Supporting Information

The impact of Ni and Zn doping on the thermal durability and thermoelectric variables of pristine CuSe nanoparticles

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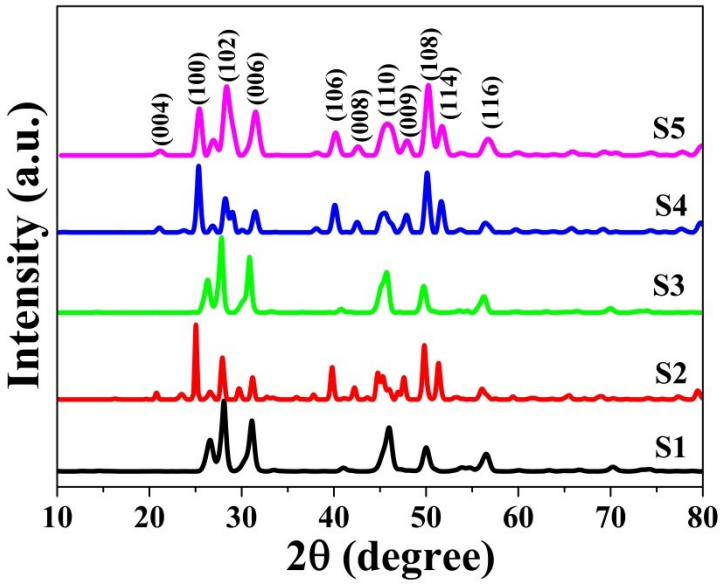

Figure S1 The XRD patterns for as-synthesized nanoparticles (adapted from S. R. Patel et. al., ACS Applied Biomaterials, 2023, http://dx.doi.org/10.1021/acsabm.3c00090)

Table S1: The structural data for as-synthesized S1, S2, S3, S4 and S5 nanoparticles (adapted from S. R. Patel et. al., ACS Applied Biomaterials, 2023, http://dx.doi.org/10.1021/acsabm.3c00090).

Sample	Lattice parameters		Volume	Crystallite size	Micro	Dislocation
	a (Å)	c (Å)	V(Å^3)	t (nm)	Strain	density δ
S1	3.948	17.285	233.31	11.981 ± 0.108	0.002904	7.046×10^{15}
S2	3.942	17.258	232.24	14.805 ± 0.162	0.002426	5.015×10^{15}
S3	3.936	17.231	231.17	11.658 ± 0.098	0.003139	8.819×10^{15}
S4	3.957	17.326	234.94	11.882 ± 0.112	0.002979	7.531×10^{15}
S5	3.966	17.366	236.55	8.464 ± 0.092	0.004237	15.581×10^{15}

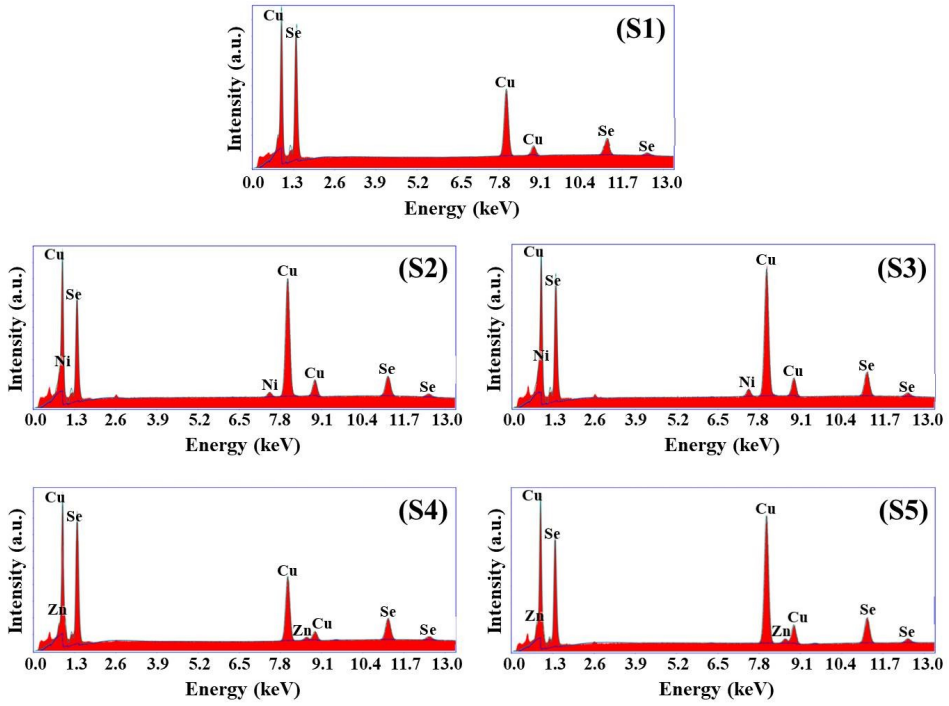

Figure S2 The EDAX spectra for all five as-synthesized nanoparticles (adapted from S. R. Patel et. al., ACS Applied Biomaterials, 2023, http://dx.doi.org/10.1021/acsabm.3c00090).

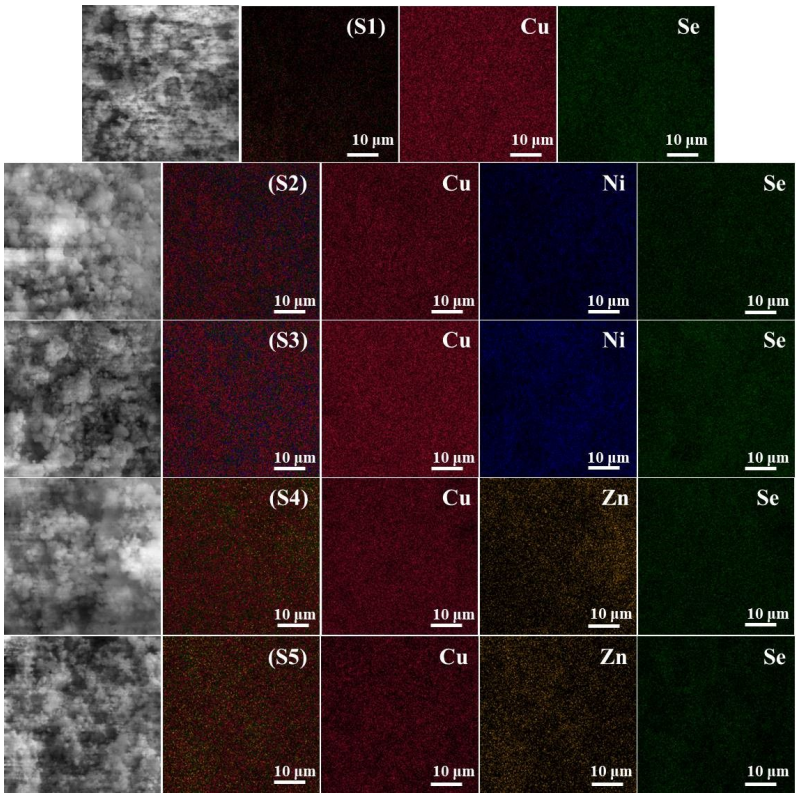

Figure S3 The EDAX elemental mapping micrographs for S1, S2, S3, S4 and S5 nanoparticles (adapted from S. R. Patel et. al., ACS Applied Biomaterials, 2023, http://dx.doi.org/10.1021/acsabm.3c00090).

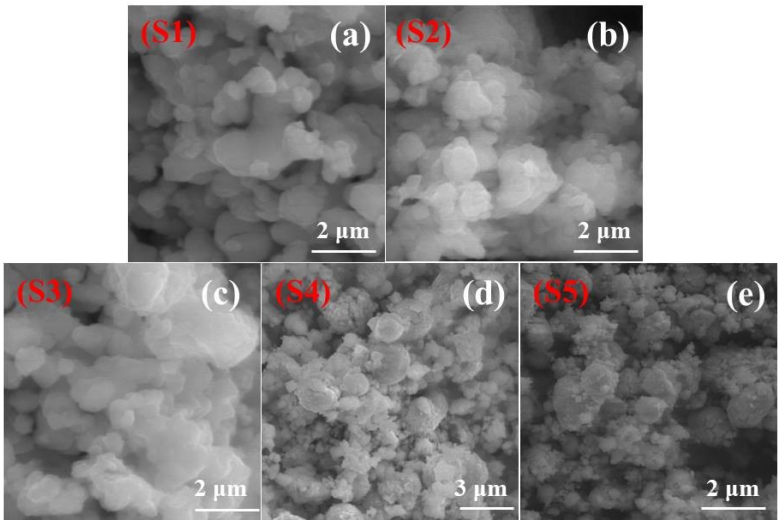

Figure S4 The FESEM micrographs for S1, S2, S3, S4 and S5 nanoparticles (adapted from S. R. Patel et. al., ACS Applied Biomaterials, 2023, http://dx.doi.org/10.1021/acsabm.3c00090).

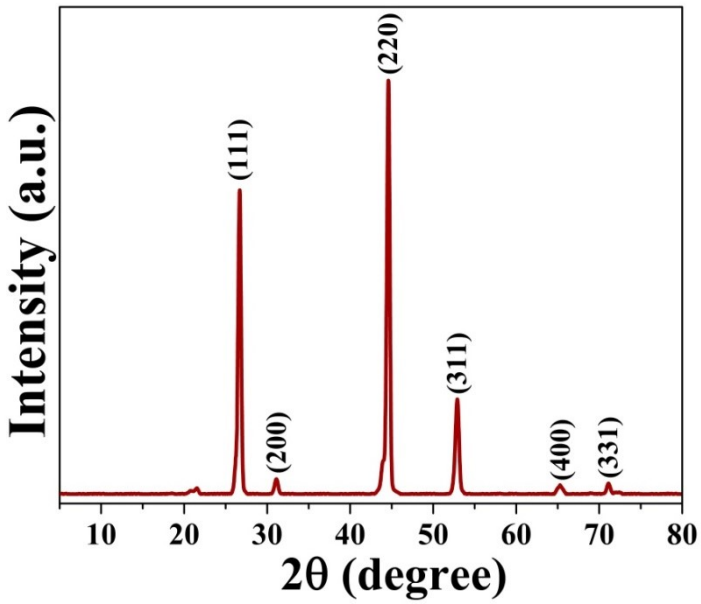

Figure S5 The XRD pattern of Cu_2Se resulting from the vacuum annealing of pristine CuSe nanoparticles.