Table S2. Experimental starting compositions for the Fe-Ni-P system.

Run # LB14, 16, 19, 21 R1P1 R5P4 R2P8 R2P9

Composition

 Fe (wt%) 83.79 73.35 63.51 53.52 43.70

 P (wt%) 15.94 16.21 16.13 16.15 16.03

 Ni (wt%) — 10.17 20.04 29.93 39.92

 E-mix (wt%)\* 0.27 0.28 0.31 0.40 0.35

\*Powders in E-mix: V, Cr2O3, Mn, Co, Ni, Cu, Zn, Ga, Ge, As, Mo, Ru, Rh, Pd, Ag2O, Sn, Sb, H2WO4, Re, Os, Ir, Pt, Au, PbO, Bi. Each trace element powder has roughly equal amounts by weight in the combined E-mix powder.