Supporting Information for

Insights on mitigation of chemical clogging of zero-valent iron for nitrobenzene reduction: the role of oxygenated anion modification

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S1 SEM and corresponding EDS elemental analyses after ZVI clogging

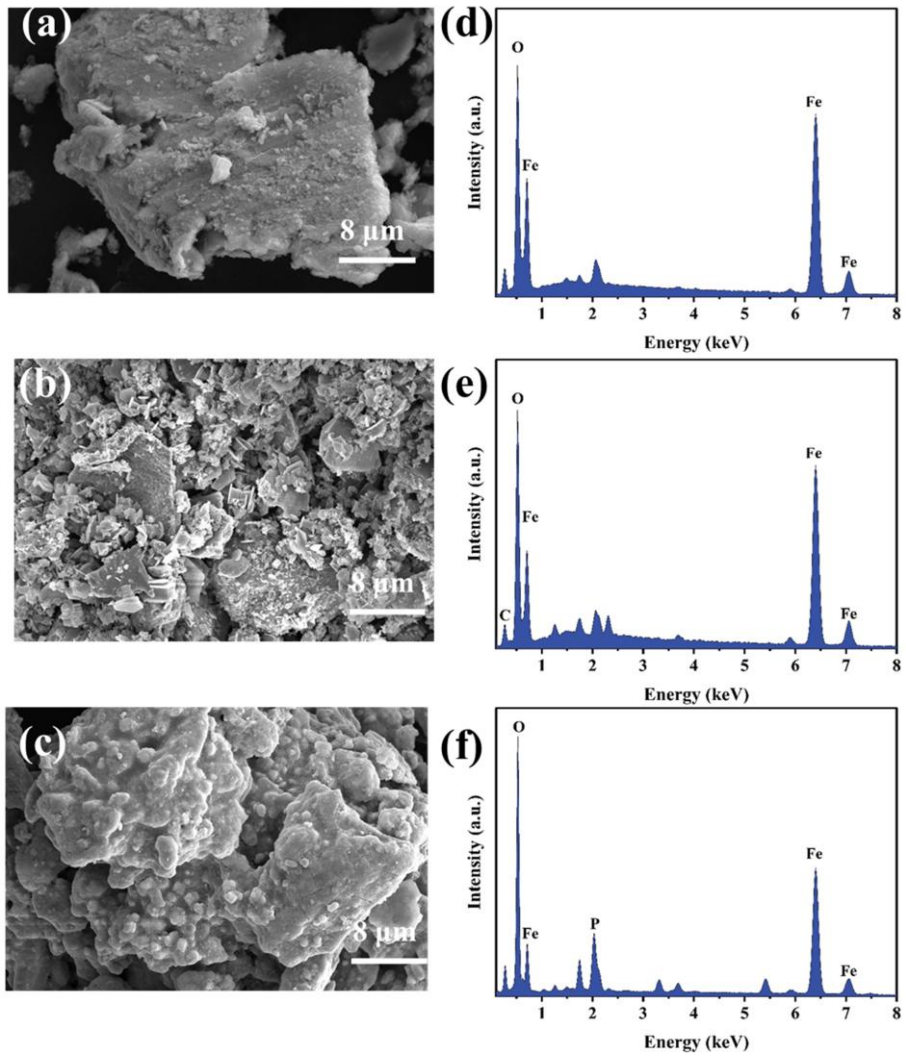

Fig. S1 SEM and corresponding EDS elemental analyses of (a and, d) mZVI, (b and, e) OX-mZVI, and (c and, f) P-mZVI after clogging.

S2 XRD diffraction patterns of mZVI at different stages of nitrate removal

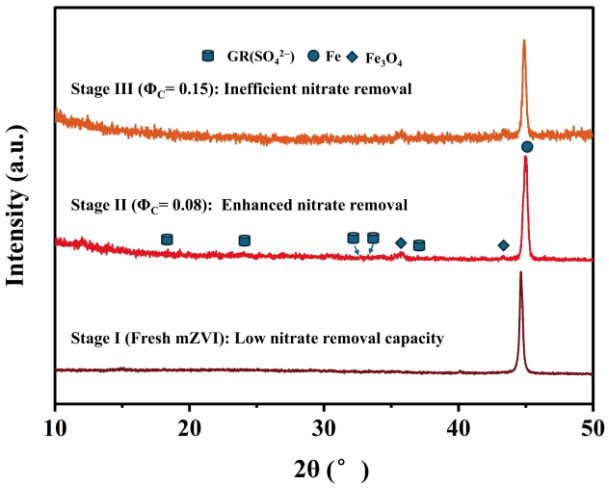

Fig. S2 XRD diffraction patterns of mZVI at different stages of nitrate removal.

S3 ZVI clogging degree fitted to changes in nitrate concentration

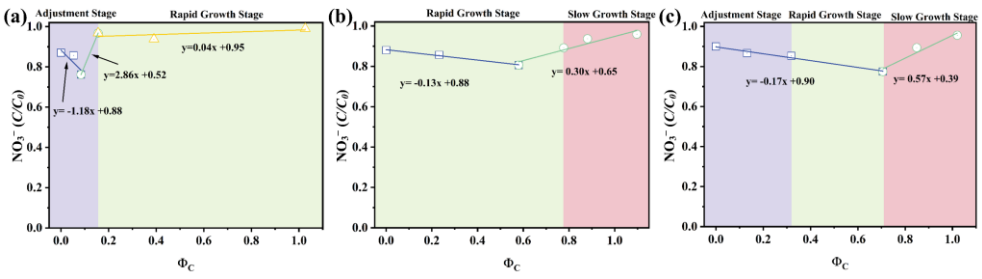

Fig. S3 ZVI clogging degree fitted to changes in nitrate concentration, (a) mZVI, (b) OX-mZVI, (c) P-mZVI.

S4 Images of the water contact angle

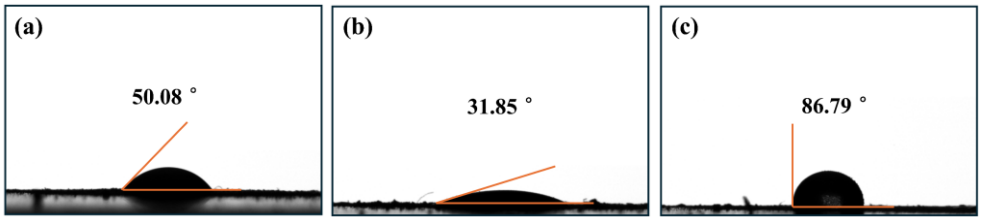

Fig. S4 Images of the water contact angle for (a) mZVI, (b) OX-mZVI and (c) P-mZVI.

S5 High-resolution P 2p XPS spectra

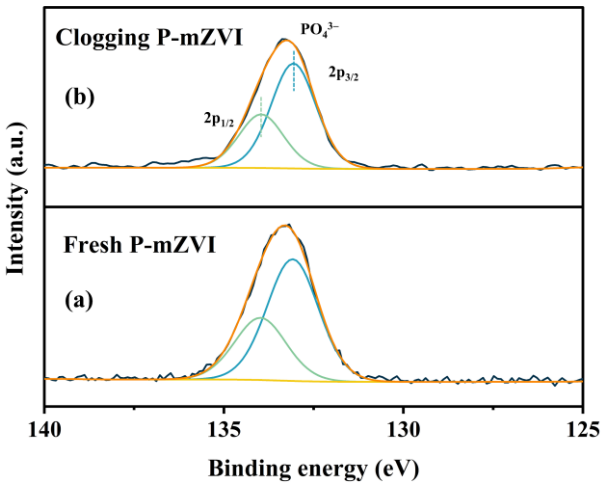

Fig. S5 High-resolution P 2p XPS spectra of (a) fresh and (b) clogging P-mZVI.

S6 The FWHM for high-resolution Fe 2p XPS spectra

Table S1 The FWHM for high-resolution Fe 2p XPS spectra.

Number	Name	FWHM (eV)					
		mZVI Fresh	mZVI Clogging	OX-mZVI Fresh	OX-mZVI Clogging	P-mZVI Fresh	P-mZVI Clogging
P1	Fe^{2+} 2p 3/2	3.08	2.48	3.16	2.47	3.50	2.65
P2	Fe^{3+} 2p 3/2	3.50	3.50	3.50	3.50	3.09	3.50
P3	Fe^{2+} sat 2p 3/2	3.50	3.50	3.50	3.50	3.50	3.50
P4	Fe^{3+} sat 2p 3/2	3.50	3.50	3.50	3.50	3.50	3.50
P5	Fe^{2+} 2p 1/2	3.08	2.48	3.16	2.47	3.50	2.65
P6	Fe^{3+} 2p 1/2	3.50	3.50	3.50	3.50	3.09	3.50
P7	Fe^{2+} sat 2p 1/2	3.50	3.50	3.50	3.50	3.50	3.50
P8	Fe^{3+} sat 2p 1/2	3.50	3.50	3.50	3.50	3.50	3.50