

Supporting Information File

Sonochemical One-step Synthesis of Polymer Capped Metal Oxide Nanocolloids: Antibacterial Activity and Cytotoxicity

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Sample	Metal salt precursor: Polymer (Weight ratio)
ZnO:PEI	1:5
ZnO:PEG	1:30
ZnO:PVA	1:30
CuO:PEG	1:30
CuO:PEI	1:5

Table S1. Optimized weight ratios of metal acetate to polymer

Sample	Zeta Potential	Average particle size (TEM)
ZnO	-	135 nm
ZnO-PEI	+0.6	110 nm
ZnO-PEG	+2.1	68 nm
ZnO-PVA	-6.5	7 nm
CuO	-	87 nm
CuO-PEG	+4.2	6 nm
CuO-PEI	+1.0	24 nm

Table S2. Zeta potential and average particle sizes of the samples

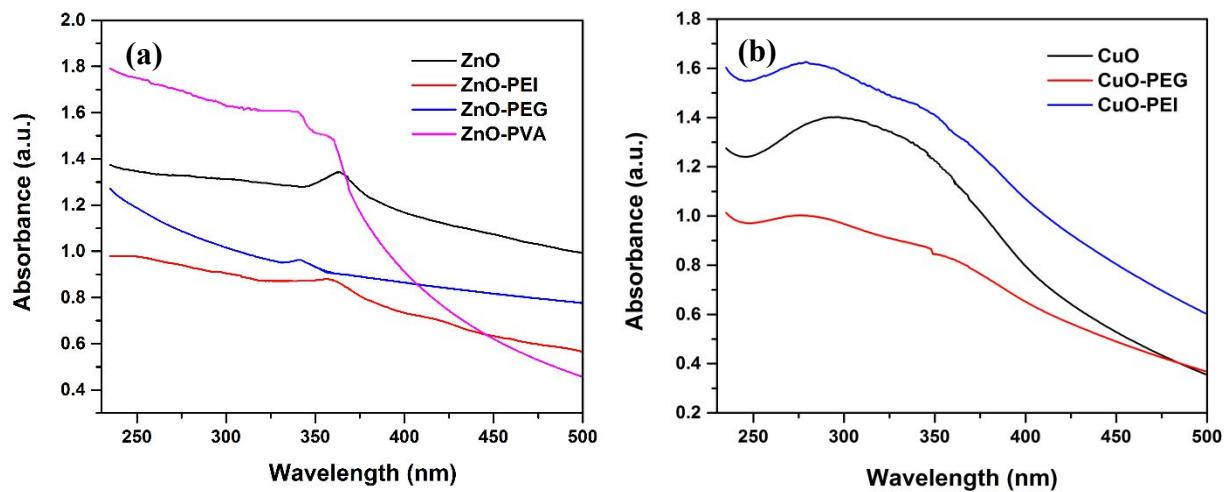
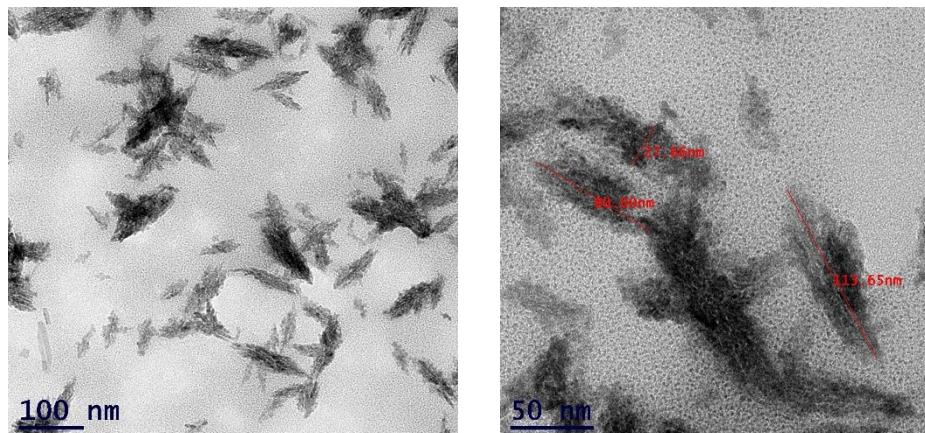
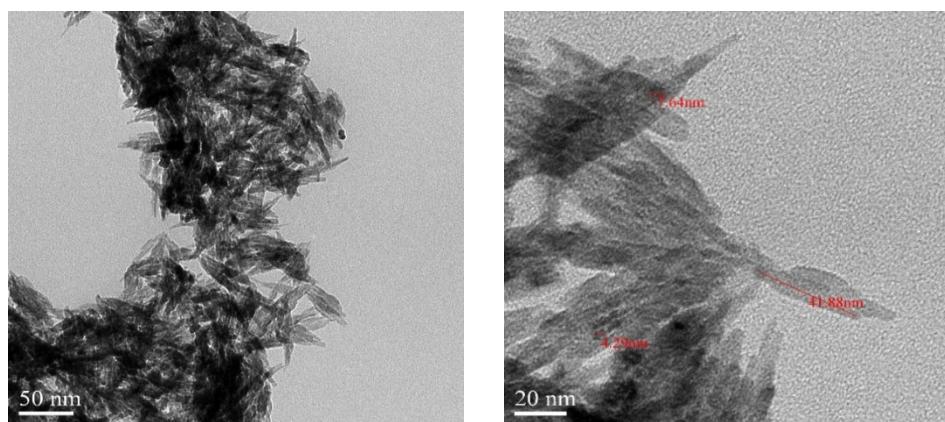


Figure S1. UV-vis absorption spectra of surfactant capped (a) ZnO and (b) CuO nanoparticles

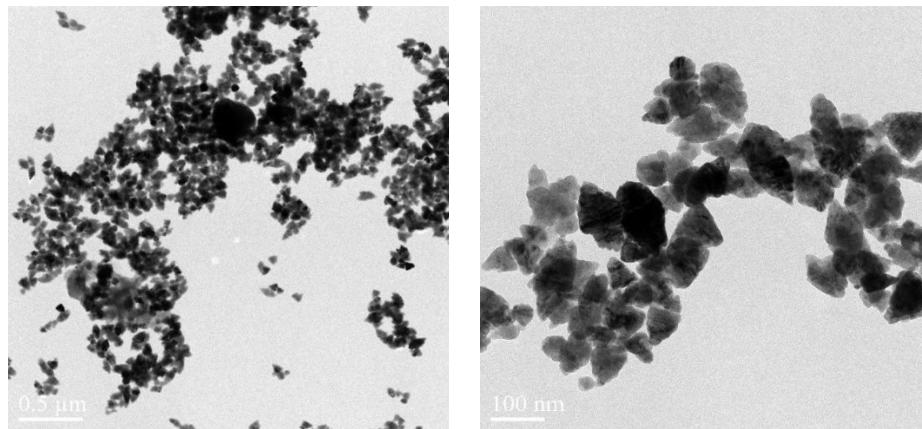
(a) CuO



(b) CuO-PEI



(c) ZnO-PEG



(d) ZnO-PEI

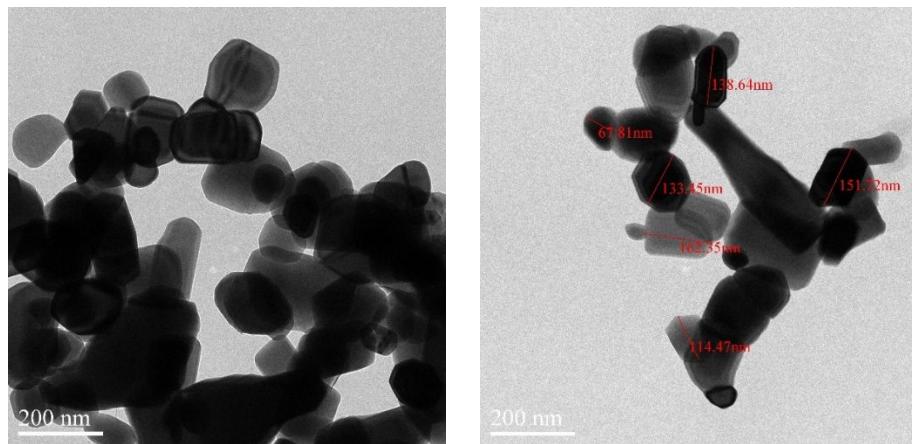


Figure S2. TEM images of the nanoparticles in the colloidal solution of (a) CuO (b) CuO-PEI (c) ZnO-PEG (d) ZnO-PEI