9a84fa4e1f

### 331. Tantalum-Gold interface tension → negative thermal expansion

**Coin ID:** COIN-5B9F827C6044789E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.74**K\_N3 (constitutional admissibility):** 0.5493**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855**Triple intersection:** 0.203223**gamma\_N (Lyapunov stability):** -0.39818**MT14 / GEQ:** 4/14 · 4/8**Survival governed / ungoverned:** 0.5915 / 0.439**Enhancement:** 1.347x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d3090177968fb37272d45349cda575d5

### 332. Lead negative thermal expansion via high pressure high temperature

**Coin ID:** COIN-5D894E6E12CF70CA**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.74

**K\_N3 (constitutional admissibility):** 0.5493  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855  
**Triple intersection:** 0.203223  
**gamma\_N (Lyapunov stability):** -0.41102  
**MT14 / GEQ:** 4/14 · 4/8  
**Survival governed / ungoverned:** 0.5915 / 0.439  
**Enhancement:** 1.347x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 5de466274a27133a9604d5a37fe3fd12

### 333. Curium negative thermal expansion via electrochemical deposition

**Coin ID:** COIN-54D31B8EEED47D3C  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.74  
**K\_N3 (constitutional admissibility):** 0.5493  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855  
**Triple intersection:** 0.203223  
**gamma\_N (Lyapunov stability):** -0.39787  
**MT14 / GEQ:** 4/14 · 4/8  
**Survival governed / ungoverned:** 0.5915 / 0.439  
**Enhancement:** 1.347x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** d42917f9aebef04f0d8705f319e9b7de

### 334. Curium-Platinum interface tension → negative thermal expansion

**Coin ID:** COIN-A8E0180916BBC389  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.74  
**K\_N3 (constitutional admissibility):** 0.5493  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855  
**Triple intersection:** 0.203223  
**gamma\_N (Lyapunov stability):** -0.41555  
**MT14 / GEQ:** 4/14 · 4/8  
**Survival governed / ungoverned:** 0.5915 / 0.439  
**Enhancement:** 1.347x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 3a15f6f3214bdc90e9b97eafa77b20d3

### 335. Uranium negative thermal expansion via nuclear transmutation pathway

**Coin ID:** COIN-8D4E0B395AD92CB1  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.74  
**K\_N3 (constitutional admissibility):** 0.5493  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.803 / 0.855  
**Triple intersection:** 0.203223  
**gamma\_N (Lyapunov stability):** -0.41322  
**MT14 / GEQ:** 4/14 · 4/8  
**Survival governed / ungoverned:** 0.5915 / 0.439  
**Enhancement:** 1.347x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a905e93f2ef4987ff27a59b09a5843b1

### 336. Thallium magneto caloric giant via laser ablation deposition

**Coin ID:** COIN-3A6F70C62986210B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.714**K\_N3 (constitutional admissibility):** 0.562**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7965 / 0.882**Triple intersection:** 0.200638**gamma\_N (Lyapunov stability):** -0.42455**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5903 / 0.4398**Enhancement:** 1.342x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f9a790dd47a07d18ab651d0b9b44c5c5

### 337. Tungsten photonic bandgap metal via laser ablation deposition

**Coin ID:** COIN-02FD17E1BB46CCCD**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.714**K\_N3 (constitutional admissibility):** 0.562**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7965 / 0.882**Triple intersection:** 0.200638**gamma\_N (Lyapunov stability):** -0.40742**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5903 / 0.4398**Enhancement:** 1.342x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9aade2df7014651e39edae1c566ceb1d

### 338. Lead topological insulator bulk via laser ablation deposition

**Coin ID:** COIN-7BB45C508430E087**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.714**K\_N3 (constitutional admissibility):** 0.562**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7965 / 0.882**Triple intersection:** 0.200638**gamma\_N (Lyapunov stability):** -0.39101**MT14 / GEQ:** 5/14 · 4/8**Survival governed / ungoverned:** 0.5903 / 0.4398**Enhancement:** 1.342x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9ee73ba0468d05ab908e711062c582ae

### 339. Osmium heavy fermion coherence via laser ablation deposition

**Coin ID:** COIN-EA5A10DF9C79C91D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.714

**K\_N3 (constitutional admissibility):** 0.562  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7965 / 0.882  
**Triple intersection:** 0.200638  
**gamma\_N (Lyapunov stability):** -0.39468  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5903 / 0.4398  
**Enhancement:** 1.342x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** abd115bbbd57790c0cb6c8afb6949dae

### 340. Thallium transparent conductivity via laser ablation deposition

**Coin ID:** COIN-9F43D5D5E83996FA  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.714  
**K\_N3 (constitutional admissibility):** 0.562  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7965 / 0.882  
**Triple intersection:** 0.200638  
**gamma\_N (Lyapunov stability):** -0.40417  
**MT14 / GEQ:** 5/14 · 4/8  
**Survival governed / ungoverned:** 0.5903 / 0.4398  
**Enhancement:** 1.342x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 867c358d7743db86996613110ef1dbe5

### 341. Iridium topological insulator bulk via molecular beam epitaxy

**Coin ID:** COIN-0CA37401CCCB00AE  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.705  
**K\_N3 (constitutional admissibility):** 0.5576  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7943 / 0.8775  
**Triple intersection:** 0.196541  
**gamma\_N (Lyapunov stability):** -0.4052  
**MT14 / GEQ:** 5/14 · 2/8  
**Survival governed / ungoverned:** 0.5884 / 0.441  
**Enhancement:** 1.334x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 75f1ccecabc4f5c59efc1d3e2bf2d37

### 342. Californium photonic bandgap metal via molecular beam epitaxy

**Coin ID:** COIN-1DB8698200C19DE6  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.705  
**K\_N3 (constitutional admissibility):** 0.5576  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7943 / 0.8775  
**Triple intersection:** 0.196541  
**gamma\_N (Lyapunov stability):** -0.3892  
**MT14 / GEQ:** 5/14 · 2/8  
**Survival governed / ungoverned:** 0.5884 / 0.441  
**Enhancement:** 1.334x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4fa1f1b2e93ec19ba0065ff2bdc1a3b3**343. Rhenium melt viscosity profile at 2601 K — intermetallic compound****Coin ID:** COIN-9C0C58C71F9F13B5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40393**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 768f09026d5204cb54ec7acfcef5ded7**344. Thorium-Thallium thermal transition state at 1560 K****Coin ID:** COIN-03076033070BFB7F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.4118**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 62bc89d3057c0d820bd90ee631f8e138**345. Rhenium-Tantalum thermal transition state at 2171 K****Coin ID:** COIN-97F4BB4616FEAE6E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.395**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9e276fc21a7a08238cf295351f06c88e**346. Tantalum melt viscosity profile at 2849 K — spinodal decomposition product****Coin ID:** COIN-7641E7D1E0A76B9C**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.37919  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** b02c5285151d402a857e15d3e6c70e92

### 347. Tungsten melt viscosity profile at 2232 K — spinodal decomposition product

**Coin ID:** COIN-1E4EA684759AB7DA  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.38061  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 5d5725736ee2d17fda7c24bf9bffc63f

### 348. Lead melt viscosity profile at 2287 K — amorphous metallic glass

**Coin ID:** COIN-E225EB2E17881820  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40139  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 34a880d383f3e8e92299f55538bb0f7c

### 349. Thallium phase boundary at 385 GPa / 499 K

**Coin ID:** COIN-5EF859C2E11CE776  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40614  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** c7a720b27b7a06f182d7ea8631ab6012

### 350. Curium-Osmium thermal transition state at 2312 K

**Coin ID:** COIN-8E4BC59B18C2690D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.41979**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a65730d26f50cab001b14dcac76cb0b4

### 351. Gold melt viscosity profile at 1710 K — intermetallic compound

**Coin ID:** COIN-F06F00250E44DD75**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.42104**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e4b409b7587fb6562ebc6fffc1870f45

### 352. Osmium phase boundary at 59 GPa / 1565 K

**Coin ID:** COIN-9F7D138AC9ABD26F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.41838**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9c2f536cf6e9c938e820017216cb25ce

### 353. Californium-Thorium thermal transition state at 1581 K

**Coin ID:** COIN-64569A771DDB3546**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.38322  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 0716264969d640ce8f9228ca181641ce

### 354. Bismuth-Thallium thermal transition state at 2240 K

**Coin ID:** COIN-C077FB1F1AB7DFD7  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41734  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 4614faf6ee58af4e73d3e69aa5395790

### 355. Americium melt viscosity profile at 2797 K — laves phase

**Coin ID:** COIN-04289FD80068B4C2  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.38387  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** afcf73aee9bd9f957c7800206edda490

### 356. Platinum phase boundary at 474 GPa / 687 K

**Coin ID:** COIN-B4EFD769F7B50DDA  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40159  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** c2aa28a6a539bc6d24f8ce19c9e4b7f7**357. Lead-Iridium thermal transition state at 1574 K****Coin ID:** COIN-A8B85464B710E236**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40907**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0935a569076eb3c39ffdd81deb29adb6**358. Lead melt viscosity profile at 2434 K  spinodal decomposition product****Coin ID:** COIN-490833A0B46EBB01**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.42246**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 781455eba750423001ad26d27e6c6fd3**359. Gold melt viscosity profile at 2730 K  frank kasper phase****Coin ID:** COIN-C41BDD6B8DAF0739**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.42137**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a2b4c9ecac5c4c74572425ca6d92853a**360. Rhenium-Tantalum thermal transition state at 2044 K****Coin ID:** COIN-1B787271CF1B334D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41284  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** b2a580b663b59f8bb7a60c82152e7554

### 361. Curium melt viscosity profile at 2742 K — intermetallic compound

**Coin ID:** COIN-EBFF04203420A79F  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39637  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 8db0a89462cb7a38a4b70e53bea73e26

### 362. Thorium phase boundary at 493 GPa / 1372 K

**Coin ID:** COIN-9EE50E0DDC2AE46  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41588  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 3c004cc11d28909b90aac4f3a82e2048

### 363. Californium melt viscosity profile at 1522 K — heusler alloy

**Coin ID:** COIN-F3A599E32597A030  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.3919  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 8a9efcbac7cf85ee7b11ead8107c894a

### 364. Iridium phase boundary at 32 GPa / 3127 K

**Coin ID:** COIN-9505BFB82AAED62E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.42472**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 594de720464ccb1cae4c6cca9b80860c

### 365. Mercury-Platinum thermal transition state at 2424 K

**Coin ID:** COIN-47D42488B1643194**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.42052**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b4b92cecbde32416f81ce523c5e280d4

### 366. Tungsten melt viscosity profile at 2238 K — laves phase

**Coin ID:** COIN-79A3DC660AEEFCCC**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.39214**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 6dce2cd2a5d7b19b9445ac0f16d7abb3

### 367. Platinum melt viscosity profile at 2010 K — spinodal decomposition product

**Coin ID:** COIN-B05365F1D9CF120F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39929  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** dec45e82b0adba73e4f42ac155b66782

### 368. Lead phase boundary at 281 GPa / 984 K

**Coin ID:** COIN-1F93F4011BEA178D  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.38725  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** bb962390b284074e175e9c47810959ac

### 369. Bismuth phase boundary at 193 GPa / 2056 K

**Coin ID:** COIN-FD59B1DAA3B24755  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40924  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 7b103c99f62a2cd2a8696e8be0b6cb1a

### 370. Lead melt viscosity profile at 1753 K — amorphous metallic glass

**Coin ID:** COIN-EDB2DF588DAC215B  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41864  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** ab997480be7bdf35beca39d9fb89a822

### 371. Californium phase boundary at 146 GPa / 2482 K

**Coin ID:** COIN-15862DA672B00977**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.39897**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 640a805794763fad3e047711ca2a0827

### 372. Californium melt viscosity profile at 2315 K — supersaturated solid solution

**Coin ID:** COIN-1EC936043724CCD8**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40487**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 66b76a88a077b2744a7d65092e8635f0

### 373. Tantalum phase boundary at 200 GPa / 1534 K

**Coin ID:** COIN-36DA8894A904D72B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.38821**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 5eba2abff2d8fd6452731ef7935a2d2f

### 374. Osmium-Rhenium thermal transition state at 2060 K

**Coin ID:** COIN-7055489C091E2E88**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41632  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 27acee1f654367a9fb3e30a5a06d8b9a

### 375. Thorium melt viscosity profile at 2452 K — amorphous metallic glass

**Coin ID:** COIN-E54E6E9918E8C89D  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41258  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 289fd2a8becdd07898fdafae39f65af29

### 376. Tungsten phase boundary at 157 GPa / 2790 K

**Coin ID:** COIN-EF30FE925FF48C4B  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40558  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 38be06cbc96b3b0722a7f5ae2df4ae09

### 377. Bismuth melt viscosity profile at 1864 K — intermetallic compound

**Coin ID:** COIN-625F8D6A35B1C183  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.3874  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 45c16fc4fb7d6600da3a44fed8ed88ae

### 378. Thallium melt viscosity profile at 2050 K — intermetallic compound

**Coin ID:** COIN-0B6F456D9D41023F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.41453**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f2d8bda3df2be0b979f45bad39cf995a

### 379. Bismuth phase boundary at 139 GPa / 2371 K

**Coin ID:** COIN-1DE8C7DEE4BC960A**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.3892**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2b804912ae4f5e5ef2ef4c09e7f245e6

### 380. Tantalum phase boundary at 442 GPa / 582 K

**Coin ID:** COIN-F4DAA8BAC6F6E9BF**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.42402**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 870ada46763fb07a3afcc7ff283529a6

### 381. Uranium-Thallium thermal transition state at 1687 K

**Coin ID:** COIN-DDF62DFDF44C1E1C**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.3946  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** eecb0dd49a769c0b2e4df113e0cb2395

### 382. Californium melt viscosity profile at 1757 K — frank kasper phase

**Coin ID:** COIN-07CB9F4152AB53FA  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40617  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 0005a58bcb7218ceded721592fa67dc7

### 383. Platinum phase boundary at 291 GPa / 594 K

**Coin ID:** COIN-DC57188E61D3A602  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.4245  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 7cc6c1be4f46a73152db800329d53e4a

### 384. Tungsten-Iridium thermal transition state at 1726 K

**Coin ID:** COIN-5FBD3E6BA163F9F4  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41129  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 47fc1d2908e00f47ab33c729601eab1d

### 385. Bismuth melt viscosity profile at 1706 K — spinodal decomposition product

**Coin ID:** COIN-35A73A97D39BF61B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.39166**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 69fda5bb653c3956e1234b5e7d6734f7

### 386. Bismuth-Tantalum thermal transition state at 1611 K

**Coin ID:** COIN-987E30915FF1A7B8**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.38216**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2f798bc7e4613cb2556ff1aa10b07aab

### 387. Bismuth melt viscosity profile at 1655 K ~~000~~ spinodal decomposition product

**Coin ID:** COIN-4948F1336F40AA03**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40743**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a7b796a83462882b1320f39c50f8ae87

### 388. Lead phase boundary at 224 GPa / 740 K

**Coin ID:** COIN-BAA55005E8716CC9**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41463  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 23b5c199cb17d10462df107372de7ba6

### 389. Americium melt viscosity profile at 2345 K frank kasper phase

**Coin ID:** COIN-0DC59F46AD93CD7C  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.42086  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 35b6fd0f245ffc6dc897a024c6cc95f8

### 390. Osmium phase boundary at 226 GPa / 1421 K

**Coin ID:** COIN-EBA9EF3A880F189E  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.4  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 53b76621f451ff4a883dac9dce82b717

### 391. Mercury melt viscosity profile at 2529 K — high entropy alloy

**Coin ID:** COIN-8971CBF7444395BA  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40357  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e52edb0a96c02c22908425ac2a42764f

### 392. Rhenium phase boundary at 482 GPa / 1312 K

**Coin ID:** COIN-E85CCDECE9984926**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.38772**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4b1c0c0ab99a6a1380462c7f21623570

### 393. Iridium melt viscosity profile at 2437 K — high entropy alloy

**Coin ID:** COIN-71ED58A1A39EAA85**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.41405**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 902208cf29c1dec5ec1bf5d80c22a340

### 394. Bismuth-Curium thermal transition state at 2001 K

**Coin ID:** COIN-4CD7DFAB6A0BA773**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40272**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 78259872916c514a8f70ae3de98ec863

### 395. Hafnium phase boundary at 171 GPa / 3256 K

**Coin ID:** COIN-DB33DCADCCE34D09**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39684  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** e6644c9fd61e4f471cec67fa8aa99c69

### 396. Hafnium melt viscosity profile at 2669 K laves phase

**Coin ID:** COIN-55E6D41434851A7F  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.42013  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 94494e4754734d9e5343747eaec92702

### 397. Hafnium melt viscosity profile at 2072 K — amorphous metallic glass

**Coin ID:** COIN-847E061C955C8978  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41071  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 6ac142bc7fe76968e0ab3837353fde19

### 398. Bismuth melt viscosity profile at 2346 K — frank kasper phase

**Coin ID:** COIN-EE15499D2096C286  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.42561  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 46f3cadfd81fd5e8d31a8cf600ff8715**399. Thallium-Tantalum thermal transition state at 2023 K****Coin ID:** COIN-4EAC79EC0967E84F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.37682**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0cb6a3d3f8b8a25a5ccda5f8d81b0ae2**400. Tungsten melt viscosity profile at 1849 K — supersaturated solid solution****Coin ID:** COIN-D4524AA85C5BE6A7**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.37745**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2b267b3f4843941852ae91d3a973b68e**401. Tantalum melt viscosity profile at 2212 K — amorphous metallic glass****Coin ID:** COIN-3BDC4D4CA71FCD8D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.38065**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 1ff7d33d346192539fccc7af45345fb9**402. Lead phase boundary at 405 GPa / 648 K****Coin ID:** COIN-AD5F5363DA73759E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.42353  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** dffbefe79ccb9ba93e07a6ae6d41bc6

#### 403. Tantalum phase boundary at 386 GPa / 1119 K

**Coin ID:** COIN-F2678CE81BED5D3A  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.42385  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** adcd14c8132e7f0a9e4790aa84061da3

#### 404. Californium melt viscosity profile at 2261 K 00 laves phase

**Coin ID:** COIN-5A397DC9EBE622B4  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.37872  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** da47564da495da67ecbeeb6b5434d502

#### 405. Thorium-Gold thermal transition state at 2388 K

**Coin ID:** COIN-614779FB1DF5D842  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39918  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9c311d1761c8fa9e582d10f98f40ea7a**406. Iridium melt viscosity profile at 1994 K — laves phase****Coin ID:** COIN-7947C1D53B94AB88**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.4175**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 62874343d398ab6e1d9e218cd7378bdd**407. Gold melt viscosity profile at 2086 K  amorphous metallic glass****Coin ID:** COIN-04FDAE8BF051BD7B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.39754**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 6d69823b4db7ea5cc2ad06f610fdd543**408. Gold melt viscosity profile at 2358 K — supersaturated solid solution****Coin ID:** COIN-C325480EDED2FDF**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40702**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e7cdeb0f05f4db2d9826ef398b22d289**409. Curium phase boundary at 287 GPa / 742 K****Coin ID:** COIN-1EC8305E3524C955**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41469  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 5df560768ce0016a32cd83e5ee048216

#### 410. Hafnium-Californium thermal transition state at 1992 K

**Coin ID:** COIN-0191C8A73458CA7E  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.42275  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c39a1f48a3b0d8b107f374eb80f0f1a1

#### 411. Tantalum melt viscosity profile at 2067 K — intermetallic compound

**Coin ID:** COIN-9784DAF4FE154BEE  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.38227  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 57e24f27ca861c7e37c6488ff083ef83

#### 412. Mercury melt viscosity profile at 2619 K amorphous metallic glass

**Coin ID:** COIN-C22A0F1726EDCF8A  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40966  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** db79b248ffe59aa4a6ad82da2bbe634a

#### 413. Gold melt viscosity profile at 2031 K — amorphous metallic glass

**Coin ID:** COIN-00FE5510B9E586EF**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40587**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** c5dc8f7e311e8887ad1ace720d05eb4c

#### 414. Bismuth phase boundary at 277 GPa / 1109 K

**Coin ID:** COIN-0552C4294E0AC592**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.41125**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 737fcb5f8bf912d048569b5cd8a880d0

#### 415. Curium-Iridium thermal transition state at 2115 K

**Coin ID:** COIN-498E90B8ED220D24**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.37988**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9e0309932eb4fefcd5c76a6b4622bdab

#### 416. Osmium melt viscosity profile at 2921 K — heusler alloy

**Coin ID:** COIN-FF0CD9438C74C030**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39938  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 3a1309bcb8270889e7ae0252080b151

#### 417. Platinum phase boundary at 356 GPa / 407 K

**Coin ID:** COIN-A475949356CAA830  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40239  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 8d7e4139037d5e07fab5e01c4f2d83e7

#### 418. Uranium-Mercury thermal transition state at 2035 K

**Coin ID:** COIN-2F8A76C5711844B5  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40618  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** b030917d7cc151e05f1978f8563b74ef

#### 419. Californium melt viscosity profile at 1724 K — eutectic composition

**Coin ID:** COIN-77AA9629DB6ADF55  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40335  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** c433c2d714cfb9bd715a289a924f0c8f**420. Hafnium-Curium thermal transition state at 1749 K****Coin ID:** COIN-E9326E4D28567B3F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40407**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** df4964f8f8f789f487c301fbda492b97**421. Californium melt viscosity profile at 2828 K — heusler alloy****Coin ID:** COIN-3AED749B0F62A6D6**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.41195**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e8e3e5d062e7b788f2ba040ebb2c8050**422. Iridium phase boundary at 305 GPa / 1271 K****Coin ID:** COIN-C391930BBEAB082F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.39297**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b25daeb48f3b443000dc03d166388f98**423. Curium melt viscosity profile at 2465 K — frank kasper phase****Coin ID:** COIN-8C47E6E83182C9C2**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.38405  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 4486ae4947a0164cb8e2e0fc497a066d

#### 424. Rhenium phase boundary at 74 GPa / 1618 K

**Coin ID:** COIN-6F4950B75E626BB4  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41623  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 3308a7f1e87caba8565ddecbea82fe57

#### 425. Iridium melt viscosity profile at 1631 K — laves phase

**Coin ID:** COIN-E6FA734DC6C6BD39  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39971  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c2613bba82c953aec56cde1375f7af54

#### 426. Bismuth phase boundary at 439 GPa / 525 K

**Coin ID:** COIN-BCF4C0596169BC18  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.38207  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 918e7d3bb053f8eea8606ff5bcfd038d

#### 427. Tantalum melt viscosity profile at 1852 K — high entropy alloy

**Coin ID:** COIN-6A89190F732F83CA**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.38837**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** aca3de6b1c53a2a8d3d48007391cf519

#### 428. Bismuth phase boundary at 163 GPa / 3133 K

**Coin ID:** COIN-472651953FDE1FB3**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.38301**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e99ca1b9fb109c29fae8fd2a6c43c737

#### 429. Uranium-Curium thermal transition state at 1660 K

**Coin ID:** COIN-1A669634B9D0BD58**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.3803**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3cde949e6f8ddd4bac7a751284d95512

#### 430. Tantalum melt viscosity profile at 2747 K — frank kasper phase

**Coin ID:** COIN-E4C70A3F5A924646**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41748  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** be006567e8f939de99e0e728b6f114f5

### 431. Americium phase boundary at 295 GPa / 1116 K

**Coin ID:** COIN-5A59B5D18F69A1E4  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41892  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 223d7cce6902215470bb56475ce917fd

### 432. Bismuth melt viscosity profile at 2364 K 00 heusler alloy

**Coin ID:** COIN-96B26567BD8A0F03  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.42557  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** e58365a7556278ae0566f984eca8e83c

### 433. Americium phase boundary at 370 GPa / 692 K

**Coin ID:** COIN-6D39CB716D18051C  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39453  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** dd0c180723818d6517aa52bbec82df14

#### 434. Osmium phase boundary at 434 GPa / 933 K

**Coin ID:** COIN-CEA43DFF448CB21E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.38623**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4e4797a8c5efb3d4ff8ee72d1b46dd55

#### 435. Bismuth-Californium thermal transition state at 1671 K

**Coin ID:** COIN-36BF29A31B438C1E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.39705**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 1814219d9a812087f1a0627ca8a607f5

#### 436. Bismuth phase boundary at 321 GPa / 989 K

**Coin ID:** COIN-FCA65EC9A13BF3FD**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.3768**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** c108e5bb59087b37346f698510cca0b2

#### 437. Tungsten-Tantalum thermal transition state at 2274 K

**Coin ID:** COIN-B697AFD47232BA80**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.37688  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ea0884b39cf724e032b164ee85f8355

#### 438. Tungsten melt viscosity profile at 1617 K amorphous metallic glass

**Coin ID:** COIN-46CC9E62CFA5A807  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41759  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** e3b5592a8b7bf989f3226f8581c16588

#### 439. Californium phase boundary at 449 GPa / 1275 K

**Coin ID:** COIN-F14A34A36F7DF792  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.37874  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** fd5a6fcb7a91f72ac2dbec09323e031f

#### 440. Rhenium melt viscosity profile at 2192 K high entropy alloy

**Coin ID:** COIN-C93DCD9FF3553D4A  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39067  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2df16559076bf8ebd0725d03cb2c6157

#### 441. Americium-Thallium thermal transition state at 1925 K

**Coin ID:** COIN-C6FFCA2F4DEDCCE7**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.39512**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a76c3b9c02effd093f9a3d55aa536e01

#### 442. Curium melt viscosity profile at 2905 K ~~000~~ heusler alloy

**Coin ID:** COIN-27EA8FE65617FEB6**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.42202**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 396b3edbe14591c47690353632c86220

#### 443. Iridium melt viscosity profile at 2383 K — frank kasper phase

**Coin ID:** COIN-CFFEAC4126AF7EE9**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40018**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 1d4e539d538936d42e3061fd7cbc03d3

#### 444. Thorium phase boundary at 390 GPa / 1411 K

**Coin ID:** COIN-A8F10DB90802680D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41787  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c08d7ccb9199e0d51e441b73925c0161

#### 445. Tungsten melt viscosity profile at 2469 K supersaturated solid solution

**Coin ID:** COIN-E831EE348A6C72E8  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40745  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** a359493124be793c458e9b42c13b6546

#### 446. Hafnium melt viscosity profile at 2623 K — intermetallic compound

**Coin ID:** COIN-E9B6ED613DD886AC  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39661  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 86d2e114d0973bbdc02130125e24c6c3

#### 447. Thallium phase boundary at 112 GPa / 1555 K

**Coin ID:** COIN-3164BB4C9A995A72  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41773  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3f46d8a9784397e933a94a4ca4f67827**448. Uranium-Bismuth thermal transition state at 1804 K****Coin ID:** COIN-392BCBA095174539**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40445**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b6e1d9616225f637e758a56969f49352**449. Uranium-Bismuth thermal transition state at 1804 K****Coin ID:** COIN-89FFF27A59FEA030**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.38182**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b6e1d9616225f637e758a56969f49352**450. Rhenium melt viscosity profile at 1818 K ~~000~~ frank kasper phase****Coin ID:** COIN-DD255EE5597E49DD**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.39672**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0ec346224c27016f55ce4129bbe03712**451. Platinum phase boundary at 15 GPa / 2141 K****Coin ID:** COIN-90446169187953D1**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.38436  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 36d1d28d424176549b05e1f3535c1858

#### 452. Curium-Tungsten thermal transition state at 2161 K

**Coin ID:** COIN-CDF721F2BA0F3506  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41921  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 535f00a04e57088dae014703819d5c35

#### 453. Hafnium melt viscosity profile at 2765 K ~~000~~ high entropy alloy

**Coin ID:** COIN-260A39BE01AC200B  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40179  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 7a3b1054368fc86fff183cead426866e

#### 454. Lead phase boundary at 453 GPa / 687 K

**Coin ID:** COIN-4CD4B9D596BF782E  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39115  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 96e4b9f6d27267344a850711a0c11a16**455. Californium-Rhenium thermal transition state at 1588 K****Coin ID:** COIN-AF806B91C1BE1019**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.42123**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 84aea89eff1674397e54b598c0535176**456. Californium melt viscosity profile at 2064 K — heusler alloy****Coin ID:** COIN-F3FC6BEE9C80265B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.38615**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0c49e1b746e55fccf50300f94f00da0f**457. Gold phase boundary at 321 GPa / 323 K****Coin ID:** COIN-FBDB4D2C0E240E74**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.41089**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 7396ed65f7e9bbc3e139c805c1afba78**458. Uranium-Platinum thermal transition state at 2453 K****Coin ID:** COIN-BE2EF8D04F8E6501**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.391  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 7db46d5c7fdb68fe9a60cf26b2a6d4f8

#### 459. Lead melt viscosity profile at 1725 K — frank kasper phase

**Coin ID:** COIN-57CC9909C78DE970  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41624  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** d7379ad7603d4ee22455782174013495

#### 460. Gold-Thallium thermal transition state at 2236 K

**Coin ID:** COIN-D9053DA654B1851D  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41796  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** b7c05a93bd78a8c5fe8ca4fc5909050b

#### 461. Californium melt viscosity profile at 2821 K frank kasper phase

**Coin ID:** COIN-2BD1B6B50E7846B7  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41811  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** dd941704d2f7165c9399d80d686ba7e9**462. Bismuth-Uranium thermal transition state at 1617 K****Coin ID:** COIN-082CCA343A4B0723**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40434**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 28dcda8437dbb865199081add87bb2f**463. Americium melt viscosity profile at 2078 K — supersaturated solid solution****Coin ID:** COIN-CD7EE78F37E26DD1**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40893**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2129317b7f6b6164add4538bab9658b4**464. Bismuth phase boundary at 78 GPa / 2573 K****Coin ID:** COIN-B12752908F6E38B0**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.41743**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** bcf2075ea3d3aaa01006eec25c85ad0b**465. Platinum-Curium thermal transition state at 2126 K****Coin ID:** COIN-ACBD7019E3E5FE75**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.42348  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ca5f95e19432b6885b21c102c1aca5aa

#### 466. Platinum phase boundary at 22 GPa / 1627 K

**Coin ID:** COIN-5747FDE01DCD9E89  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.39788  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** a8fde3b7b3f127909f72b201e8feab3f

#### 467. Tantalum melt viscosity profile at 1748 K 00 intermetallic compound

**Coin ID:** COIN-D0CDB9E281F23B0B  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.409  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 67af52426f60a84a1eca24bf9ee50a16

#### 468. Rhenium-Lead thermal transition state at 2469 K

**Coin ID:** COIN-E798FE8802CA9825  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.41613  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 8f58245b895c6057dfb733a6b1a27e22

#### 469. Tantalum melt viscosity profile at 2935 K — intermetallic compound

**Coin ID:** COIN-D00A8D524401C6D9**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.40024**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d7443c71b2c76c9bfff55f02467dcf2f

#### 470. Platinum phase boundary at 349 GPa / 1087 K

**Coin ID:** COIN-DEBA407F98D3910F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.41374**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4b103a571a863323f06cf2a478b377db

#### 471. Rhenium-Tungsten thermal transition state at 1964 K

**Coin ID:** COIN-26762C546B89426F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71**K\_N3 (constitutional admissibility):** 0.5441**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855**Triple intersection:** 0.193163**gamma\_N (Lyapunov stability):** -0.41557**MT14 / GEQ:** 4/14 · 2/8**Survival governed / ungoverned:** 0.5869 / 0.4421**Enhancement:** 1.328x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** ca313fe3f4a626d7bc6b5869548f15a6

#### 472. Thallium phase boundary at 386 GPa / 1101 K

**Coin ID:** COIN-C3B6FBA47574069D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40372  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c233316b366676491abb09b82de76061

#### 473. Hafnium-Tantalum thermal transition state at 1510 K

**Coin ID:** COIN-3BB7E58C7EDE1B10  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40016  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 698f685a275d4fdac3e6ebb7b0bfb917

#### 474. Thorium melt viscosity profile at 2247 K — supersaturated solid solution

**Coin ID:** COIN-179C39BBA50996FA  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.42377  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 6b323d53c2bf47db326b0e3d2f9f305a

#### 475. Uranium phase boundary at 172 GPa / 2404 K

**Coin ID:** COIN-1AC33A35DF6F85C1  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.71  
**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.37742  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":null,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** a6d0fe5180fda8bb66d880018e143969

#### 476. Platinum melt viscosity profile at 2083 K intermetallic compound

**Coin ID:** COIN-949D7D34FEFF0275

**K\_N1 (inner magic shell):** 0.5

**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441

**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855

**Triple intersection:** 0.193163

**gamma\_N (Lyapunov stability):** -0.38332

**MT14 / GEQ:** 4/14 · 2/8

**Survival governed / ungoverned:** 0.5869 / 0.4421

**Enhancement:** 1.328x

**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":null,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 8308fd7df8fd867cf344ab4fb0ab7154

#### 477. Californium-Curium thermal transition state at 1867 K

**Coin ID:** COIN-679B32CC7AF94D39

**K\_N1 (inner magic shell):** 0.5

**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441

**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855

**Triple intersection:** 0.193163

**gamma\_N (Lyapunov stability):** -0.39836

**MT14 / GEQ:** 4/14 · 2/8

**Survival governed / ungoverned:** 0.5869 / 0.4421

**Enhancement:** 1.328x

**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":null,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 958170199f62cbfb5e8e192d440842cc

#### 478. Californium phase boundary at 439 GPa / 793 K

**Coin ID:** COIN-A16132C2F45E5E75

**K\_N1 (inner magic shell):** 0.5

**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441

**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855

**Triple intersection:** 0.193163

**gamma\_N (Lyapunov stability):** -0.39118

**MT14 / GEQ:** 4/14 · 2/8

**Survival governed / ungoverned:** 0.5869 / 0.4421

**Enhancement:** 1.328x

**Verdict:** REVIEW\_REQUIRED

**Flags:**

{"quasicrystal":false,"superconductor":false,"mott\_insulator":false,"shell\_closure":null,"neptunium":false,"plutonium":false}

**SHA-256 (truncated):** 63effe9bad3878241edc28a0c9e8b773

#### 479. Iridium-Osmium thermal transition state at 2097 K

**Coin ID:** COIN-9DFF68224DD79CED

**K\_N1 (inner magic shell):** 0.5

**K\_N2 (outer island of stability):** 0.71

**K\_N3 (constitutional admissibility):** 0.5441  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.7955 / 0.855  
**Triple intersection:** 0.193163  
**gamma\_N (Lyapunov stability):** -0.40145  
**MT14 / GEQ:** 4/14 · 2/8  
**Survival governed / ungoverned:** 0.5869 / 0.4421  
**Enhancement:** 1.328x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 821cee6ed749a171ce13510ae1f74473

#### 480. Iridium transparent conductivity via arc melting controlled atmosphere

**Coin ID:** COIN-65D42DA250E018E5  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.696  
**K\_N3 (constitutional admissibility):** 0.5531  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.792 / 0.873  
**Triple intersection:** 0.19249  
**gamma\_N (Lyapunov stability):** -0.37807  
**MT14 / GEQ:** 3/14 · 2/8  
**Survival governed / ungoverned:** 0.5866 / 0.4423  
**Enhancement:** 1.326x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** fe02324d7a6fd16739bcde07d2def426

#### 481. Thorium photonic bandgap metal via arc melting controlled atmosphere

**Coin ID:** COIN-83B227457299DCC3  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.696  
**K\_N3 (constitutional admissibility):** 0.5531  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.792 / 0.873  
**Triple intersection:** 0.19249  
**gamma\_N (Lyapunov stability):** -0.40768  
**MT14 / GEQ:** 3/14 · 2/8  
**Survival governed / ungoverned:** 0.5866 / 0.4423  
**Enhancement:** 1.326x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 4f41cea5d956a980624474943b355da6

#### 482. Tungsten transparent conductivity via arc melting controlled atmosphere

**Coin ID:** COIN-18D137CE728AC1E9  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.696  
**K\_N3 (constitutional admissibility):** 0.5531  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.792 / 0.873  
**Triple intersection:** 0.19249  
**gamma\_N (Lyapunov stability):** -0.39667  
**MT14 / GEQ:** 3/14 · 2/8  
**Survival governed / ungoverned:** 0.5866 / 0.4423  
**Enhancement:** 1.326x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3df1c2584adfcc54c52feb68764a22fb

#### 483. Iridium heavy fermion coherence via mechanical alloying cryogenic

**Coin ID:** COIN-79D2078040ED6B18**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.684**K\_N3 (constitutional admissibility):** 0.5473**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.789 / 0.867**Triple intersection:** 0.18716**gamma\_N (Lyapunov stability):** -0.41438**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5842 / 0.4439**Enhancement:** 1.316x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 68416ab9ed6f7387744d24ccca7cc31e

#### 484. Americium spin orbit coupling max via mechanical alloying cryogenic

**Coin ID:** COIN-58942E6C33A719C4**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.684**K\_N3 (constitutional admissibility):** 0.5473**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.789 / 0.867**Triple intersection:** 0.18716**gamma\_N (Lyapunov stability):** -0.3811**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5842 / 0.4439**Enhancement:** 1.316x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e8077338a191868dab294d9fa3f582d1

#### 485. Osmium nuclear binding stability via mechanical alloying cryogenic

**Coin ID:** COIN-893BDA7E6E4D2F32**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.684**K\_N3 (constitutional admissibility):** 0.5473**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.789 / 0.867**Triple intersection:** 0.18716**gamma\_N (Lyapunov stability):** -0.4186**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5842 / 0.4439**Enhancement:** 1.316x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 31ca5f6954d94c5864fca4c60cdd7cf7

#### 486. Lead topological insulator bulk via mechanical alloying cryogenic

**Coin ID:** COIN-96C105CB40B12AFE**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.684

**K\_N3 (constitutional admissibility):** 0.5473  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.789 / 0.867  
**Triple intersection:** 0.18716  
**gamma\_N (Lyapunov stability):** -0.41876  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5842 / 0.4439  
**Enhancement:** 1.316x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 610395a1ee6f94626cfcaace4b46abec

#### 487. Californium spin orbit coupling max via self propagating synthesis

**Coin ID:** COIN-BF29F613D6A23D11  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.672  
**K\_N3 (constitutional admissibility):** 0.5414  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.786 / 0.861  
**Triple intersection:** 0.181909  
**gamma\_N (Lyapunov stability):** -0.41042  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5819 / 0.4454  
**Enhancement:** 1.306x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c7f42b6db3776605ef85f49bdfba2110

#### 488. Curium magneto caloric giant via self propagating synthesis

**Coin ID:** COIN-38431BC20C009224  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.672  
**K\_N3 (constitutional admissibility):** 0.5414  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.786 / 0.861  
**Triple intersection:** 0.181909  
**gamma\_N (Lyapunov stability):** -0.3779  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5819 / 0.4454  
**Enhancement:** 1.306x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** b7968e40e6ad1c1fc0bfa2bfd9011337

#### 489. Californium topological insulator bulk via self propagating synthesis

**Coin ID:** COIN-7C78260EFCC7A020  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.672  
**K\_N3 (constitutional admissibility):** 0.5414  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.786 / 0.861  
**Triple intersection:** 0.181909  
**gamma\_N (Lyapunov stability):** -0.41167  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5819 / 0.4454  
**Enhancement:** 1.306x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0f3c9fef1d53c34a24e47560047c76d5

#### 490. Platinum photonic bandgap metal via self propagating synthesis

**Coin ID:** COIN-3BD859EAA42E7E8F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.672**K\_N3 (constitutional admissibility):** 0.5414**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.786 / 0.861**Triple intersection:** 0.181909**gamma\_N (Lyapunov stability):** -0.39413**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5819 / 0.4454**Enhancement:** 1.306x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** adc6b8fc04ce2620f277f89017a037f0

#### 491. Thorium topological insulator bulk via self propagating synthesis

**Coin ID:** COIN-A0641CED5D4B4261**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.672**K\_N3 (constitutional admissibility):** 0.5414**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.786 / 0.861**Triple intersection:** 0.181909**gamma\_N (Lyapunov stability):** -0.38104**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5819 / 0.4454**Enhancement:** 1.306x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b7afd7ea1ab781ae28158e744904e3c7

#### 492. Hafnium magneto caloric giant via self propagating synthesis

**Coin ID:** COIN-4FA104FCEAF5B002**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.672**K\_N3 (constitutional admissibility):** 0.5414**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.786 / 0.861**Triple intersection:** 0.181909**gamma\_N (Lyapunov stability):** -0.38693**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5819 / 0.4454**Enhancement:** 1.306x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0ca8160d418e196a4fb081f72c31a06f

#### 493. Bismuth heavy fermion coherence via self propagating synthesis

**Coin ID:** COIN-DB97C6CCDDAFFE40**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.672

**K\_N3 (constitutional admissibility):** 0.5414  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.786 / 0.861  
**Triple intersection:** 0.181909  
**gamma\_N (Lyapunov stability):** -0.41104  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5819 / 0.4454  
**Enhancement:** 1.306x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":null, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 2b18c2880a1b4cbfe30b98da2f0b1f69

#### 494. Gold-Hafnium thermal transition state at 1020 K

**Coin ID:** COIN-9A981D89EEA48340  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36292  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":null, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 8053a1f5c20fbb85fe567345605ec71a

#### 495. Uranium-Thorium spinodal decomposition product at 16:84 ratio

**Coin ID:** COIN-FEB7AD752E173DCA  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40514  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":null, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** bf98deef7fc30503164d782cd8385c1

#### 496. Thorium-Thallium frank kasper phase at 79:21 ratio

**Coin ID:** COIN-98707C1159CE4FA5  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3973  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0e093fd67b1520b9d3b9fe3204b3b938**497. Thorium phase boundary at 86 GPa / 683 K****Coin ID:** COIN-A7C5ED1978B3A7BD**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.40758**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3ee040f6bda1909d11d78371534a70da**498. Thorium-Tantalum frank kasper phase at 86:14 ratio****Coin ID:** COIN-CAE6DCB9FDCEDC25**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38602**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 168d77c232d4ce9e55de20a11a6288be**499. Gold magneto caloric giant via electrochemical deposition****Coin ID:** COIN-8ED348CA8BB9EBFD**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36885**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 90e24e2b07346abeea034a78bada1e8a**500. Hafnium melt viscosity profile at 1263 K — eutectic composition****Coin ID:** COIN-069B6D7ADC9F94FD**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40716  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** d016bdd631f4bbac326ada2061e1665c

### 501. Platinum-Mercury frank kasper phase at 5:95 ratio

**Coin ID:** COIN-41B3D178278D9538  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36849  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** cfd233c8b368898ca6ba4fe0e657adf2

### 502. Hafnium-Lead interface tension → topological insulator bulk

**Coin ID:** COIN-ACC818D8C862BB67  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39037  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 46307aa794c034d02369eb86000e9c30

### 503. Platinum-Californium interface tension ☹️ heavy fermion coherence

**Coin ID:** COIN-5859832D3EF595F5  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39689  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2d9c8818a16482522cc6e0a71b026f4a

### 504. Osmium-Hafnium thermal transition state at 938 K

**Coin ID:** COIN-68AD6D3F3621A542**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36536**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 546fbd916da8c81201bf08013f8c043d

### 505. Platinum magneto caloric giant via spark plasma sintering

**Coin ID:** COIN-7E7FB86E7482D6DF**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39064**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d4092a6d8a525100a36b6d8ea93c9ac5

### 506. Lead-Uranium laves phase at 83:17 ratio

**Coin ID:** COIN-773745C2C7538C8A**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39268**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e48152ce322a75131e00b823c3d2c52c

### 507. Lead-Thorium interface tension → photonic bandgap metal

**Coin ID:** COIN-CF1C753615F60091**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37021  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 5d3a18470e513ad5fa9f66e966afa7c6

### 508. Tantalum-Platinum thermal transition state at 1176 K

**Coin ID:** COIN-595CC5BD85725BFB  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36621  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** b30f9fe8c8801aa3e0a1675d8088d7f5

### 509. Tungsten spin orbit coupling max via nuclear transmutation pathway

**Coin ID:** COIN-B2A2E4A7943891DC  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38566  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 933088c98965339196d4b6f5f9758118

### 510. Thorium melt viscosity profile at 1247 K — laves phase

**Coin ID:** COIN-8989D89B639B7F24  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38271  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 84ab6adf32d9fffd27667739eb6f5fc4

### 511. Thallium-Rhenium interface tension → topological insulator bulk

**Coin ID:** COIN-873E1DC7C16212D5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37308**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4fc2fd823d387dcd74b3f933ba645be8

### 512. Tungsten-Californium interface tension → topological insulator bulk

**Coin ID:** COIN-6AEDA4A2617E7765**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39076**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** aec303368e67b71aa4db227e5fc15b66

### 513. Thallium-Tantalum amorphous metallic glass at 59:41 ratio

**Coin ID:** COIN-1B0585E15664EC63**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.3968**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0d021684b32213a1b659d7d78d95c451

### 514. Rhenium-Gold interface tension → photonic bandgap metal

**Coin ID:** COIN-9A87CD46E91145F5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38783  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 1494322a96f77003e86df91a7fb692b9

### 515. Thallium nuclear binding stability via nuclear transmutation pathway

**Coin ID:** COIN-0F7FC092E8CDE877  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39933  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 59453fd83660934deb4f19c3e42d8630

### 516. Rhenium-Uranium frank kasper phase at 6:94 ratio

**Coin ID:** COIN-F98177E5EEAE61F1  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37433  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 800208c256a5d320ac64f6c9290cd639

### 517. Tantalum-Thallium interface tension → magneto caloric giant

**Coin ID:** COIN-B1B865A08FA3A2F3  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38761  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3b396ea9052b378e89271793fb3b0eae**518. Hafnium-Tantalum interface tension → nuclear binding stability****Coin ID:** COIN-489DB8B9DB7C2641**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36278**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4d49b1d657d3a6fc89b4506d9514523d**519. Platinum phase boundary at 193 GPa / 1211 K****Coin ID:** COIN-36AB23E9D9320BAA**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37219**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b98c666ae9aceb8e9569f04945143b8d**520. Lead-Uranium heusler alloy at 93:7 ratio****Coin ID:** COIN-E55EE88B96C5A8EB**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38607**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 81fa6cf4f04d0754db39e9d58dd381aa**521. Tungsten-Americium interface tension → topological insulator bulk****Coin ID:** COIN-94A25FF5D31543C2**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3772  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 3fd0e080ffcc93556c1567ab6738b788

## 522. Mercury-Curium thermal transition state at 1452 K

**Coin ID:** COIN-75013D5BE24CA2C2  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39394  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 70dd880e2daefb2b40875de28933f8e

## 523. Californium melt viscosity profile at 1062 K — eutectic composition

**Coin ID:** COIN-A2194869EDF32E18  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39921  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c87610c23b7549b9a5f7f2eb235d4f09

## 524. Uranium magneto caloric giant via spark plasma sintering

**Coin ID:** COIN-DDA57CDDE1A82B41  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37204  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b1684e10d4c36e1edc5fd1b82af2bca3

## 525. Bismuth-Bismuth high entropy alloy at 8:92 ratio

**Coin ID:** COIN-61A31FF7948A5862**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39914**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d208049ece234cd260b67cefb203b0c7

## 526. Iridium-Curium interface tension → photonic bandgap metal

**Coin ID:** COIN-120266A8358C2F0A**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39438**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 6f97ddfbcaafa3adc582d8ac25f8803c

## 527. Uranium-Curium thermal transition state at 656 K

**Coin ID:** COIN-6F0F469F70F4A7E8**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.35998**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 31b726f08f486e48e9933feaecd9fbaf

## 528. Thallium melt viscosity profile at 1293 K — laves phase

**Coin ID:** COIN-E0FAD51A291E8707**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40793  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 6b6946ec327db27ea1c9d36ac912dcf9

### 529. Rhenium-Thallium frank kasper phase at 93:7 ratio

**Coin ID:** COIN-0625585BDBD8506A  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36966  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 93f4aadf914e678e07549c394c50ccc1

### 530. Osmium-Gold thermal transition state at 1441 K

**Coin ID:** COIN-8CFB6EEA21D004DC  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38422  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 3dad5c24314b0e448c330d30ff443821

### 531. Americium nuclear binding stability via high pressure high temperature

**Coin ID:** COIN-2B73C871C683D74B  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37519  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 61fe545045f6d8b0dfdc5114e178f562**532. Tungsten-Lead interface tension → topological insulator bulk****Coin ID:** COIN-E63BC9AC6380E55E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.35997**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9b6f374eeff89879d6cf560b2e4a8d4b**533. Americium-Tantalum thermal transition state at 630 K****Coin ID:** COIN-9D0D0E057D5AC33F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37043**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** bd973ad30dd16097a9c0001602ddb9c7**534. Gold melt viscosity profile at 1452 K  heusler alloy****Coin ID:** COIN-05231BE2FB1ECC85**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38293**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** ed3b178b3b4631c5bb2f4a2b1142ea2b**535. Californium-Uranium laves phase at 49:51 ratio****Coin ID:** COIN-8DFC4A5A79936CA3**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39047  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 83f2e1b4aeb5b07548532fa66abe34e0

### 536. Thallium phase boundary at 196 GPa / 946 K

**Coin ID:** COIN-6673F5DD660CD961  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38723  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** fca161cdb0e5e8d82815d651f942df26

### 537. Mercury-Uranium intermetallic compound at 96:4 ratio

**Coin ID:** COIN-263481777D2528E8  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37269  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 24cb84586c9eb663488b5d4fa6c8ad10

### 538. Osmium-Mercury interface tension → nuclear binding stability

**Coin ID:** COIN-221519E0C61D445E  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36534  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 7f105cd1672be2b15bda10ddb56695ba**539. Tungsten-Osmium thermal transition state at 780 K****Coin ID:** COIN-7ACB1D830057598C**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.3877**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e6f014de4bcc48ac91c8d6c5cca5ecb7**540. Bismuth-Osmium high entropy alloy at 81:19 ratio****Coin ID:** COIN-A8886B7AE99331BB**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38454**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 053a154f333f9a33ea1cffbc32a15f18**541. Rhenium-Gold interface tension → spin orbit coupling max****Coin ID:** COIN-45AC8F3C051605C1**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39416**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2594c65b515175b5fc4549e0f4ed59b0**542. Curium-Thallium thermal transition state at 1047 K****Coin ID:** COIN-1AD59AFD9F4251E6**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37068  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 35968b9e9abd4c6943267876566023fb

#### 543. Thallium melt viscosity profile at 1476 K — high entropy alloy

**Coin ID:** COIN-13686A7468E5A619  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38643  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ee90c9b9addac48cc96d0f0d89be255a

#### 544. Thallium-Americium frank kasper phase at 93:7 ratio

**Coin ID:** COIN-B9A568230C0A5DD4  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39088  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 63512aaac7cc7e67953a473596076866

#### 545. Thorium-Osmium thermal transition state at 1161 K

**Coin ID:** COIN-0A5F0E3C28A91EF4  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36113  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 24fa66072e521ff1a4631fc3ab1ba068

### 546. Tungsten-Uranium spinodal decomposition product at 46:54 ratio

**Coin ID:** COIN-100769E9B5AE9350**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36706**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** cc96f5e5adce716603ec8b4c6abae5c5

### 547. Platinum-Hafnium interface tension → magneto caloric giant

**Coin ID:** COIN-F92C614DC79FDD14**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38091**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 579b65df4dd421ca7c031a0ae0b6ff1c

### 548. Thallium-Tungsten thermal transition state at 686 K

**Coin ID:** COIN-A66317A95FA4845D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.40252**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** fe8fa242d0e5970b8c3189ca37c7fb22

### 549. Tantalum magneto caloric giant via spark plasma sintering

**Coin ID:** COIN-4C126CEB2A0822E9**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3837  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 61e8dceacbd59c81aef30020e4efc3d9

### 550. Bismuth melt viscosity profile at 1309 K — laves phase

**Coin ID:** COIN-BE948F129336960B  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3845  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** e757834c018a826216535f3a23bf688c

### 551. Curium-Curium interface tension → spin orbit coupling max

**Coin ID:** COIN-6A21FE5192C17B99  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40473  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 1c9e51c3fb93fe06b47f38b8a6d9f8b7

### 552. Tungsten-Tantalum thermal transition state at 1117 K

**Coin ID:** COIN-09192AF7DFF3CAFA  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39954  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0855d82909674d8b5cafea855fb12c96**553. Curium-Thallium frank kasper phase at 100:0 ratio****Coin ID:** COIN-CED5FD9E8709A07B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38771**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f83d62d9f3e3faa3d5bf93c3b7456daa**554. Americium-Rhenium interface tension → transparent conductivity****Coin ID:** COIN-8170DF16E20D41DC**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37656**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 81c8d43649ba60f9d72f6476969df296**555. Tungsten heavy fermion coherence via electrochemical deposition****Coin ID:** COIN-47B2345BAF04FA3A**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36416**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b302b4fdaedb3270e453e172f4263de0**556. Platinum-Tungsten interface tension → transparent conductivity****Coin ID:** COIN-5AD9CED7EAAC4D9C**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37108  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 3d66564a49c2afef771a9f4fbf1771cd

### 557. Platinum-Americium interface tension → spin orbit coupling max

**Coin ID:** COIN-B156B4EFB9E39E59  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38701  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ed5200db802cd4b1cb42b5e9b20c38dc

### 558. Curium-Lead thermal transition state at 1254 K

**Coin ID:** COIN-8B4888C6885D0499  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38784  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 0aef0f514ddc5cc7154b858defe31486

### 559. Iridium-Tungsten amorphous metallic glass at 88:12 ratio

**Coin ID:** COIN-95E4682902E600B7  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40291  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2458820a848d2ea26fa1eaa61bb9b777**560. Thorium-Thorium thermal transition state at 1194 K****Coin ID:** COIN-497868B4259F95F6**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39089**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** de9bea96f344455a3e4d5c3cbdce11cc**561. Iridium melt viscosity profile at 1275 K 000 intermetallic compound****Coin ID:** COIN-DCCD90C6E824C37C**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39221**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 46f01ca36d7845100220d7ef725ed4fd**562. Iridium-Tantalum eutectic composition at 39:61 ratio****Coin ID:** COIN-03C10F03AFA48B84**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37147**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 48c3ba28f8efca9281699c84bf226e0d**563. Tungsten-Curium laves phase at 42:58 ratio****Coin ID:** COIN-22CAD3A8568528E0**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36953  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** b89ebb44b4ea21f990b63a7e6b136747

#### 564. Californium-Rhenium interface tension transparent conductivity

**Coin ID:** COIN-227ED87BCA4D26C1  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38767  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 852a7a8577c677225c0f7ca761ee91f3

#### 565. Rhenium photonic bandgap metal via electrochemical deposition

**Coin ID:** COIN-6EF1F1D5EF138C66  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39483  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** a71d58eede4d74079fcbf67e695d53ad

#### 566. Americium-Bismuth spinodal decomposition product at 83:17 ratio

**Coin ID:** COIN-5A8266FA5BE8A31C  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37587  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 1b6ec46ac4af42ecfeac4a4323721bb0**567. Iridium-Rhenium eutectic composition at 3:97 ratio****Coin ID:** COIN-6640207BD70B0144**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36912**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** baa8b76777f077388d140d5d04054b14**568. Lead-Californium interface tension → topological insulator bulk****Coin ID:** COIN-E317294FD4F2C205**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37945**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** df6ff34c5af028abec89b2ff0d74cfaa**569. Lead-Thorium laves phase at 24:76 ratio****Coin ID:** COIN-FD87694DF982E8EA**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.3851**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 896d52987eea0bc4781f712fc1309161**570. Tungsten-Thorium interface tension 000 transparent conductivity****Coin ID:** COIN-679701C8CF24F5A2**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40698  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 3fab3baa846f36ec22e524190b4337d3

### 571. Tungsten-Lead thermal transition state at 1419 K

**Coin ID:** COIN-39246E1A9D815343  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39085  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 740412f43d7357e8b0fedb856a15035d

### 572. Lead-Hafnium supersaturated solid solution at 26:74 ratio

**Coin ID:** COIN-D30E96AEBBC9BD54A  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37881  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** b8a689cc774df6edec8b0b75266e6c45

### 573. Americium-Thorium thermal transition state at 825 K

**Coin ID:** COIN-7A94BB6177A28AAC  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37546  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d5c0094f4e0458a78803930bcab4d814**574. Gold-Platinum intermetallic compound at 82:18 ratio****Coin ID:** COIN-DBD72F2C9926C555**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39264**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 70627ede0bbed0c803596bc6e19b865f**575. Lead-Californium interface tension → photonic bandgap metal****Coin ID:** COIN-0E001BD42239BDE7**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39919**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 6f925dec684221173efd4beeb94788d8**576. Americium-Iridium thermal transition state at 578 K****Coin ID:** COIN-538F4EA6C7DD4DB1**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39569**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9a9af3274d091dffe6169183500c9088**577. Osmium-Bismuth spinodal decomposition product at 59:41 ratio****Coin ID:** COIN-9C4C949F20AA7884**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37194  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 6f6c7c14b04d2929473b5fd16b44be30

### 578. Iridium-Tungsten interface tension → transparent conductivity

**Coin ID:** COIN-BB779CC150FD703A  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36033  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ec6d6c6a8a52567269099216c40a2cda

### 579. Thallium-Californium thermal transition state at 1072 K

**Coin ID:** COIN-A2D44A2AB1B70EFA  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.4051  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 9a0c84e4566416374972277f4c40acb7

### 580. Tungsten spin orbit coupling max via electrochemical deposition

**Coin ID:** COIN-EE2609353A33CC69  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39163  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 5ca24677d07141e77ea8225a968f66c0

### 581. Lead-Osmium eutectic composition at 20:80 ratio

**Coin ID:** COIN-101802EE1639616A**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36948**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f206f122cbcdcb7a5dece7a56588bda

### 582. Americium melt viscosity profile at 1238 K — eutectic composition

**Coin ID:** COIN-BE93D24318FECA2A**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38479**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 71f4295a637fcd4a7c7d45a62088403a

### 583. Bismuth-Californium interface tension → nuclear binding stability

**Coin ID:** COIN-D86D8FA193171043**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.35924**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 037a3aa119fca9a5e7fdb30d7732fd15

### 584. Gold-Tantalum amorphous metallic glass at 35:65 ratio

**Coin ID:** COIN-3CE7B5D40892BC91**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37829  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 624f498bba20c366a01742d4f4b99399

### 585. Platinum-Lead interface tension → spin orbit coupling max

**Coin ID:** COIN-197973C11B77690B  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36984  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** cfd743d2199ef0ffbd9a902f64390b5b

### 586. Americium-Iridium frank kasper phase at 49:51 ratio

**Coin ID:** COIN-186B97E7823DD515  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39442  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 3d35afb81333e363fc6c85323bc72ed9

### 587. Tungsten-Iridium eutectic composition at 28:72 ratio

**Coin ID:** COIN-D16B8AFE7E5BCF37  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40491  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 7408ffcc7c88f80cb873960568f1cb88

### 588. Californium-Hafnium interface tension → heavy fermion coherence

**Coin ID:** COIN-081B610C04DF19CD**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.4025**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2c5d0bfe7e0a0f0fa019278c74aa3002

### 589. Americium-Tungsten thermal transition state at 1150 K

**Coin ID:** COIN-BB4A9887EAE365EF**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38863**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3a8f4177778535d35d3ad7e001f83b37

### 590. Tungsten-Osmium laves phase at 5:95 ratio

**Coin ID:** COIN-B3E6544B13D522B8**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.3934**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 8199b4422faf732363d5eef9c9997628

### 591. Osmium-Thorium thermal transition state at 705 K

**Coin ID:** COIN-B6378A68C72BC1A5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40198  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 09c83059a7443ee5487ea8af61f1b1d5

## 592. Iridium melt viscosity profile at 1438 K — high entropy alloy

**Coin ID:** COIN-8FEA54FAD42F259E  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39428  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 1bb50151e83d165a1ed63e5bf09ff076

## 593. Tantalum heavy fermion coherence via spark plasma sintering

**Coin ID:** COIN-B86FF489C50AED70  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36163  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 69d1fd3cdcf04c6fdd4f74097d0323fe

## 594. Iridium-Bismuth eutectic composition at 76:24 ratio

**Coin ID:** COIN-ABA9CF1D37FF45D5  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37952  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d33a70e48f2f630ad3934fd4e576d2d7

### 595. Hafnium phase boundary at 174 GPa / 1427 K

**Coin ID:** COIN-40D3B408F89CB70B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37954**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f657de09818cc1deff57df568b0f1479

### 596. Lead-Uranium eutectic composition at 74:26 ratio

**Coin ID:** COIN-09E23719A9549C9A**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.40831**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4d5f8b4eb55f906ffb51228927047a6c

### 597. Curium-Mercury thermal transition state at 1473 K

**Coin ID:** COIN-26D6D18A905A79B1**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37786**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 8f3b3b5e4be25857f7e9459c1275065d

### 598. Iridium phase boundary at 154 GPa / 657 K

**Coin ID:** COIN-1FE775EB2652DB5A**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3847  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 2637b865f94e61d1620e13c6b2bbbd4b

### 599. Curium-Gold intermetallic compound at 54:46 ratio

**Coin ID:** COIN-65773A80A7DF37C6  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40598  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** fe49a15b392ca9b4b1e5bec8b9c8857f

### 600. Iridium-Lead laves phase at 35:65 ratio

**Coin ID:** COIN-05FC6ECF99C9D7FF  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40792  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 13d2bbcec675c9741b43c5cc41a2f69e

### 601. Rhenium-Californium interface tension → heavy fermion coherence

**Coin ID:** COIN-4BC554C2DC2ED5BC  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37009  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** bd19350dfd9f9909b3ce11100d4047ed

## 602. Iridium-Curium thermal transition state at 613 K

**Coin ID:** COIN-FCD8D59F75501CC5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39727**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** d0ff676f963984dc18f3c9ad55020df8

## 603. Lead-Mercury laves phase at 87:13 ratio

**Coin ID:** COIN-BE6C8F3955D2227C**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.40489**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 61a4bce52eaed2db16185a38225e20fb

## 604. Mercury-Americium laves phase at 96:4 ratio

**Coin ID:** COIN-A5DFE194E42A4806**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36307**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 011e34ed2daddb907e4e84ab36a47215

## 605. Thorium-Rhenium interface tension → photonic bandgap metal

**Coin ID:** COIN-87C992CC78B056F9**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38464  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 2fe63625befdb4ec66af86f6ab0e842a

#### 606. Lead-Hafnium thermal transition state at 901 K

**Coin ID:** COIN-948AA7CC0C010823  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36889  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ce9e6ae9fe2cda93c67e1ce52aad0448

#### 607. Tantalum-Uranium supersaturated solid solution at 8:92 ratio

**Coin ID:** COIN-BB7C3C72E66BE93A  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39076  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 94b36b053828e877954d6876b73f5b52

#### 608. Lead-Thallium thermal transition state at 1390 K

**Coin ID:** COIN-51AF3E2D0A8FDD96  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39332  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a1bb6189612e1280acee78ef6f5fa6a2**609. Americium-Thallium frank kasper phase at 77:23 ratio****Coin ID:** COIN-E60B382E757EFC6B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38647**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 6d79082062e860895ca340e5da793350**610. Tungsten-Uranium interface tension ☹☹ transparent conductivity****Coin ID:** COIN-196E5083B24A3C9E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39474**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 7d18636d226d5b514ca9d3bcb077ab78**611. Iridium-Americium intermetallic compound at 56:44 ratio****Coin ID:** COIN-990F5CBFEDA874A5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38349**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** da193311e4d57968986c62959efdf6dd**612. Tantalum-Lead interface tension ☹☹☹ photonic bandgap metal****Coin ID:** COIN-3754875A02BC2C98**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38702  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 8278a3b73e192b8111c61e2d68f319d2

### 613. Uranium melt viscosity profile at 1204 K supersaturated solid solution

**Coin ID:** COIN-1380678879F6C7BD  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37761  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 76ff337fd2c34f6979c09e69f8d5d13e

### 614. Iridium-Curium laves phase at 79:21 ratio

**Coin ID:** COIN-1EBDE316491AB5F8  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.35934  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c36a9f65486c526e4847a5eab353b5f8

### 615. Gold-Thorium interface tension → topological insulator bulk

**Coin ID:** COIN-7EF7EDB8506928F1  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36487  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 137b336dd9fabbe85df9014cd43f66a9**616. Hafnium-Platinum thermal transition state at 1000 K****Coin ID:** COIN-FE300EFD73A23CFD**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38562**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3b86ccdbbda2be6f305153e51ad17c84**617. Americium-Curium supersaturated solid solution at 73:27 ratio****Coin ID:** COIN-EAD6E4F721AE148D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.40695**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 61b61afb9b1b3619f9da92a28682220**618. Uranium-Rhenium interface tension → heavy fermion coherence****Coin ID:** COIN-707E240B1B69126B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39923**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f0c652159c3385ebdeac052b97f7a65d**619. Lead-Tungsten intermetallic compound at 5:95 ratio****Coin ID:** COIN-66D935954975C637**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38386  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** b7d550911d8708cb6fa5ee95625ffb76

## 620. Thallium-Gold interface tension → photonic bandgap metal

**Coin ID:** COIN-915089C1E4243D64  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.383  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ebd04e0d91b7b3ef94e48ccd974ce584

## 621. Tantalum-Tantalum heusler alloy at 74:26 ratio

**Coin ID:** COIN-D99CD6B67EDA3D1D  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3959  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ff7bd62d80a599a1d6758b7ac974c402

## 622. Tungsten-Thorium interface tension → spin orbit coupling max

**Coin ID:** COIN-6CB88448C9868E34  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39297  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 3bf0c63e77ea0170ef032be3d2a20d6c**623. Rhenium-Lead thermal transition state at 902 K****Coin ID:** COIN-995D9C8C19CED8A1**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39337**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 5f5e3e2f5d87be30d3fd09a1869f6fa5**624. Rhenium-Rhenium laves phase at 88:12 ratio****Coin ID:** COIN-D129C9D63AAEF03F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37989**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2f8fa06b238be60774b5a8bbae666c55**625. Platinum-Iridium interface tension  spin orbit coupling max****Coin ID:** COIN-2611B21ABF0F9A54**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39494**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 1dcfce69c0996ba1085a5abbecd0bd2c**626. Bismuth-Bismuth interface tension  topological insulator bulk****Coin ID:** COIN-71CD2B56BA3B1F83**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39662  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** f63dab275f6f5f9e0b22cb1a6ace3189

### 627. Californium-Iridium spinodal decomposition product at 95:5 ratio

**Coin ID:** COIN-83504A2D0BFCCE3C  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36823  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** bdbd359276e2d68a65f221faaa08e4d4

### 628. Tungsten melt viscosity profile at 1148 K 000 eutectic composition

**Coin ID:** COIN-D493B4AB7E7355F3  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3661  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** f8d17f81495f80ff899a5942f0c2c31e

### 629. Americium-Thallium interface tension 000 magneto caloric giant

**Coin ID:** COIN-2B7B875B52256547  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3701  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 6c4c0d45a251b1efa0be49eca67a4a89**630. Rhenium-Americium thermal transition state at 1187 K****Coin ID:** COIN-6EE8C011384EB70C**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37966**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f54f570559f646e0f67ab0ced7b9aa00**631. Thorium topological insulator bulk via electrochemical deposition****Coin ID:** COIN-471881501B78B9BD**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.40014**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 17ac53d52969776c8ffd6c0a6a02d255**632. Tantalum-Bismuth laves phase at 70:30 ratio****Coin ID:** COIN-73C5E4FF1F4FB1B6**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.3757**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 5b982961c626dc49b50e7cd1c1d6ef07**633. Osmium-Tungsten interface tension → nuclear binding stability****Coin ID:** COIN-8806E6091884A871**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39626  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 8b3198d48690f7f3abf9f6aa94f2c483

### 634. Platinum-Lead thermal transition state at 1129 K

**Coin ID:** COIN-F2E48D0BBA8BEDB7  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.35917  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 7ad405ba7bda2de87ce9a654fc743c29

### 635. Hafnium melt viscosity profile at 1184 K frank kasper phase

**Coin ID:** COIN-CD8653627DD0DBB5  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39468  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 53182b5944b8bd0583ea3a1b6548d7de

### 636. Hafnium-Lead eutectic composition at 34:66 ratio

**Coin ID:** COIN-3B31B4AC461A1672  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40577  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f85ef539b6b6df056f1cf66c7049511f**637. Californium-Thorium thermal transition state at 963 K****Coin ID:** COIN-578E09F9BFC1446E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37037**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** a3c7fd5486bc27856004cda3dcfd99fe**638. Thallium melt viscosity profile at 1382 K  amorphous metallic glass****Coin ID:** COIN-7C1960A4738AC375**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39384**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 61144b3e1802403ac638f5c3232e30e0**639. Tantalum phase boundary at 96 GPa / 304 K****Coin ID:** COIN-55B1E7DF4524761C**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.3967**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f289e8b0b7ee592026427b3def8a1f9f**640. Tungsten-Californium spinodal decomposition product at 96:4 ratio****Coin ID:** COIN-4D35124DCCB18AEF**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37125  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 529fa1c8c54f354904f8e8e9f7635a91

#### 641. Mercury-Rhenium interface tension → transparent conductivity

**Coin ID:** COIN-862DC020807A5C99  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36989  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** bdf5ef2c629389e2d300c5411433ff1d

#### 642. Curium nuclear binding stability via nuclear transmutation pathway

**Coin ID:** COIN-4E79DAA8C7EF6532  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.389  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 72e0755e2e85dcb2403b9949656d16e8

#### 643. Californium-Californium spinodal decomposition product at 88:12 ratio

**Coin ID:** COIN-1070438CC6518383  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36151  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 723826878e5698d3c49895180f35fb3b**644. Americium-Iridium interface tension → photonic bandgap metal****Coin ID:** COIN-3F3FDD399D581611**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39475**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 04e63c56ff6d823c482f2c7690ce104e**645. Uranium melt viscosity profile at 1139 K — eutectic composition****Coin ID:** COIN-2345D865C010E06D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.37582**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 987f0a74ff7e98b5ab3749003ef21bb6**646. Platinum-Americium frank kasper phase at 49:51 ratio****Coin ID:** COIN-6EE5AC7B4D73D62F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38614**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e6745f79e89195a579eee2172d3963c7**647. Americium-Platinum thermal transition state at 520 K****Coin ID:** COIN-0DA724D214953194**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40099  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 69ff411aa124c8b690144d47baaa7552

#### 648. Tungsten-Mercury thermal transition state at 717 K

**Coin ID:** COIN-A745B35B3BEBD38B  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3902  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** cbb5bffe77c1a874021bd6c482c00e63

#### 649. Americium-Mercury laves phase at 79:21 ratio

**Coin ID:** COIN-1354E27B88CE6757  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3797  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** ed44d48e2719589ef1fb72ef0d0df2fa

#### 650. Gold-Tungsten interface tension nuclear binding stability

**Coin ID:** COIN-0E2F5711679F3545  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37967  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 392135ef01286aa863c7c2e9a49c1520**651. Iridium-Tantalum high entropy alloy at 64:36 ratio****Coin ID:** COIN-44394444E6BDA69B**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38094**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** ecd7030f9a415c3e65ce8db798467613**652. Americium-Iridium thermal transition state at 790 K****Coin ID:** COIN-484FDD0F5851017C**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36944**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 631a904ca3256238420649d450205caa**653. Iridium-Bismuth high entropy alloy at 45:55 ratio****Coin ID:** COIN-27475003C10BF5DF**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36304**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b205beeffca61225488845a51cc778b9**654. Uranium-Hafnium eutectic composition at 90:10 ratio****Coin ID:** COIN-791ABC8BAB8EE233**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36693  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 5813b44cde0c85b20b1b31e0cf4b0387

### 655. Thorium-Thallium thermal transition state at 702 K

**Coin ID:** COIN-627A4BFE0043183A  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40224  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** c33cd155418c3862eed7fa0e1dbf9e03

### 656. Tantalum melt viscosity profile at 1037 K — supersaturated solid solution

**Coin ID:** COIN-7A44C0BEC484AB2A  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37308  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** f47cd3f38fa7e7d699e879c9260bc6fb

### 657. Gold-Curium interface tension heavy fermion coherence

**Coin ID:** COIN-A6FB502B3A3D9BD1  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.3897  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f26470fb29ea6becaa5151927bac9998**658. Osmium-Thorium thermal transition state at 1162 K****Coin ID:** COIN-0BD98588CD167015**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36896**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4a09be6e8a99936aae8763519f3727fc**659. Americium-Rhenium laves phase at 80:20 ratio****Coin ID:** COIN-CC72082C12848803**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39752**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 97d288b81118f3287f82f04b6e3fd210**660. Californium-Bismuth interface tension → transparent conductivity****Coin ID:** COIN-42B412FB36489925**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.40708**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 18dc80ee76fd852ba167f5224177e2ea**661. Thorium-Tantalum frank kasper phase at 15:85 ratio****Coin ID:** COIN-C37349611767675E**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39635  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 37efe52bd71bb584355423940cafd9cb

## 662. Lead-Uranium interface tension → topological insulator bulk

**Coin ID:** COIN-80B92DF1099FABBC  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39532  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 586138cb0295eb441913c73bce33d636

## 663. Curium magneto caloric giant via spark plasma sintering

**Coin ID:** COIN-0ECF6F9F5596CF16  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40807  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 64e232f77676bc89e221d4e3e0d59229

## 664. Mercury phase boundary at 112 GPa / 1261 K

**Coin ID:** COIN-3AA407B72E011ACC  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.37816  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b48bb5d5c8fe4c91581bd07ead938445**665. Uranium-Tungsten eutectic composition at 12:88 ratio****Coin ID:** COIN-48A206662B5FB6F5**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.40478**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 2a7961ad3cbff15273c6f4bbd45b8f60**666. Tungsten-Osmium thermal transition state at 957 K****Coin ID:** COIN-D84B1C3CE71F6E95**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38737**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 7a2530a2878fe436d68b9acbb1c9acca**667. Tungsten melt viscosity profile at 1405 K 000 high entropy alloy****Coin ID:** COIN-FE30D14DEE0B99EE**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.3652**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 33e49a3363fda1ed3dc9073ea7d08659**668. Osmium-Thorium interface tension → spin orbit coupling max****Coin ID:** COIN-CBF26B652B20EF76**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36147  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 66eb1e477eec98bfa5d4312e36f70100

### 669. Californium-Lead heusler alloy at 21:79 ratio

**Coin ID:** COIN-E589FE5639B18631  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.35998  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** cacb3bf326915b4d84039844a71a36d2

### 670. Rhenium-Osmium interface tension → spin orbit coupling max

**Coin ID:** COIN-2210A923896C2D52  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.40226  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 2f19b73a0c0f2c4086d369e5e90aee1c

### 671. Curium-Hafnium heusler alloy at 68:32 ratio

**Coin ID:** COIN-951CBCECD477FF6B  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38903  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 4351e5bbd1ff296ad1f6df36bc8477f7**672. Lead-Tantalum intermetallic compound at 3:97 ratio****Coin ID:** COIN-2FF6F70A2B5C01FC**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36538**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 28e85146f5b3a99cf26afd07bd0a2509**673. Uranium-Rhenium interface tension → spin orbit coupling max****Coin ID:** COIN-3F1C283496230E48**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.36175**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 9dff14cf64f448d1a13da1407ec4dea6**674. Lead-Iridium heusler alloy at 78:22 ratio****Coin ID:** COIN-E64C3D983824F4F0**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38724**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e21c9614c4e2d0cf9ccc8535255b8c1f**675. Thorium-Americium interface tension → nuclear binding stability****Coin ID:** COIN-D479A60DA4AA81AE**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39647  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** d41122161203d505926f5437ed2f8975

### 676. Californium-Mercury intermetallic compound at 61:39 ratio

**Coin ID:** COIN-33FE9D9CD3963A88  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36243  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 6d7fec5a339709e442c5be8caa0768a

### 677. Uranium-Curium interface tension 000 heavy fermion coherence

**Coin ID:** COIN-EEBB5149CD6050B2  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.38221  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 14e0991be87e2e0a78a0bf0c056a6860

### 678. Tantalum spin orbit coupling max via nuclear transmutation pathway

**Coin ID:** COIN-DA404F59545BEDA4  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39229  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** ba95908f8ff60d8d82aff0c6ad37cee5**679. Rhenium-Rhenium eutectic composition at 22:78 ratio****Coin ID:** COIN-FDA148C74665CD59**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.4083**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** e4d7109c0b7c18be04d7a73b43707b1c**680. Tantalum-Mercury thermal transition state at 937 K****Coin ID:** COIN-028D0FEEA24069FC**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39181**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** c2adfdc5a1168af82782c1983bb1aca9**681. Californium-Gold spinodal decomposition product at 26:74 ratio****Coin ID:** COIN-6E25B6676FDE042F**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.38883**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** b528ce720c5a73435d3a82e48370b95c**682. Mercury-Gold interface tension  photonic bandgap metal****Coin ID:** COIN-7174445E978AC83D**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.35935  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":null, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** dc98eb4518830f3625ade42e6e071a2c

### 683. Iridium-Californium heusler alloy at 49:51 ratio

**Coin ID:** COIN-9BDF3CCBFAE19689  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36676  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":null, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 5db34963fbaeb2c5c9abbbad4057f77c

### 684. Tungsten-Thorium high entropy alloy at 72:28 ratio

**Coin ID:** COIN-615B70C788075B2E  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36303  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal":false, "superconductor":false, "mott\_insulator":false, "shell\_closure":null, "neptunium":false, "plutonium":false }  
**SHA-256 (truncated):** 880cdb2c4151ca60e6bd41b13593467a

### 685. Uranium-Osmium interface tension → magneto caloric giant

**Coin ID:** COIN-059D36E41C436641  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36238  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED

**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 0e23f5ef761eabdb6ec9605a392a268a**686. Tantalum-Iridium laves phase at 48:52 ratio****Coin ID:** COIN-BA46A4976E5B7ADE**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39662**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f9b1b6f8391800bc8d2ba9d9b1cf98d7**687. Americium-Tungsten thermal transition state at 665 K****Coin ID:** COIN-34506EBA1C106183**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.389**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** f565051e914bdddecc3a742fa9e75558**688. Tungsten melt viscosity profile at 1188 K 00 laves phase****Coin ID:** COIN-5FAFB9B861004400**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66**K\_N3 (constitutional admissibility):** 0.5356**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855**Triple intersection:** 0.176739**gamma\_N (Lyapunov stability):** -0.39452**MT14 / GEQ:** 2/14 · 2/8**Survival governed / ungoverned:** 0.5795 / 0.447**Enhancement:** 1.297x**Verdict:** REVIEW\_REQUIRED**Flags:**

```
{"quasicrystal":false,"superconductor":false,"mott_insulator":false,"shell_closure":null,"neptunium":false,"plutonium":false}
```

**SHA-256 (truncated):** 92cec304006bd9f6e8ed60706b22d0f5**689. Platinum phase boundary at 150 GPa / 1184 K****Coin ID:** COIN-D3FDCBE5918D6153**K\_N1 (inner magic shell):** 0.5**K\_N2 (outer island of stability):** 0.66

**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.39872  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 157a1c2a7cf8f2c231b296afb02a68c2

## 690. Gold-Californium frank kasper phase at 50:50 ratio

**Coin ID:** COIN-4DCF4A0B3A8DD973  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36297  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 8ca9edb525788b94b03db65553b7f479

## 691. Platinum-Bismuth interface tension → spin orbit coupling max

**Coin ID:** COIN-7FBBFF7C91B058A4  
**K\_N1 (inner magic shell):** 0.5  
**K\_N2 (outer island of stability):** 0.66  
**K\_N3 (constitutional admissibility):** 0.5356  
**K\_alpha / K\_beta / K\_gamma:** 0.8 / 0.783 / 0.855  
**Triple intersection:** 0.176739  
**gamma\_N (Lyapunov stability):** -0.36131  
**MT14 / GEQ:** 2/14 · 2/8  
**Survival governed / ungoverned:** 0.5795 / 0.447  
**Enhancement:** 1.297x  
**Verdict:** REVIEW\_REQUIRED  
**Flags:**  
{ "quasicrystal": false, "superconductor": false, "mott\_insulator": false, "shell\_closure": null, "neptunium": false, "plutonium": false }  
**SHA-256 (truncated):** 850ef8100113f293d6fd52e0a79b2769