Supplementary Material

Sorption mechanisms of diphenylarsinic acid on natural magnetite and siderite: evidence from sorption kinetics, sequential extraction and extended X-ray absorption fine-structure spectroscopy analysis

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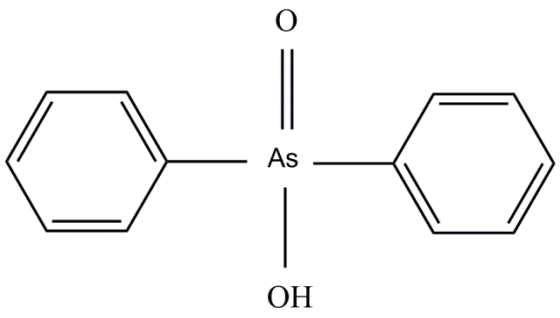

Fig. S1 The molecular structure of DPAA.

Table S1 The mass percentage (%) of the components in magnetite and siderite.[a]

	Fe	FeO	SiO_2	Al_2O_3	CaO	MgO	K_2O	Na_2O	TiO_2	Mn	Cu	Zn	Co	Ni	Ti	As	S	P
Magnetite	50.940	20.670	13.830	1.420	4.850	3.950	0.204	0.140	0.108	0.098	0.305	0.017	-	-	-	0.083	0.430	0.033
Siderite	43.660	37.960	3.990	0.600	3.380	3.840	0.200	0.024	-	0.235	0.088	-	0.016	0.006	0.013	-	1.460	0.034

[a] – means not found.

Table S2 The XRD results (%) of magnetite and siderite.[a]

	Vermiculite	Hydromica	Amphibole	Kaolinite	Chlorite	Quartz	Plaster	Talc	Calcite	Iron dolomite	Siderite	Hematite	Pyrite	Magnetite
Magnetite	3	4	3	3	3	18	–	1	16	–	–	–	–	49
Siderite	–	4	–	–	–	8	2	–	11	4	59	6	6	–

[a] – means not found.