Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Etching synthesis of iron oxide nanoparticles for adsorption of arsenic from water

Wei Cheng, Weidong Zhang, Lijuan Hu, Wei Ding, Feng Wu and Jinjun Li *

School of Resources and Environmental Sciences, Hubei Key Lab of Bioresources and Environmental Biotechnologies, Wuhan University, Wuhan 430079, China

Figure captions

Fig. S1† Energy-dispersive spectrometry pattern of (a) Fe-Si composite and (b) nano-iron oxide.

Fig. S2†. X-ray diffraction spectrum of nano-iron oxide.

Fig. S3† Nitrogen adsorption–desorption isotherm and BJH pore size distribution of nano-iron oxide.

Fig. S4† Point of zero charge (PZC) of nano-iron oxide.

Fig. S5† (a) As(III) and (b) As(V) speciation for various pH values (calculated using Visual MINTEQ3.1).

Fig. S6† Influence of initial H_2O_2 concentration on As(III) removal.

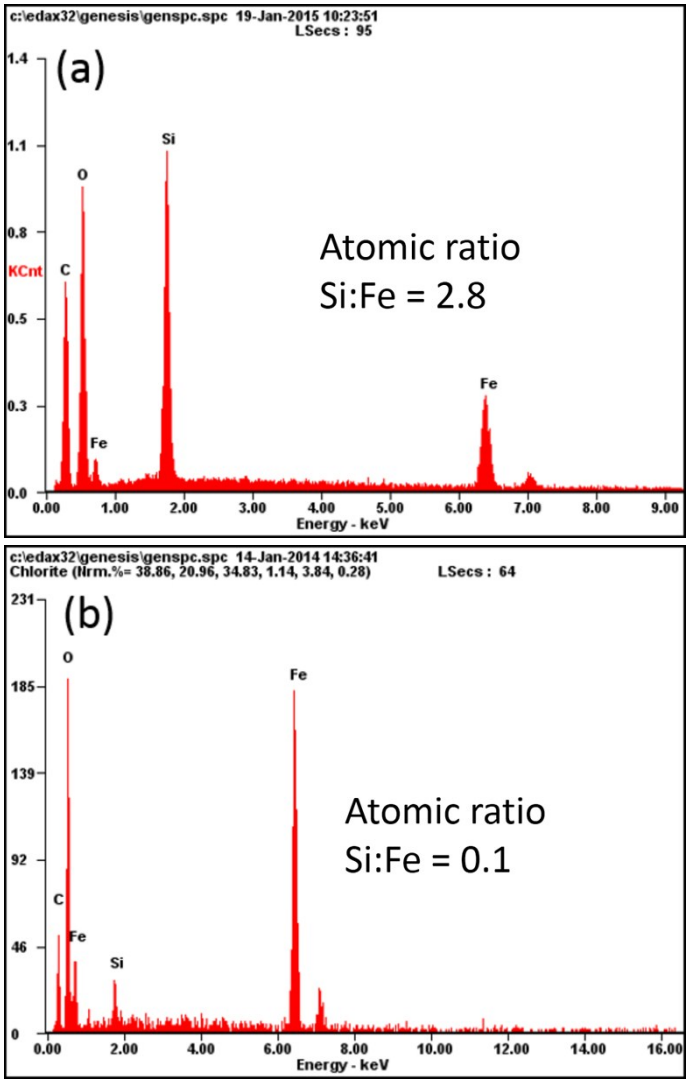

Fig. S1† Energy-dispersive spectrometry pattern of (a) Fe-Si composite and (b) nano-iron oxide.

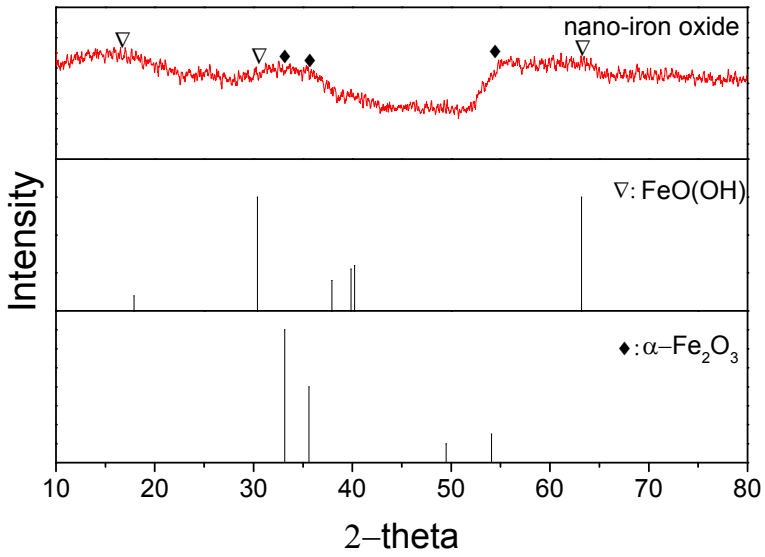

Fig. S2† X-ray diffraction spectrum of nano-iron oxide.

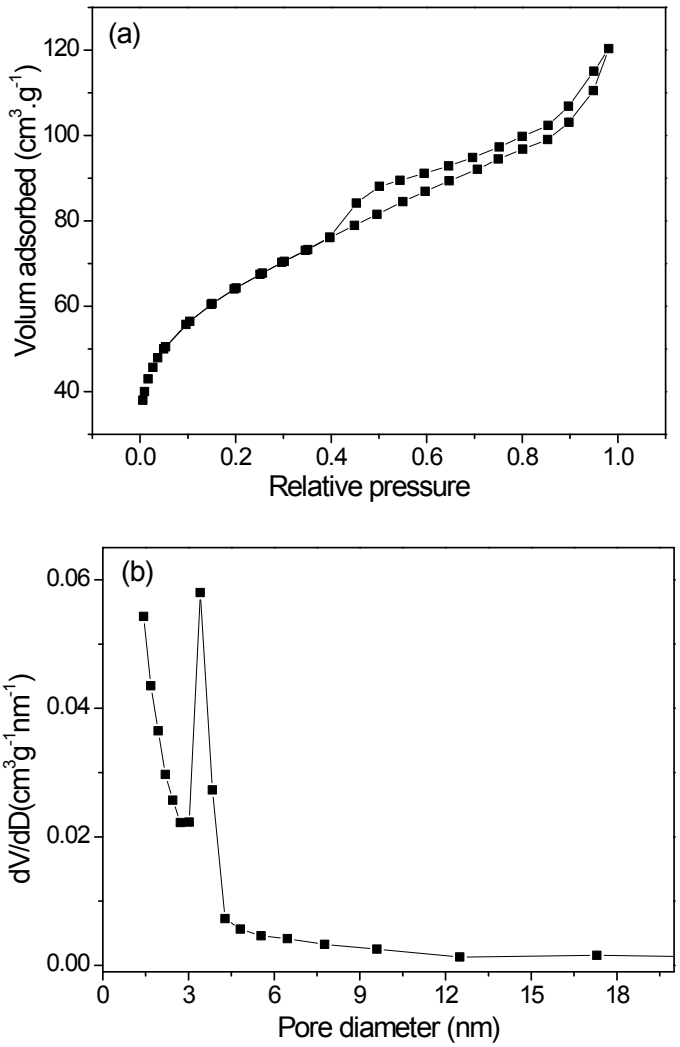

Fig. S3† Nitrogen adsorption–desorption isotherm and BJH pore size distribution of nano-iron oxide.

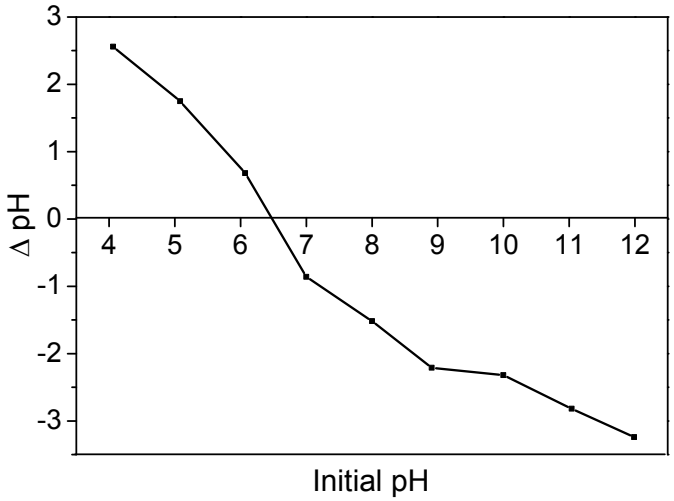

Fig. S4† Point of zero charge (PZC) of nano-iron oxide.

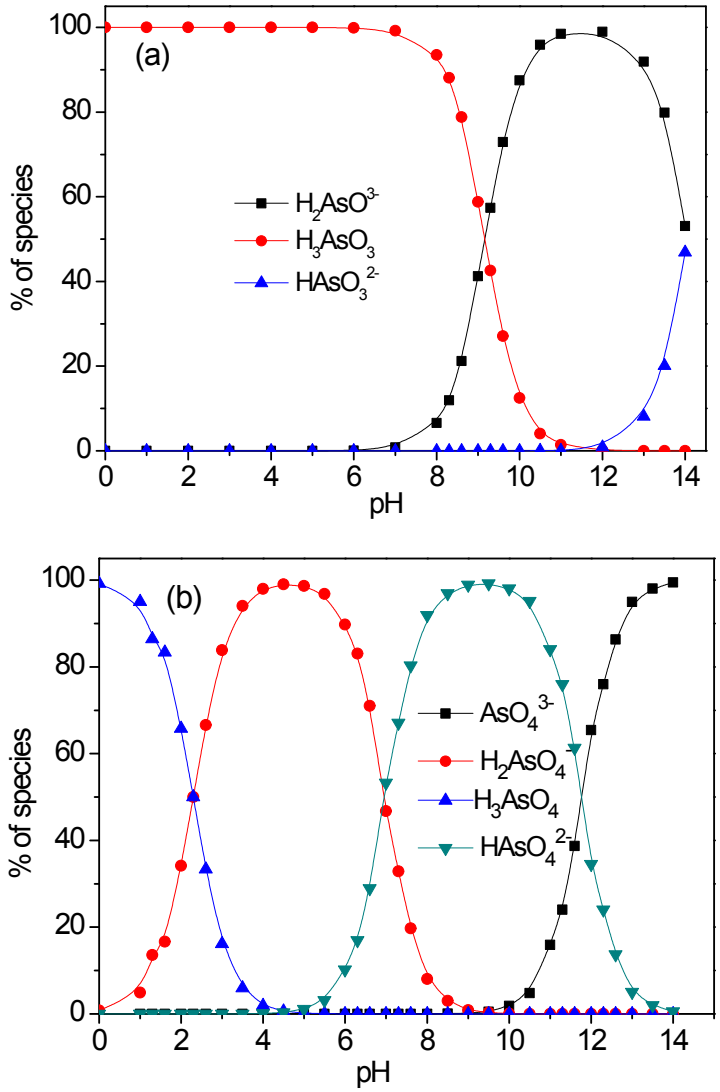

Fig. S5† (a) As(III) and (b) As(V) speciation for various pH values (calculated using Visual MINTEQ3.1).

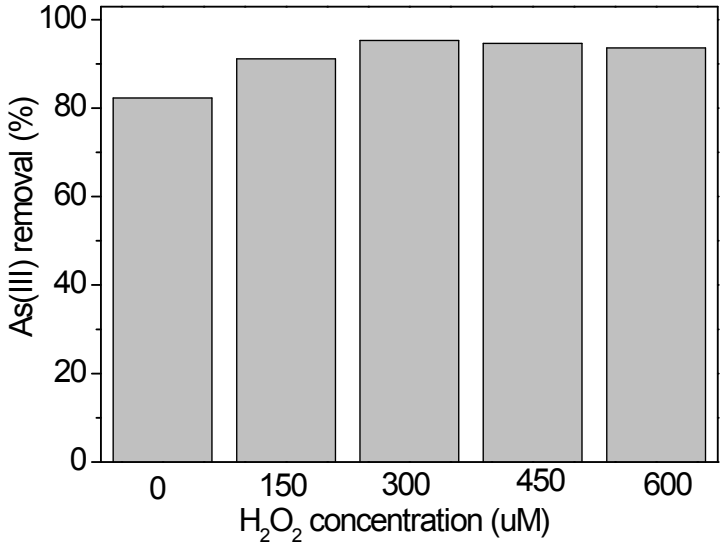

Fig. S6† Influence of initial H_2O_2 concentration on As(III) removal at pH 7.