

# Wei Li

## List of Publications by Year in descending order

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76  
papers

4,915  
citations

94433

37  
h-index

95266

68  
g-index

76  
all docs

76  
docs citations

76  
times ranked

5469  
citing authors

#	ARTICLE	IF	CITATIONS
1	Remediation techniques for heavy metal-contaminated soils: Principles and applicability. <i>Science of the Total Environment</i> , 2018, 633, 206-219.	8.0	1,064
2	Oxidation of Benzene by Persulfate in the Presence of Fe(III)- and Mn(IV)-Containing Oxides: Stoichiometric Efficiency and Transformation Products. <i>Environmental Science &amp; Technology</i> , 2016, 50, 890-898.	10.0	257
3	Effect of Ferrihydrite Crystallite Size on Phosphate Adsorption Reactivity. <i>Environmental Science &amp; Technology</i> , 2013, 47, 10322-10331.	10.0	191
4	Phosphate adsorption on the iron oxyhydroxides goethite ( $\alpha$ -FeOOH), akaganeite ( $\beta$ -FeOOH), and lepidocrocite ( $\gamma$ -FeOOH): a $^{31}\text{P}$ NMR Study. <i>Energy and Environmental Science</i> , 2011, 4, 4298.	30.8	187
5	Peroxymonosulfate activation by iron(III)-tetraamidomacrocyclic ligand for degradation of organic pollutants via high-valent iron-oxo complex. <i>Water Research</i> , 2018, 147, 233-241.	11.3	161
6	Characteristics of Phosphate Adsorption-Desorption Onto Ferrihydrite. <i>Soil Science</i> , 2013, 178, 1-11.	0.9	155
7	Evaluation of various approaches to predict cadmium bioavailability to rice grown in soils with high geochemical background in the karst region, Southwestern China. <i>Environmental Pollution</i> , 2020, 258, 113645.	7.5	126
8	Enrichment and source identification of Cd and other heavy metals in soils with high geochemical background in the karst region, Southwestern China. <i>Chemosphere</i> , 2020, 245, 125620.	8.2	124
9	Mechanism of Myo-inositol Hexakisphosphate Sorption on Amorphous Aluminum Hydroxide: Spectroscopic Evidence for Rapid Surface Precipitation. <i>Environmental Science &amp; Technology</i> , 2014, 48, 6735-6742.	10.0	103
10	Redox Reactions between Mn(II) and Hexagonal Birnessite Change Its Layer Symmetry. <i>Environmental Science &amp; Technology</i> , 2016, 50, 1750-1758.	10.0	102
11	Molecular level investigations of phosphate sorption on corundum ( $\alpha$ -Al <sub>2</sub> O <sub>3</sub> ) by $^{31}\text{P}$ solid state NMR, ATR-FTIR and quantum chemical calculation. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 107, 252-266.	3.9	94
12	Formation of Crystalline Zn-Al Layered Double Hydroxide Precipitates on $\gamma$ -Alumina: The Role of Mineral Dissolution. <i>Environmental Science &amp; Technology</i> , 2012, 46, 11670-11677.	10.0	93
13	Use of lanthanum/aluminum co-modified granulated attapulgite clay as a novel phosphorus (P) sorbent to immobilize P and stabilize surface sediment in shallow eutrophic lakes. <i>Chemical Engineering Journal</i> , 2020, 385, 123395.	12.7	81
14	Effect of iron oxide reductive dissolution on the transformation and immobilization of arsenic in soils: New insights from X-ray photoelectron and X-ray absorption spectroscopy. <i>Journal of Hazardous Materials</i> , 2014, 279, 212-219.	12.4	77
15	Effects of crystallite size on the structure and magnetism of ferrihydrite. <i>Environmental Science: Nano</i> , 2016, 3, 190-202.	4.3	77
16	Sorption and desorption characteristics of organic phosphates of different structures on aluminium (oxyhydr)oxides. <i>European Journal of Soil Science</i> , 2014, 65, 308-317.	3.9	69
17	Characterizing Phosphorus Speciation of Chesapeake Bay Sediments Using Chemical Extraction, $^{31}\text{P}$ NMR, and X-ray Absorption Fine Structure Spectroscopy. <i>Environmental Science &amp; Technology</i> , 2015, 49, 203-211.	10.0	69
18	Differential Pair Distribution Function Study of the Structure of Arsenate Adsorbed on Nanocrystalline $\gamma$ -Alumina. <i>Environmental Science &amp; Technology</i> , 2011, 45, 9687-9692.	10.0	66

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19	An invisible soil acidification: Critical role of soil carbonate and its impact on heavy metal bioavailability. <i>Scientific Reports</i> , 2015, 5, 12735.	3.3	66
20	Surface Speciation of Phosphate on Boehmite ( $\text{Î}^3\text{-AlOOH}$ ) Determined from NMR Spectroscopy. <i>Langmuir</i> , 2010, 26, 4753-4761.	3.5	63
21	Phosphate uptake by $\text{TiO}_2$ : Batch studies and NMR spectroscopic evidence for multisite adsorption. <i>Journal of Colloid and Interface Science</i> , 2011, 364, 455-461.	9.4	61
22	Bismuth 2,6-pyridinedicarboxylates: Assembly of molecular units into coordination polymers, $\text{CO}_2$ sorption and photoluminescence. <i>Dalton Transactions</i> , 2012, 41, 4126.	3.3	60
23	Enhanced Dissolution and Transformation of $\text{ZnO}$ Nanoparticles: The Role of Inositol Hexakisphosphate. <i>Environmental Science &amp; Technology</i> , 2016, 50, 5651-5660.	10.0	60
24	Versatile inorganic-organic hybrid $\text{WO}_x$ -ethylenediamine nanowires: Synthesis, mechanism and application in heavy metal ion adsorption and catalysis. <i>Nano Research</i> , 2014, 7, 903-916.	10.4	59
25	Cadmium Isotope Fractionation during Adsorption and Substitution with Iron (Oxyhydr)oxides. <i>Environmental Science &amp; Technology</i> , 2021, 55, 11601-11611.	10.0	58
26	Effect of phosphate on the adsorption of Cu and Cd on natural hematite. <i>Chemosphere</i> , 2006, 63, 1235-1241.	8.2	55
27	Synthesis and Structural Characterization of a 3-D Lithium Based Metal-Organic Framework Showing Dynamic Structural Behavior. <i>Crystal Growth and Design</i> , 2010, 10, 2801-2805.	3.0	55
28	Introducing hydrate aluminum into porous thermally-treated calcium-rich attapulgite to enhance its phosphorus sorption capacity for sediment internal loading management. <i>Chemical Engineering Journal</i> , 2018, 348, 704-712.	12.7	54
29	Arsenate substitution in hydroxylapatite: Structural characterization of the $\text{Ca}_5(\text{P}_x\text{As}_{1-x}\text{O}_4)_3\text{OH}$ solid solution. <i>American Mineralogist</i> , 2009, 94, 666-675.	1.9	53
30	Contrasting effects of inorganic and organic fertilisation regimes on shifts in Fe redox bacterial communities in red soils. <i>Soil Biology and Biochemistry</i> , 2018, 117, 56-67.	8.8	48
31	Real-time QEXAFS spectroscopy measures rapid precipitate formation at the mineral-water interface. <i>Nature Communications</i> , 2014, 5, 5003.	12.8	47
32	Fluoride uptake by three lanthanum based nanomaterials: Behavior and mechanism dependent upon lanthanum species. <i>Science of the Total Environment</i> , 2019, 683, 609-616.	8.0	45
33	Preparation of the Lanthanum-Aluminum-Amended Attapulgite Composite as a Novel Inactivation Material to Immobilize Phosphorus in Lake Sediment. <i>Environmental Science &amp; Technology</i> , 2020, 54, 11602-11610.	10.0	45
34	Surface modification of goethite by phosphate for enhancement of Cu and Cd adsorption. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2007, 293, 13-19.	4.7	43
35	Speciation Transformation of Phosphorus in Poultry Litter during Pyrolysis: Insights from X-ray Diffraction, Fourier Transform Infrared, and Solid-State NMR Spectroscopy. <i>Environmental Science &amp; Technology</i> , 2019, 53, 13841-13849.	10.0	43
36	A review of cadmium sorption mechanisms on soil mineral surfaces revealed from synchrotron-based X-ray absorption fine structure spectroscopy: Implications for soil remediation. <i>Pedosphere</i> , 2021, 31, 11-27.	4.0	41

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37	The effects of iron(II) on the kinetics of arsenic oxidation and sorption on manganese oxides. <i>Journal of Colloid and Interface Science</i> , 2015, 457, 319-328.	9.4	40
38	Zinc Isotope Fractionation during Sorption onto Al Oxides: Atomic Level Understanding from EXAFS. <i>Environmental Science &amp; Technology</i> , 2018, 52, 9087-9096.	10.0	40
39	Formation of hydroxylapatite from co-sorption of phosphate and calcium by boehmite. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 85, 289-301.	3.9	38
40	Inhibition Mechanisms of Zn Precipitation on Aluminum Oxide by Glyphosate: A <sup>31</sup> P NMR and Zn EXAFS Study. <i>Environmental Science &amp; Technology</i> , 2013, 47, 4211-4219.	10.0	37
41	Environmental applications of metal stable isotopes: Silver, mercury and zinc. <i>Environmental Pollution</i> , 2019, 252, 1344-1356.	7.5	36
42	Different effects of copper (II), cadmium (II) and phosphate on the sorption of phenanthrene on the biomass of cyanobacteria. <i>Journal of Hazardous Materials</i> , 2013, 261, 21-28.	12.4	35
43	Size-dependent sorption of myo-inositol hexakisphosphate and orthophosphate on nano- $\text{Al}_2\text{O}_3$ . <i>Journal of Colloid and Interface Science</i> , 2015, 451, 85-92.	9.4	33
44	Characterization of Lead Uptake by Nano-Sized Hydroxyapatite: A Molecular Scale Perspective. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 599-607.	2.7	33
45	Iron and Arsenic Speciation During As(III) Oxidation by Manganese Oxides in the Presence of Fe(II): Molecular-Level Characterization Using XAFS, Mössbauer, and TEM Analysis. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 256-268.	2.7	32
46	Formation of Cd precipitates on $\text{Al}_2\text{O}_3$ : Implications for Cd sequestration in the environment. <i>Environment International</i> , 2019, 126, 234-241.	10.0	31
47	Solid-State NMR Spectroscopic Study of Phosphate Sorption Mechanisms on Aluminum (Hydr)oxides. <i>Environmental Science &amp; Technology</i> , 2013, 47, 130725144353009.	10.0	30
48	Molecular-scale investigation of fluoride sorption mechanism by nanosized hydroxyapatite using <sup>19</sup> F solid-state NMR spectroscopy. <i>Journal of Colloid and Interface Science</i> , 2019, 557, 357-366.	9.4	30
49	The Important Role of Layered Double Hydroxides in Soil Chemical Processes and Remediation: What We Have Learned Over the Past 20 Years. <i>Advances in Agronomy</i> , 2018, 147, 1-59.	5.2	29
50	Fe(II) sorption on pyrophyllite: Effect of structural Fe(III) (impurity) in pyrophyllite on nature of layered double hydroxide (LDH) secondary mineral formation. <i>Chemical Geology</i> , 2016, 439, 152-160.	3.3	28
51	Effects of Low Molecular Weight Organic Anions on the Release of Arsenite and Arsenate from a Contaminated Soil. <i>Water, Air, and Soil Pollution</i> , 2005, 167, 111-122.	2.4	27
52	Effect of Iron(II) on Arsenic Sequestration by $\text{MnO}_2$ : Desorption Studies Using Stirred-Flow Experiments and X-Ray Absorption Fine-Structure Spectroscopy. <i>Environmental Science &amp; Technology</i> , 2015, 49, 13360-13368.	10.0	26
53	Identification of Fe and Zr oxide phases in an iron-zirconium binary oxide and arsenate complexes adsorbed onto their surfaces. <i>Journal of Hazardous Materials</i> , 2018, 353, 340-347.	12.4	26
54	The regime and P availability of omitting P fertilizer application for rice in rice/wheat rotation in the Taihu Lake Region of southern China. <i>Journal of Soils and Sediments</i> , 2015, 15, 844-853.	3.0	25

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55	Adsorption of carbon dioxide on Al/Fe oxyhydroxide. <i>Journal of Colloid and Interface Science</i> , 2013, 400, 1-10.	9.4	22
56	Ecological risk assessment on heavy metals in soils: Use of soil diffuse reflectance mid-infrared Fourier-transform spectroscopy. <i>Scientific Reports</i> , 2017, 7, 40709.	3.3	22
57	A novel multi-reaction model for kinetics of Zn release from soils: Roles of soil binding sites. <i>Journal of Colloid and Interface Science</i> , 2018, 514, 146-155.	9.4	22
58	Enhanced Fluoride Uptake by Layered Double Hydroxides under Alkaline Conditions: Solid-State NMR Evidence of the Role of Surface >MgOH Sites. <i>Environmental Science &amp; Technology</i> , 2021, 55, 15082-15089.	10.0	22
59	Transformation of Phosphorus in Speciation and Bioavailability During Converting Poultry Litter to Biochar. <i>Frontiers in Sustainable Food Systems</i> , 2018, 2, .	3.9	21
60	Competitive sorption of Ni and Zn at the aluminum oxide/water interface: an XAFS study. <i>Geochemical Transactions</i> , 2018, 19, 9.	0.7	20
61	Sources and Pathways of Formation of Recalcitrant and Residual Phosphorus in an Agricultural Soil. <i>Soil Systems</i> , 2018, 2, 45.	2.6	20
62	Molecular speciation of phosphorus in phosphogypsum waste by solid-state nuclear magnetic resonance spectroscopy. <i>Science of the Total Environment</i> , 2019, 696, 133958.	8.0	17
63	EXAFS investigation of Ni(II) sorption at the palygorskite-solution interface: New insights into surface-induced precipitation phenomena. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 314, 85-107.	3.9	14
64	Effect of magnesium oxide on adsorption of Cd <sup>2+</sup> from aqueous solution. <i>RSC Advances</i> , 2012, 2, 5178.	3.6	12
65	Zn stable isotope fractionation during adsorption onto todorokite: A molecular perspective from X-ray absorption spectroscopy and density functional theory. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 327, 116-136.	3.9	12
66	Molecular scale assessment of defluoridation of coal-mining wastewater by calcined Mg/Al layered double hydroxide using <sup>19</sup> F solid-state NMR, XPS, and HRTEM. <i>Chemosphere</i> , 2022, 303, 135072.	8.2	12
67	Combining zinc desorption with EXAFS speciation analysis to understand Zn mobility in mining and smelting affected soils in Minas Gerais, Brazil. <i>Science of the Total Environment</i> , 2021, 754, 142450.	8.0	11
68	Phosphate uptake by calcite: Constraints of concentration and pH on the formation of calcium phosphate precipitates. <i>Chemical Geology</i> , 2021, 579, 120365.	3.3	10
69	Long-Range and Short-Range Structures of Multimetallic Layered Double Hydroxides. <i>Journal of Physical Chemistry C</i> , 2022, 126, 5311-5322.	3.1	10
70	Macroscopic and microscopic investigation of adsorption and precipitation of Zn on $\gamma$ -alumina in the absence and presence of As. <i>Chemosphere</i> , 2017, 178, 309-316.	8.2	9
71	Effect of $\gamma$ -manganite particle size on Zn <sup>2+</sup> coordination environment during adsorption and desorption. <i>Applied Clay Science</i> , 2019, 168, 68-76.	5.2	9
72	Speciation transformation of Pb during palygorskite sorption-calcination process: Implications for Pb sequestration. <i>Applied Geochemistry</i> , 2021, 124, 104850.	3.0	7

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73	Mechanisms of fluoride uptake by surface-modified calcite: A $^{19}\text{F}$ solid-state NMR and TEM study. <i>Chemosphere</i> , 2022, 294, 133729.	8.2	7
74	An EXAFS investigation of the mechanism of competitive sorption between Co(II) and Ni(II) at $\gamma$ -alumina/solution interface. <i>Acta Geochimica</i> , 2017, 36, 462-464.	1.7	4
75	Linking Environmental Science with Geochemistry. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2021, 106, 1-1.	2.7	2
76	Improvement of quantitative solution $^{31}\text{P}$ NMR analysis of soil organic P: a study of spin-lattice relaxation responding to paramagnetic ions. <i>Geochemical Transactions</i> , 2020, 21, 3.	0.7	2