

# Runliang Zhu

## List of Publications by Year in descending order

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103  
papers

6,443  
citations

87401

40  
h-index

78623

77  
g-index

103  
all docs

103  
docs citations

103  
times ranked

6904  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrothermal carbons/ferrihydrate heterogeneous Fenton catalysts with low H <sub>2</sub> O <sub>2</sub> consumption and the effect of graphitization degrees. <i>Chemosphere</i> , 2022, 287, 131933.	4.2	21
2	A novel montmorillonite-based soil amendment for Cd/REEs immobilization and nutrients sustained release. <i>Applied Clay Science</i> , 2022, 221, 106464.	2.6	9
3	The different effects of sulfate on the adsorption of REEs on kaolinite and ferrihydrate. <i>Applied Clay Science</i> , 2022, 221, 106468.	2.6	6
4	Enhanced immobilization of phosphate by ferrihydrate during the photoreductive dissolution process. <i>Science of the Total Environment</i> , 2022, 838, 155835.	3.9	1
5	Coupled redox cycling of Fe and Mn in the environment: The complex interplay of solution species with Fe- and Mn-(oxyhydr)oxide crystallization and transformation. <i>Earth-Science Reviews</i> , 2022, 232, 104105.	4.0	25
6	Adsorption of phosphate and cadmium on iron (oxyhydr)oxides: A comparative study on ferrihydrate, goethite, and hematite. <i>Geoderma</i> , 2021, 383, 114799.	2.3	88
7	Phosphate modified magnetite@ferrihydrate as an magnetic adsorbent for Cd(II) removal from water, soil, and sediment. <i>Science of the Total Environment</i> , 2021, 764, 142846.	3.9	44
8	Facile synthesis of highly efficient and cost-effective photo-Fenton catalyst by ball milling commercial TiO <sub>2</sub> and natural magnetite. <i>Journal of Alloys and Compounds</i> , 2021, 862, 158670.	2.8	13
9	Development of novel multifunctional adsorbent by effectively hosting both zwitterionic surfactant and hydrated ferric oxides in montmorillonite. <i>Science of the Total Environment</i> , 2021, 774, 144974.	3.9	6
10	Technical development of characterization methods provides insights into clay mineral-water interactions: A comprehensive review. <i>Applied Clay Science</i> , 2021, 206, 106088.	2.6	26
11	Insight into the effect of manganese substitution on mesoporous hollow spinel cobalt oxides for catalytic oxidation of toluene. <i>Journal of Colloid and Interface Science</i> , 2021, 594, 713-726.	5.0	70
12	Facile synthesis of Al/Fe bimetallic (oxyhydr)oxide-coated magnetite for efficient removal of fluoride from water. <i>Environmental Technology (United Kingdom)</i> , 2020, 41, 2625-2636.	1.2	13
13	Functionalized layered double hydroxides for innovative applications. <i>Materials Horizons</i> , 2020, 7, 715-745.	6.4	171
14	A novel multifunctional adsorbent synthesized by modifying acidified organo-montmorillonite with iron hydroxides. <i>Applied Clay Science</i> , 2020, 185, 105420.	2.6	24
15	Layered intercalation compounds: Mechanisms, new methodologies, and advanced applications. <i>Progress in Materials Science</i> , 2020, 109, 100631.	16.0	66
16	Fabrication of layered double hydroxide/carbon nanomaterial for heavy metals removal. <i>Applied Clay Science</i> , 2020, 199, 105867.	2.6	18
17	Organoclay-derived lamellar silicon carbide/carbon composite as an ideal support for Pt nanoparticles: facile synthesis and toluene oxidation performance. <i>Chemical Communications</i> , 2020, 56, 9489-9492.	2.2	3
18	Role of phosphate concentration in control for phosphate removal and recovery by layered double hydroxides. <i>Environmental Science and Pollution Research</i> , 2020, 27, 16612-16623.	2.7	10

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19	Adsorption, degradation, and mineralization of emerging pollutants (pharmaceuticals and) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 Research, 2020, 27, 34862-34905.	2.7	27
20	One-pot synthesis of the reduced-charge montmorillonite via molten salts treatment. Applied Clay Science, 2020, 186, 105429.	2.6	6
21	CNTs/ferrhydrite as a highly efficient heterogeneous Fenton catalyst for the degradation of bisphenol A: The important role of CNTs in accelerating Fe(III)/Fe(II) cycling. Applied Catalysis B: Environmental, 2020, 270, 118891.	10.8	152
22	One-pot synthesis of novel hierarchically porous and hydrophobic Si/SiO <sub>2</sub> composite from natural palygorskite for benzene adsorption. Chemical Engineering Journal, 2019, 378, 122131.	6.6	25
23	<i>In situ</i> synthesis of a silicon flake/nitrogen-doped graphene-like carbon composite from organoclay for high-performance lithium-ion battery anodes. Chemical Communications, 2019, 55, 2644-2647.	2.2	44
24	The significant effect of photo-catalyzed redox reactions on the immobilization of chromium by hematite. Chemical Geology, 2019, 524, 228-236.	1.4	13
25	Strategies for enhancing the heterogeneous Fenton catalytic reactivity: A review. Applied Catalysis B: Environmental, 2019, 255, 117739.	10.8	687
26	Photochemical behavior of ferrhydrite-oxalate system: Interfacial reaction mechanism and charge transfer process. Water Research, 2019, 159, 10-19.	5.3	73
27	Efficient degradation of cefotaxime by a UV+ferrhydrite/TiO <sub>2</sub> +H <sub>2</sub> O <sub>2</sub> process: the important role of ferrhydrite in transferring photo-generated electrons from TiO <sub>2</sub> to H <sub>2</sub> O <sub>2</sub> . Journal of Chemical Technology and Biotechnology, 2019, 94, 2512-2521.	1.6	9
28	Understanding the role of natural clay minerals as effective adsorbents and alternative source of rare earth elements: Adsorption operative parameters. Hydrometallurgy, 2019, 185, 149-161.	1.8	76
29	TiO <sub>2</sub> /Schwertmannite nanocomposites as superior co-catalysts in heterogeneous photo-Fenton process. Journal of Environmental Sciences, 2019, 80, 208-217.	3.2	17
30	Degradation of 2,4-dichlorophenol using palygorskite-supported bimetallic Fe/Ni nanocomposite as a heterogeneous catalyst. Applied Clay Science, 2019, 168, 276-286.	2.6	40
31	Self-templating synthesis of silicon nanorods from natural sepiolite for high-performance lithium-ion battery anodes. Journal of Materials Chemistry A, 2018, 6, 6356-6362.	5.2	67
32	Heterogeneous photo-Fenton degradation of bisphenol A over Ag/AgCl/ferrhydrite catalysts under visible light. Chemical Engineering Journal, 2018, 346, 567-577.	6.6	157
33	Catalytic degradation of Orange II in aqueous solution using diatomite-supported bimetallic Fe/Ni nanoparticles. RSC Advances, 2018, 8, 7687-7696.	1.7	29
34	Superior thermal stability of Keggin-Al 30 pillared montmorillonite: A comparative study with Keggin-Al 13 pillared montmorillonite. Microporous and Mesoporous Materials, 2018, 265, 104-111.	2.2	25
35	Pd nanoparticle-decorated Bi <sub>4</sub> O <sub>5</sub> Br <sub>2</sub> nanosheets with enhanced visible-light photocatalytic activity for degradation of Bisphenol A. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 356, 440-450.	2.0	43
36	Effect of acid activation of palygorskite on their toluene adsorption behaviors. Applied Clay Science, 2018, 159, 60-67.	2.6	83

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37	From natural clay minerals to porous silicon nanoparticles. <i>Microporous and Mesoporous Materials</i> , 2018, 260, 76-83.	2.2	18
38	Plasmonic Ag coated Zn/Ti-LDH with excellent photocatalytic activity. <i>Applied Surface Science</i> , 2018, 433, 458-467.	3.1	83
39	Three-dimensional Ag <sub>2</sub> O/Bi <sub>5</sub> O <sub>7</sub> I n heterojunction photocatalyst harnessing UV-vis-NIR broad spectrum for photodegradation of organic pollutants. <i>Journal of Hazardous Materials</i> , 2018, 344, 42-54.	6.5	192
40	Self-assembled ZnAl-LDH/PMo <sub>12</sub> nano-hybrids as effective catalysts on the degradation of methyl orange under room temperature and ambient pressure. <i>Applied Catalysis A: General</i> , 2018, 550, 206-213.	2.2	18
41	Calcined Mg/Al-LDH for acidic wastewater treatment: Simultaneous neutralization and contaminant removal. <i>Applied Clay Science</i> , 2018, 153, 46-53.	2.6	39
42	Calcined Mg/Al layered double hydroxides as efficient adsorbents for polyhydroxy fullerenes. <i>Applied Clay Science</i> , 2018, 151, 66-72.	2.6	16
43	Adsorption of ammonium by different natural clay minerals: Characterization, kinetics and adsorption isotherms. <i>Applied Clay Science</i> , 2018, 159, 83-93.	2.6	218
44	Clay minerals derived nanostructured silicon with various morphology: Controlled synthesis, structural evolution, and enhanced lithium storage properties. <i>Journal of Power Sources</i> , 2018, 405, 61-69.	4.0	34
45	Superior adsorption of phosphate by ferrihydrite-coated and lanthanum-decorated magnetite. <i>Journal of Colloid and Interface Science</i> , 2018, 530, 704-713.	5.0	185
46	Visible-light Ag/AgBr/ferrihydrite catalyst with enhanced heterogeneous photo-Fenton reactivity via electron transfer from Ag/AgBr to ferrihydrite. <i>Applied Catalysis B: Environmental</i> , 2018, 239, 280-289.	10.8	123
47	Enhanced photocatalytic activity of Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> nanosheets by Fe <sup>3+</sup> -doping and the addition of Au nanoparticles: Photodegradation of Phenol and bisphenol A. <i>Applied Catalysis B: Environmental</i> , 2017, 200, 72-82.	10.8	184
48	Keggin-Al 30 pillared montmorillonite. <i>Microporous and Mesoporous Materials</i> , 2017, 242, 256-263.	2.2	39
49	Mechanisms for the enhanced photo-Fenton activity of ferrihydrite modified with BiVO <sub>4</sub> at neutral pH. <i>Applied Catalysis B: Environmental</i> , 2017, 212, 50-58.	10.8	182
50	Reduction removal of hexavalent chromium by zinc-substituted magnetite coupled with aqueous Fe(II) at neutral pH value. <i>Journal of Colloid and Interface Science</i> , 2017, 500, 20-29.	5.0	23
51	A novel synergy of Er <sup>3+</sup> /Fe <sup>3+</sup> co-doped porous Bi <sub>5</sub> O <sub>7</sub> I microspheres with enhanced photocatalytic activity under visible-light irradiation. <i>Applied Catalysis B: Environmental</i> , 2017, 205, 421-432.	10.8	123
52	Influence of interlayer species on the thermal characteristics of montmorillonite. <i>Applied Clay Science</i> , 2017, 135, 129-135.	2.6	41
53	Converting Spent Cu/Fe Layered Double Hydroxide into Cr(VI) Reductant and Porous Carbon Material. <i>Scientific Reports</i> , 2017, 7, 7277.	1.6	28
54	An efficient catalyst of manganese supported on diatomite for toluene oxidation: Manganese species, catalytic performance, and structure-activity relationship. <i>Microporous and Mesoporous Materials</i> , 2017, 239, 101-110.	2.2	54

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55	Enhanced photocatalytic activity of Zn/Ti-LDH via hybridizing with C60. <i>Molecular Catalysis</i> , 2017, 427, 54-61.	1.0	34
56	In situ sequentially generation of acid and ferrous ions for environmental remediation. <i>Chemical Engineering Journal</i> , 2016, 302, 223-232.	6.6	15
57	Bisphenol A degradation by a new acidic nano zero-valent iron diatomite composite. <i>Catalysis Science and Technology</i> , 2016, 6, 6066-6075.	2.1	34
58	Adsorption of polyhydroxy fullerene on polyethylenimine-modified montmorillonite. <i>Applied Clay Science</i> , 2016, 132-133, 412-418.	2.6	19
59	Fullerol modification ferrihydrite for the degradation of acid red 18 under simulated sunlight irradiation. <i>Journal of Molecular Catalysis A</i> , 2016, 424, 393-401.	4.8	24
60	One-step solvothermal synthesis of Fe-doped BiOI film with enhanced photocatalytic performance. <i>RSC Advances</i> , 2016, 6, 106615-106624.	1.7	20
61	BiVO <sub>4</sub> /Fe/Mt composite for visible-light-driven degradation of acid red 18. <i>Applied Clay Science</i> , 2016, 129, 27-34.	2.6	21
62	Visible light assisted Fenton-like degradation of Orange II on Ni <sub>3</sub> Fe/Fe <sub>3</sub> O <sub>4</sub> magnetic catalyst prepared from spent FeNi layered double hydroxide. <i>Journal of Molecular Catalysis A</i> , 2016, 415, 9-16.	4.8	41
63	Adsorbents based on montmorillonite for contaminant removal from water: A review. <i>Applied Clay Science</i> , 2016, 123, 239-258.	2.6	389
64	Ag <sub>3</sub> PO <sub>4</sub> immobilized on hydroxy-metal pillared montmorillonite for the visible light driven degradation of acid red 18. <i>Catalysis Science and Technology</i> , 2016, 6, 4116-4123.	2.1	35
65	Efficiency of Fe <sup>2+</sup> -montmorillonite on the removal of Rhodamine B and hexavalent chromium from aqueous solution. <i>Applied Clay Science</i> , 2016, 120, 9-15.	2.6	53
66	The variation of cationic microstructure in Mn-doped spinel ferrite during calcination and its effect on formaldehyde catalytic oxidation. <i>Journal of Hazardous Materials</i> , 2016, 306, 305-312.	6.5	38
67	Adsorption of phenol, phosphate and Cd(II) by inorganic-organic montmorillonites: A comparative study of single and multiple solute. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2016, 497, 63-71.	2.3	43
68	Co-adsorption of phosphate and zinc(II) on the surface of ferrihydrite. <i>Chemosphere</i> , 2016, 144, 1148-1155.	4.2	118
69	Adsorption of phenol and Cu(II) onto cationic and zwitterionic surfactant modified montmorillonite in single and binary systems. <i>Chemical Engineering Journal</i> , 2016, 283, 880-888.	6.6	112
70	Effect of Mn substitution on the promoted formaldehyde oxidation over spinel ferrite: Catalyst characterization, performance and reaction mechanism. <i>Applied Catalysis B: Environmental</i> , 2016, 182, 476-484.	10.8	149
71	Thermal analysis evidence for the location of zwitterionic surfactant on clay minerals. <i>Applied Clay Science</i> , 2015, 112-113, 62-67.	2.6	27
72	Organo-Clays As Sorbents of Hydrophobic Organic Contaminants: Sorptive Characteristics and Approaches to Enhancing Sorption Capacity. <i>Clays and Clay Minerals</i> , 2015, 63, 199-221.	0.6	32

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73	Simultaneous adsorption of Cd(II) and phosphate on Al <sub>13</sub> pillared montmorillonite. RSC Advances, 2015, 5, 77227-77234.	1.7	39
74	Sequestration of heavy metal cations on montmorillonite by thermal treatment. Applied Clay Science, 2015, 107, 90-97.	2.6	21
75	Modelling the effects of surfactant loading level on the sorption of organic contaminants on organoclays. RSC Advances, 2015, 5, 47022-47030.	1.7	24
76	From spent Mg/Al layered double hydroxide to porous carbon materials. Journal of Hazardous Materials, 2015, 300, 572-580.	6.5	28
77	Templated synthesis of nitrogen-doped graphene-like carbon materials using spent montmorillonite. RSC Advances, 2015, 5, 7522-7528.	1.7	34
78	Investigation of structure and thermal stability of surfactant-modified Al-pillared montmorillonite. Journal of Thermal Analysis and Calorimetry, 2014, 115, 219-225.	2.0	13
79	Restricting layer collapse enhances the adsorption capacity of reduced-charge organoclays. Applied Clay Science, 2014, 88-89, 73-77.	2.6	17
80	Surface Heterogeneity of SiO <sub>2</sub> Polymorphs: An XPS Investigation of $\alpha$ -Quartz and $\beta$ -Cristobalite. Journal of Physical Chemistry C, 2014, 118, 26249-26257.	1.5	41
81	Al <sub>13</sub> -pillared montmorillonite modified by cationic and zwitterionic surfactants: A comparative study. Applied Clay Science, 2014, 101, 327-334.	2.6	13
82	Structure and dynamic properties of water saturated CTMA-montmorillonite: molecular dynamics simulations. Applied Clay Science, 2014, 97-98, 62-71.	2.6	30
83	Co-sorption of Cd and phosphate on the surface of a synthetic hydroxyiron-montmorillonite complex. Clays and Clay Minerals, 2014, 62, 79-88.	0.6	26
84	From used montmorillonite to carbon monolayered montmorillonite nanocomposites. Applied Clay Science, 2014, 100, 112-117.	2.6	39
85	Montmorillonite as a multifunctional adsorbent can simultaneously remove crystal violet, cetyltrimethylammonium, and 2-naphthol from water. Applied Clay Science, 2014, 88-89, 33-38.	2.6	43
86	Application of linear free energy relationships to characterizing the sorptive characteristics of organic contaminants on organoclays from water. Journal of Hazardous Materials, 2012, 233-234, 228-234.	6.5	20
87	Molecular dynamics simulation of TCDD adsorption on organo-montmorillonite. Journal of Colloid and Interface Science, 2012, 377, 328-333.	5.0	34
88	Sorptive Characteristics of Organomontmorillonite toward Organic Compounds: A Combined LFERs and Molecular Dynamics Simulation Study. Environmental Science & Technology, 2011, 45, 6504-6510.	4.6	46
89	Sorption of 2,4-Dichlorophenol onto Organobentonites: Influence of Organic Cation Structure and Bentonite Layer Charge. Adsorption Science and Technology, 2011, 29, 29-38.	1.5	11
90	Structural and sorptive characteristics of the cetyltrimethylammonium and polyacrylamide modified bentonite. Chemical Engineering Journal, 2010, 160, 220-225.	6.6	28

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91	Removal of hexavalent chromium [Cr(VI)] from aqueous solutions by the diatomite-supported/unsupported magnetite nanoparticles. <i>Journal of Hazardous Materials</i> , 2010, 173, 614-621.	6.5	327
92	Enhancing the sorption capacity of CTMA-bentonite by simultaneous intercalation of cationic polyacrylamide. <i>Journal of Hazardous Materials</i> , 2010, 178, 1078-1084.	6.5	22
93	Regeneration of spent organoclays after the sorption of organic pollutants: A review. <i>Journal of Environmental Management</i> , 2009, 90, 3212-3216.	3.8	67
94	Simultaneous sorption of crystal violet and 2-naphthol to bentonite with different CECs. <i>Journal of Hazardous Materials</i> , 2009, 166, 195-199.	6.5	62
95	Sorption of naphthalene and phosphate to the CTMA <sup>+</sup> -Al <sup>3+</sup> intercalated bentonites. <i>Journal of Hazardous Materials</i> , 2009, 168, 1590-1594.	6.5	60
96	Intercalation of both CTMAB and Al <sup>3+</sup> into montmorillonite. <i>Journal of Colloid and Interface Science</i> , 2009, 335, 77-83.	5.0	47
97	Thermodynamics of naphthalene sorption to organoclays: Role of surfactant packing density. <i>Journal of Colloid and Interface Science</i> , 2008, 322, 27-32.	5.0	34
98	Structure of surfactant <sup>+</sup> -clay complexes and their sorptive characteristics toward HOCs. <i>Separation and Purification Technology</i> , 2008, 63, 156-162.	3.9	37
99	Surface structure of CTMA <sup>+</sup> modified bentonite and their sorptive characteristics towards organic compounds. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2008, 320, 19-24.	2.3	24
100	Microstructure of organo-bentonites in water and the effect of steric hindrance on the uptake of organic compounds. <i>Clays and Clay Minerals</i> , 2008, 56, 144-154.	0.6	43
101	Sorption characteristics of CTMA <sup>+</sup> -bentonite complexes as controlled by surfactant packing density. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2007, 294, 221-227.	2.3	69
102	Influence of clay charge densities and surfactant loading amount on the microstructure of CTMA <sup>+</sup> -montmorillonite hybrids. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2007, 304, 41-48.	2.3	69
103	Simultaneous sorption of organic compounds and phosphate to inorganic <sup>+</sup> -organic bentonites from water. <i>Separation and Purification Technology</i> , 2007, 54, 71-76.	3.9	84