

Electronic Supplementary Information

A Facile and General Fabrication Method of Organic Silica Hollow Spheres and Their Excellent Adsorptions for Heavy Metal Ions

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Table S1 BET surface area and pore volume of vinyl silica particles with different morphologies

VTMS/TEOS	Morphology	S_{BET}^a (m^2g^{-1})	S_{micro}^b (m^2g^{-1})	S_{meso}^c (m^2g^{-1})	V_{T}^d (cm^3g^{-1})	V_{micro}^e (cm^3g^{-1})	V_{meso}^f (cm^3g^{-1})
1:5	Hollow sphere	259.9	75.3	184.6	0.355	0.031	0.324
1:1	Bowl-like particle	55.1	5.60	49.5	0.205	0.002	0.203
1.2:0	Spherical solid particle	8.75	—	—	—	—	—

^a BET surface area, ^b Micropore area, ^c Mesopore area, ^d Total pore volume, ^e Micropore volume, ^f Mesopore volume. Micropores were determined by a *t*-plot method. Mesopores were determined by the BJH method (desorption branch).

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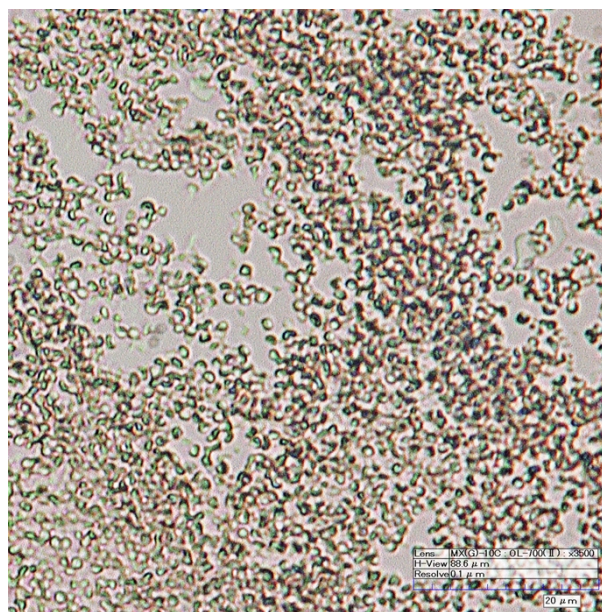


Fig. S1 Optical microscopy of the vinyl silica bowl-like particles (Run 3 in Table 1)

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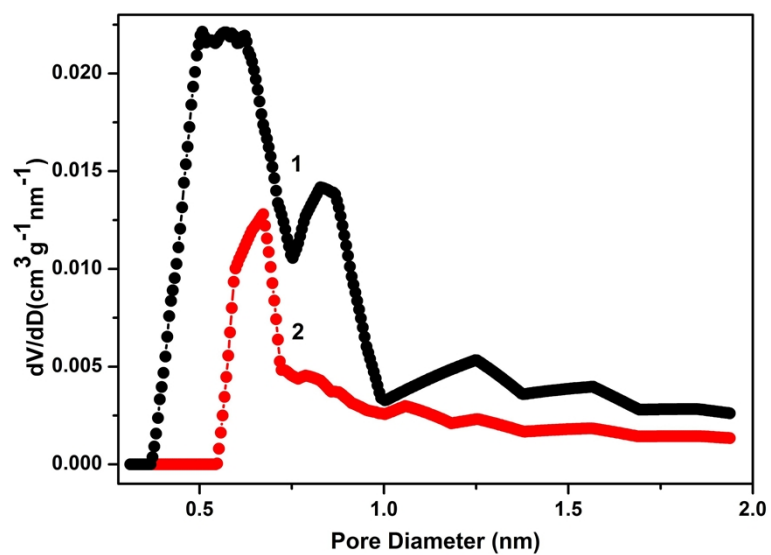
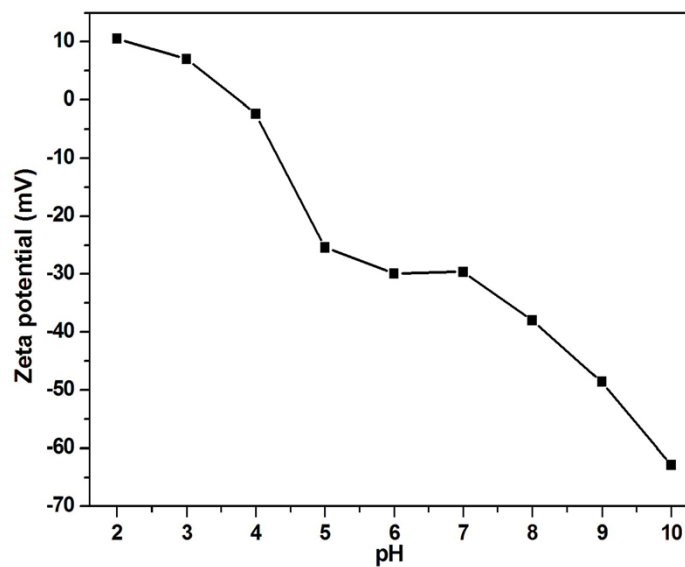


Fig. S2 Micropore size distribution of vinyl silica hollow spheres (1) and vinyl silica bowl-like particles (2), corresponding to Runs 1 and 2 in Table 1.

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10 **Fig. S3** Zeta potential of the vinyl silica hollow spheres at different pH

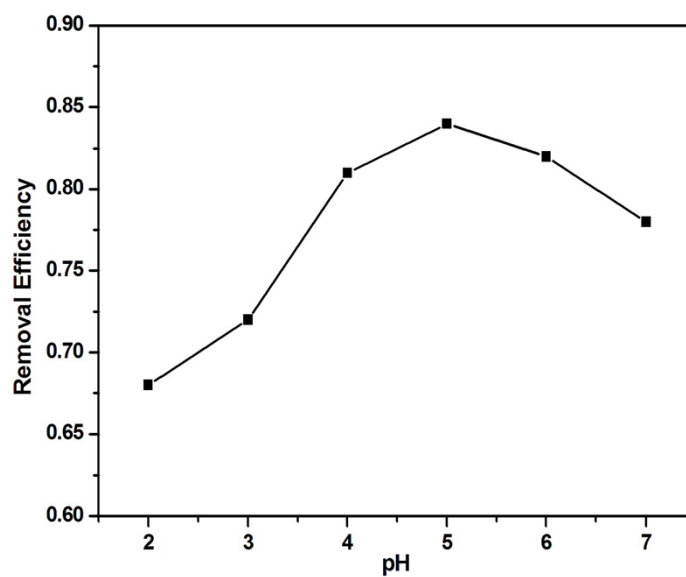


Fig. S4 Effect of initial pH on the removal of Pb^{2+} ion by vinyl silica hollow spheres. The content of vinyl silica hollow spheres was 0.025g and the initial Pb^{2+} ion concentration was $100 \text{ mg}\cdot\text{L}^{-1}$.

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