

SUPPLEMENTARY SECTION

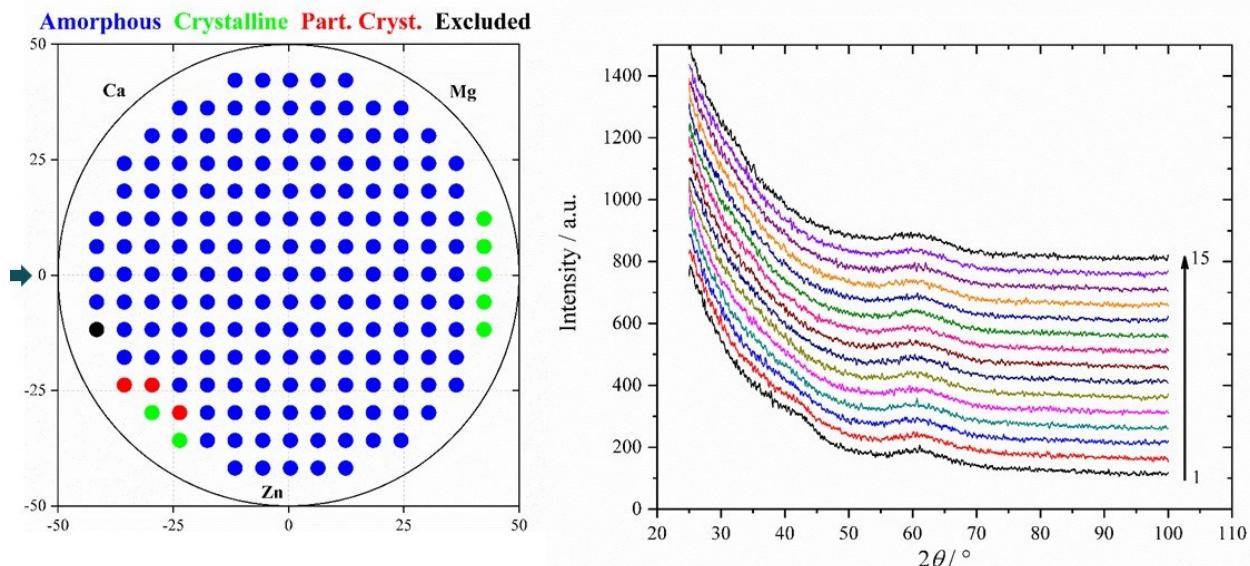


Figure S1: XRD mapping of patches in the Mg-Zn-Ca system. Left panel: Results from phase analysis using XRD mapping. Right panel: XRD spectra for one row of patches (marked by arrow in left panel, patches numbered from 1 to 15 from left to right).

Table 2: Density, Poisson's ratio, and elastic constants of base elements used in the libraries. T_m = melting temperature, E = Young's modulus, G = Shear modulus, K = Bulk modulus, ν = Poisson's ratio. (Data taken from www.webelements.com).

Element	Density (g/cm ³)	T_m (K)	E (GPa)	G (GPa)	K (GPa)	ν	Atomic radius (pm)
Mg	1.738	922	45	17	45	0.29	150
Fe	7.874	1808	211	82	170	0.29	140
Zn	7.14	692	108	43	70	0.25	135
Ca	1.54	1112	20	7.4	17	0.31	180