

SUPPLEMENTARY MATERIAL

Synthesis of FeO@SiO₂-DNA core-shell engineered nanostructures for rapid adsorption of heavy metals in aqueous solutions

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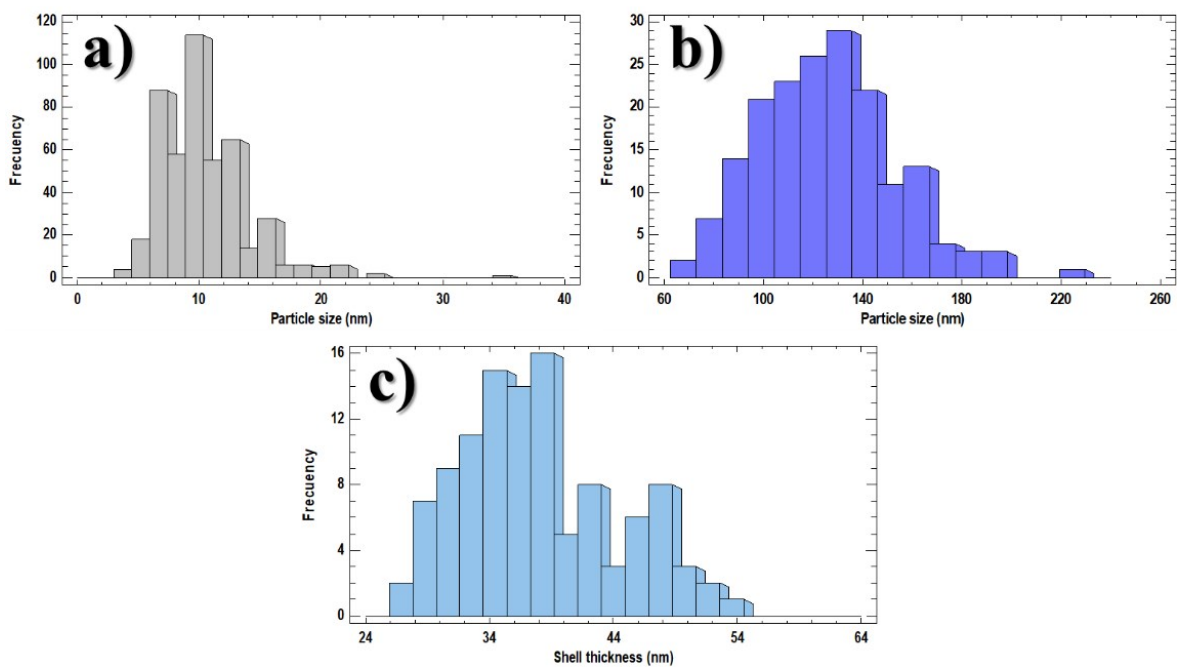


Figure S1. Particle size distribution of **(a)** FeO/ca-NPs (10.2 ± 3.7 nm), **(b)** FeO@SiO₂ (125 ± 27 nm), and **(c)** SiO₂ shell thickness (38 ± 6 nm).

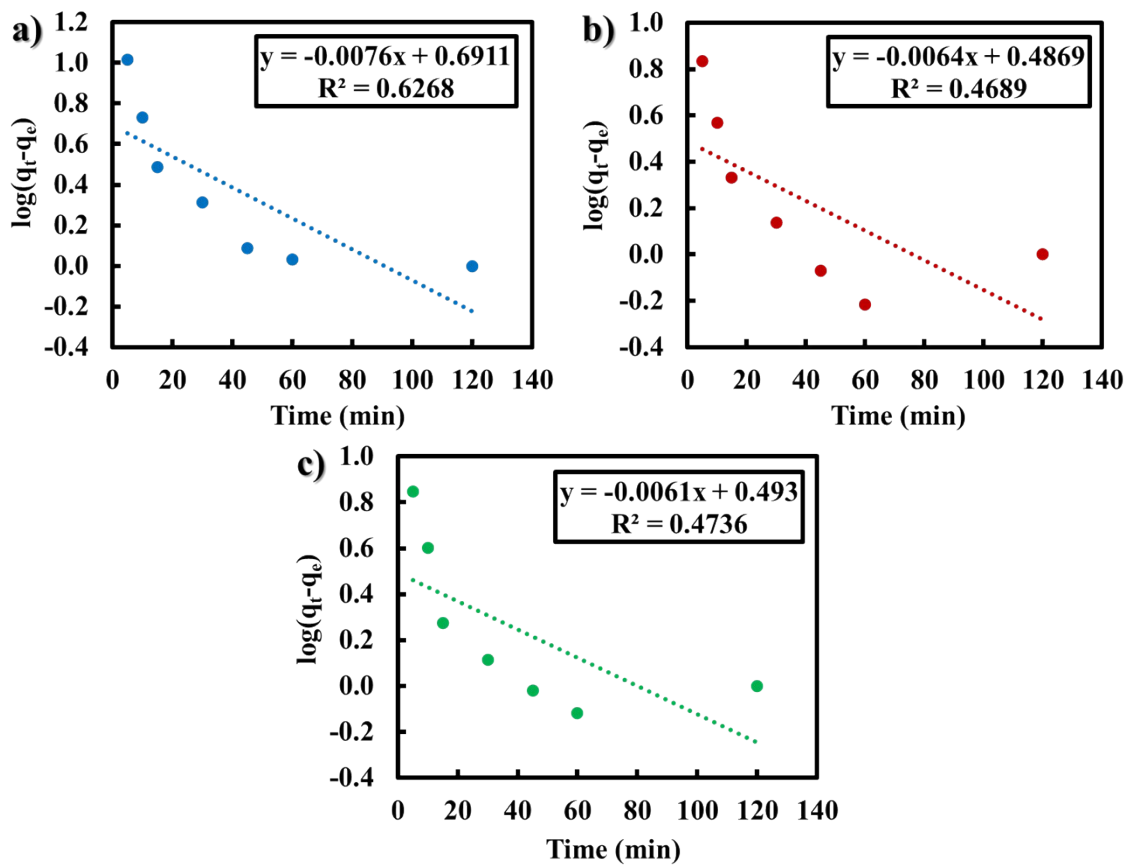


Figure S2. Experimental data fitting based on the Pseudo-first order model for the adsorption of (a) Pb(II), (b) As(III), and (c) Hg(II).

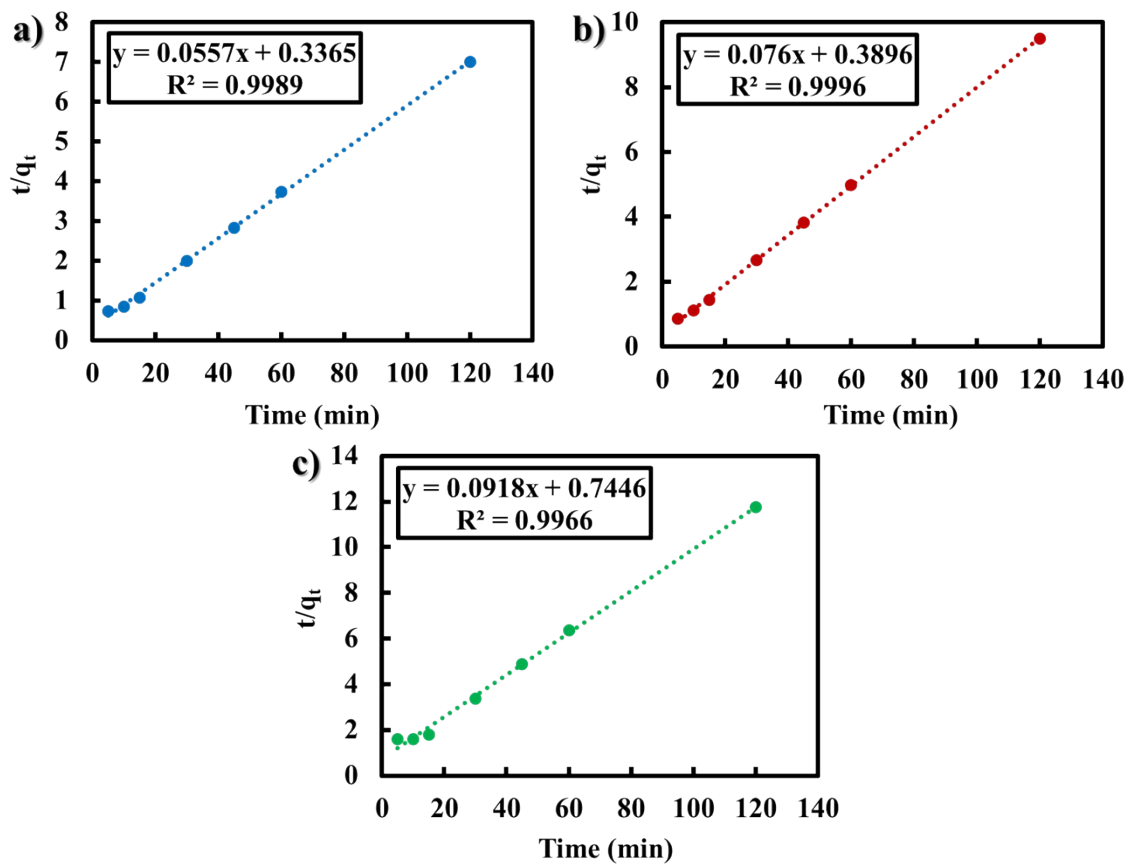


Figure S3. Experimental data fitting based on the Pseudo-second order model for the adsorption of (a) Pb(II), (b) As(III), and (c) Hg(II).

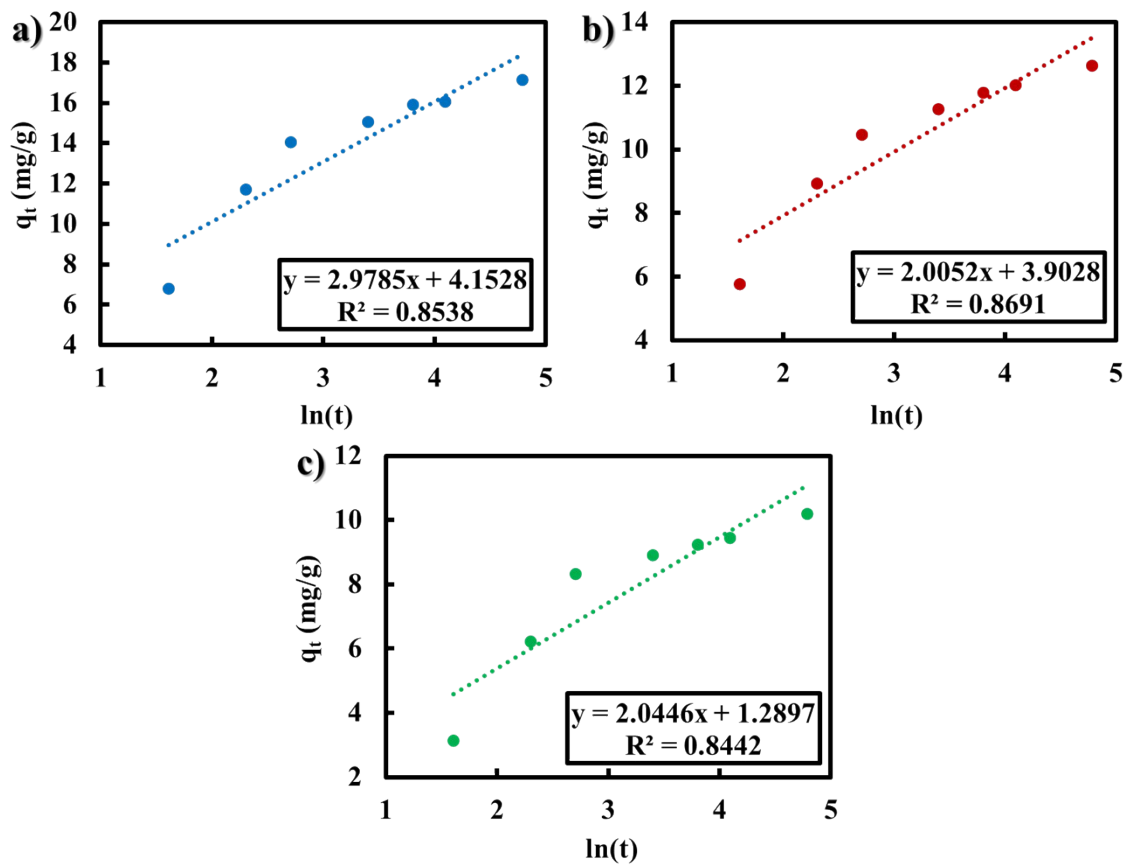


Figure S4. Experimental data fitting based on the Elovich model for the adsorption of (a) Pb(II), (b) As(III), and (c) Hg(II).