## Supplementary Information for

## Porous Fe0/C ceramsites for removal of aqueous Pb(II) ions:

## equilibrium, long-term performance and mechanism studies

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Parameters	Values
Metallic iron content (%)	51.18
Carbon content (%)	6.82
Fe/C mass ratio	7.5:1
Grain density (g cm <sup>-3</sup> )	1.76
Porosity (vol.%)	46.37
Compressive strength (MPa)	53.9

Table S1 Physical and chemical parameters of fabricated Fe<sup>0</sup>/C ceramsites

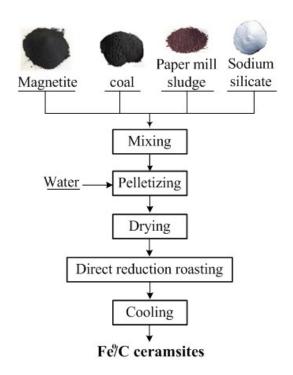


Fig. S1 Fabrication procedure for Fe $^0$ /C ceramsites



Fig. S2 Photograph of fabricated Fe<sup>0</sup>/C ceramsites

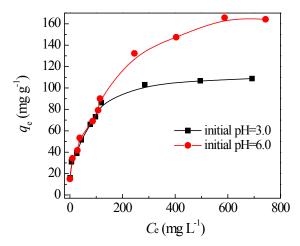
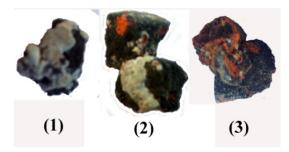


Fig. S3 Variations of adsorption capacity ( $q_e$ ) with Pb(II) concentration at equilibrium ( $C_e$ ) by Fe<sup>0</sup>/C ceramsite



**Fig. S4** Photograph of Fe<sup>0</sup>/C ceramsites after the Pb(II) removal for 12 days. White coating in particles (1) and (2) is lead oxides, and red coating in particles (2) and (3) is iro hydroxides.