

Supplementary Information

Table S1. Composition of the synthetic groundwater

Components	Concentration (mg L ⁻¹)	Trace elements	Concentration (mg L ⁻¹)
KNO ₃	30.3	ZnCl ₂	0.2
NaHCO ₃	16.9	CoCl ₂ ·6H ₂ O	0.2
NaAsO ₂	16.9	MnSO ₄ ·H ₂ O	1.6
NaH ₂ PO ₄	6.2	CuSO ₄ ·5H ₂ O	0.2
CaCl ₂	5.5	NaMoO ₄ ·2H ₂ O	0.2
MgCl ₂ ·6H ₂ O	10.15	NiCl ₂ ·6H ₂ O	0.4

Table S2. Cost analysis table of regeneration process.

Process	Chemical	unit price (¥ kg ⁻¹)	Consumption (kg kg ⁻¹ FFA-1)	Cost (¥ kg ⁻¹ FFA-1)
alkali cleaning (C)	NaOH	6.6	0.0325	0.21
acid pickling (D)	HCl	7.6	0.15	1.14

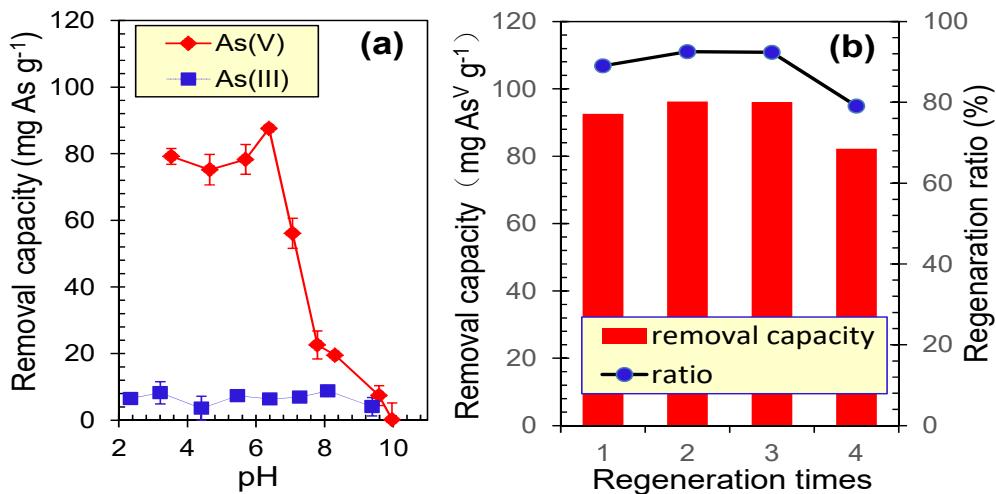


Figure S1. Effect of pH (a) and regeneration time (b) on FFA-1 to As(V) removal capacity.