

Supplementary Information

Surface Peptide Functionalization of Zeolitic Imidazolate Framework-8 for Autonomous Homing and Enhanced Delivery of Chemotherapeutic Agent to Lung Tumor Cells

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Supplementary Figures

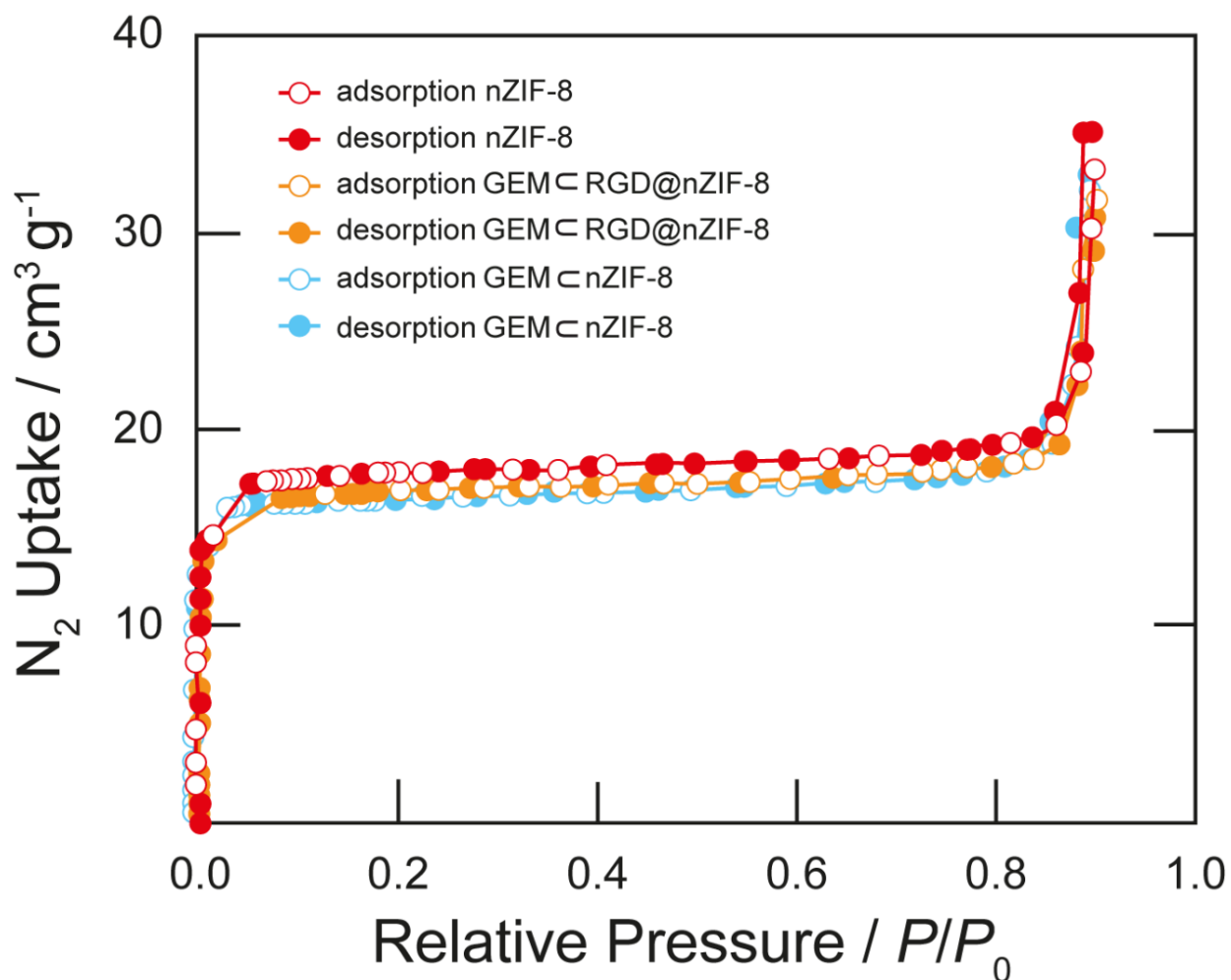


Fig. S1. N₂ Isotherm for nZIF-8 (red), GEM⊂nZIF-8 (blue), and GEM⊂RGD@nZIF-8 (orange). Open and solid circle represent adsorption and desorption, respectively. Connecting traces are for guidance only.

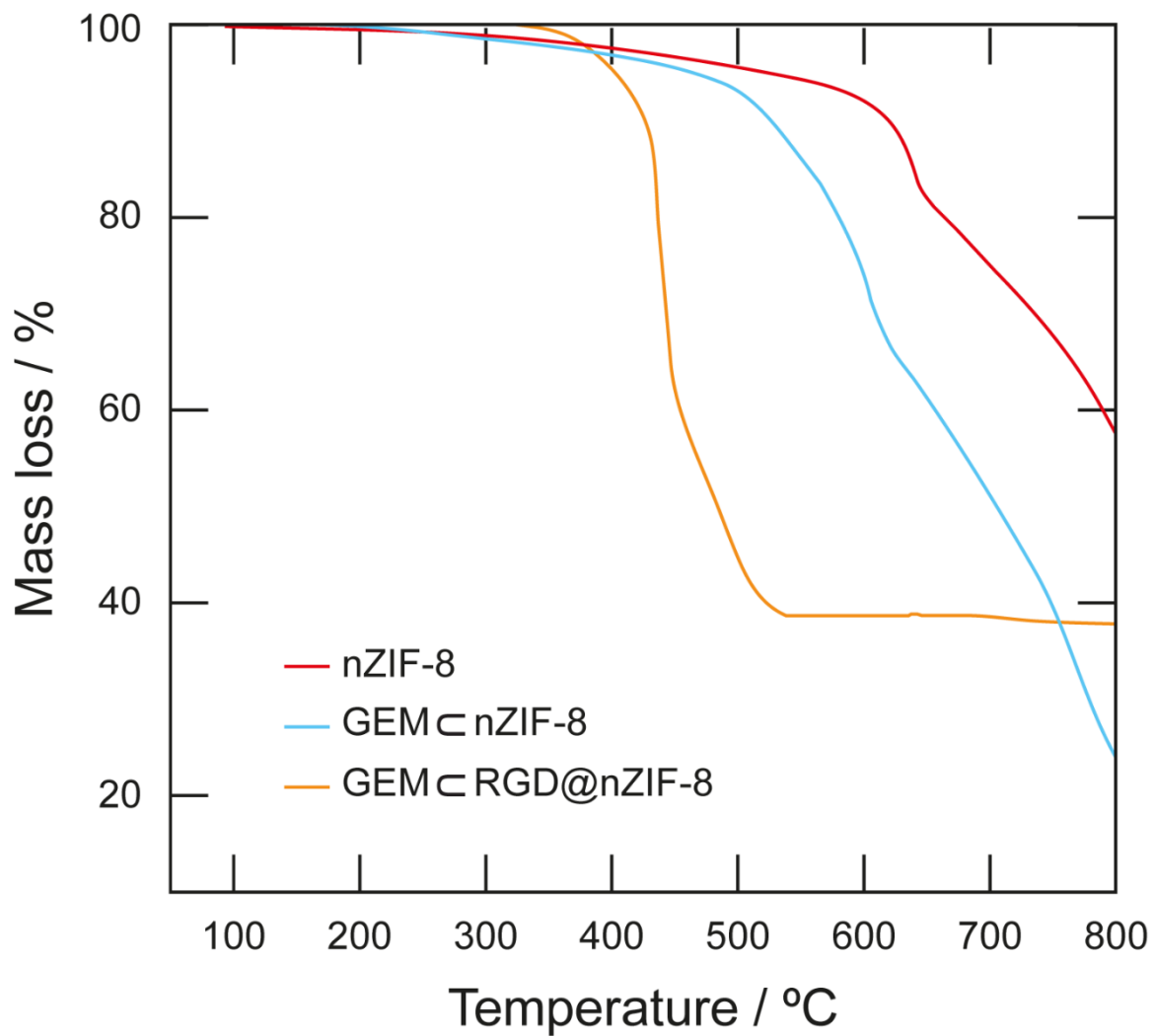


Fig. S2. Thermal gravimetric analysis (TGA) under N₂ flow of nZIF-8 (red), GEM@nZIF-8 (blue), and GEM@RGD@nZIF-8 (orange).

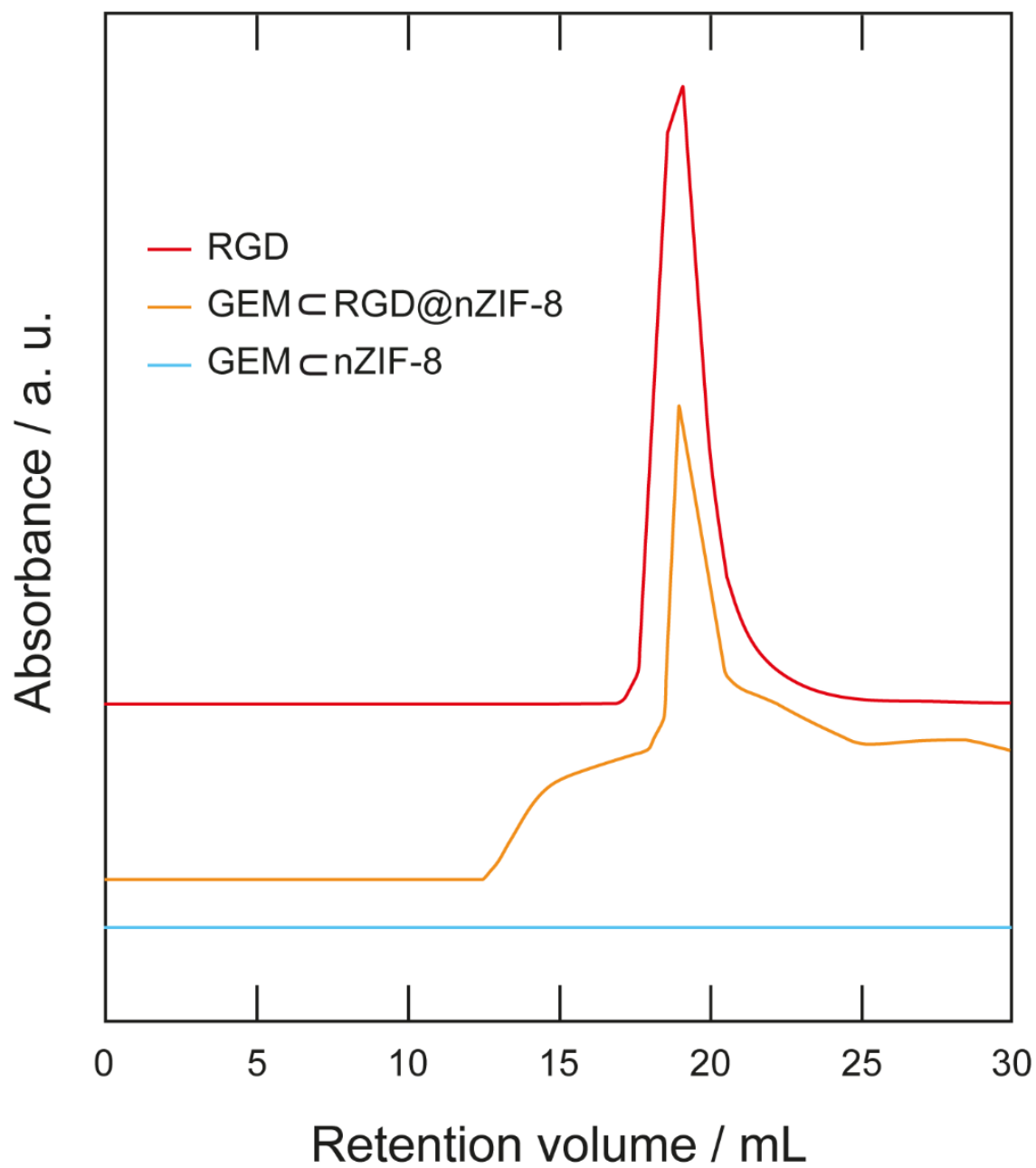
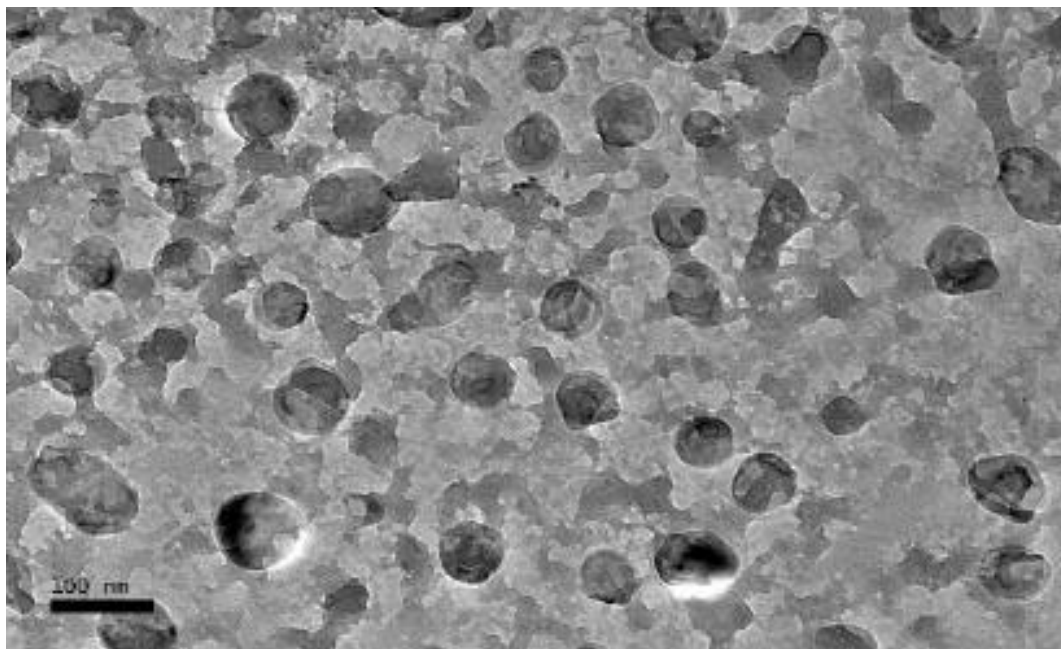


Fig. S3. Size exclusion chromatograms comparing acid-digested GEM⊂nZIF-8 (blue) and GEM⊂RGD@nZIF-8 (orange) with the chromatogram of the pristine RGD homing peptide ligand (red).

A)



B)

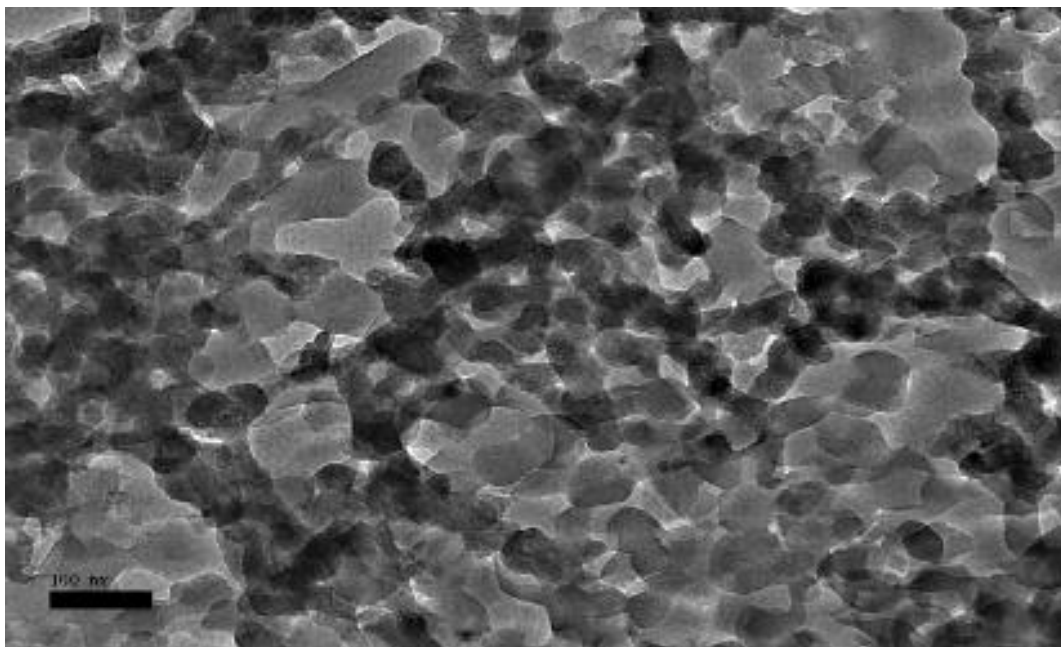


Fig. S4. Transmission electron microscope images of nZIF-8 particles after 24 h incubated in SLF pH 7.4 (A) and SLF pH 6.0 (B) with scale bar = 100 nm.

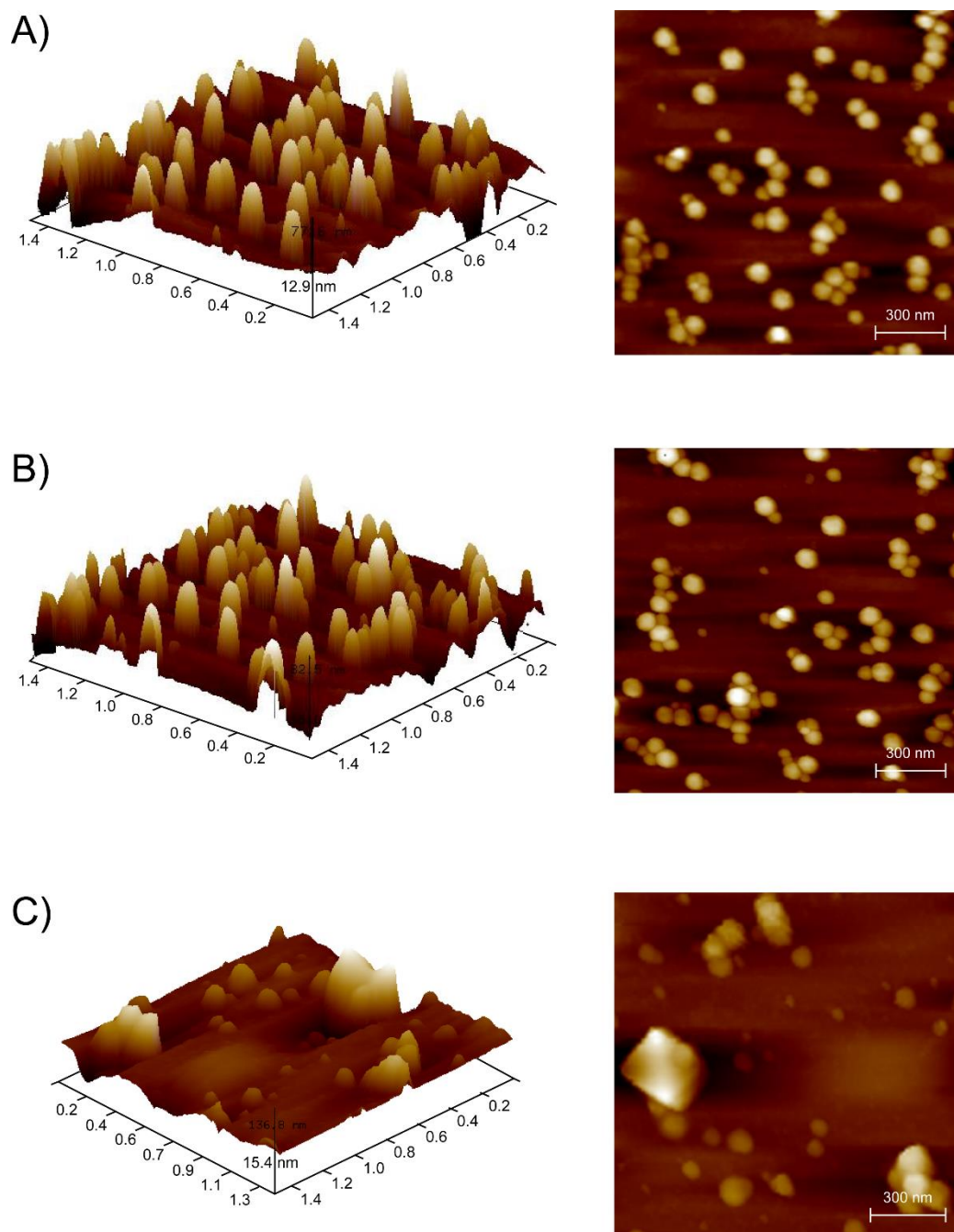


Fig. S5. Atomic force microscope images of nZIF-8 (A), GEMcnZIF-8 (B), and GEMcRGD@nZIF-8 (C) with the scale bar = 300 nm.

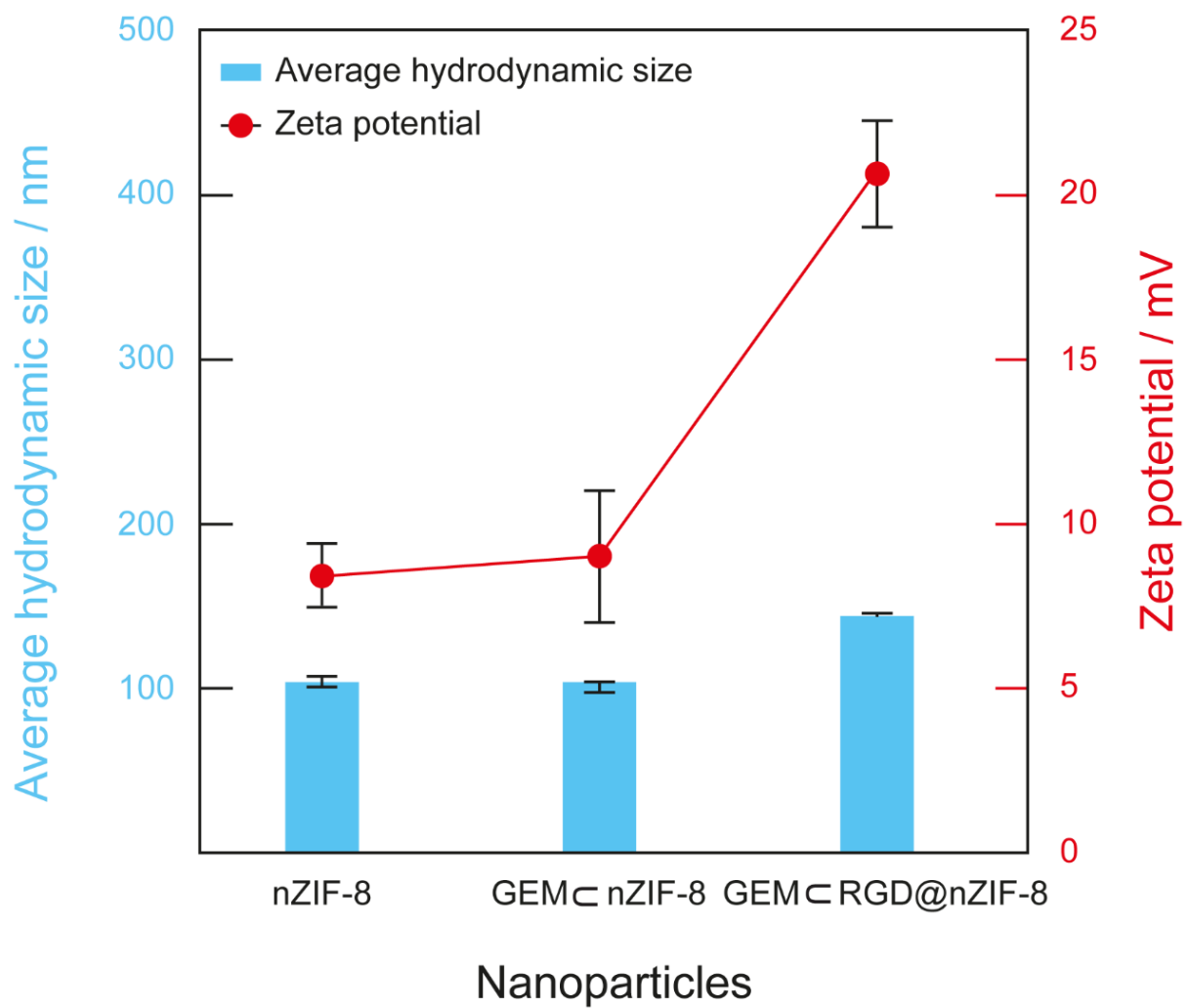


Fig. S6. Average hydrodynamic size (blue) and zeta potential (red) of nZIF-8, GEM⊂nZIF-8, and GEM⊂RGD@nZIF-8.