Xiaoliang Liang

List of Publications by Year
in descending order

64 papers	2,638 citations	172457 29 h-index	197818 49 g-index
65 all docs	65 docs citations	65 times ranked	3147 citing authors

#	ARTICLE	IF	CITATIONS
1	Heterogeneous UV/Fenton degradation of TBBPA catalyzed by titanomagnetite: Catalyst characterization, performance and degradation products. Water Research, 2012, 46, 4633-4644.	11.3	164
2	Effect of Mn substitution on the promoted formaldehyde oxidation over spinel ferrite: Catalyst characterization, performance and reaction mechanism. Applied Catalysis B: Environmental, 2016, 182, 476-484.	20.2	149
3	The constraints of transition metal substitutions (Ti, Cr, Mn, Co and Ni) in magnetite on its catalytic activity in heterogeneous Fenton and UV/Fenton reaction: From the perspective of hydroxyl radical generation. Applied Catalysis B: Environmental, 2014, 150-151, 612-618.	20.2	130
4	The application of chromium substituted magnetite as heterogeneous Fenton catalyst for the degradation of aqueous cationic and anionic dyes. Chemical Engineering Journal, 2012, 191, 177-184.	12.7	110
5	The decolorization of Acid Orange II in non-homogeneous Fenton reaction catalyzed by natural vanadiumâ€“titanium magnetite. Journal of Hazardous Materials, 2010, 181, 112-120.	12.4	109
6	The remarkable effect of vanadium doping on the adsorption and catalytic activity of magnetite in the decolorization of methylene blue. Applied Catalysis B: Environmental, 2010, 97, 151-159.	20.2	98
7	The contribution of vanadium and titanium on improving methylene blue decolorization through heterogeneous UV-Fenton reaction catalyzed by their co-doped magnetite. Journal of Hazardous Materials, 2012, 199-200, 247-254.	12.4	95
8	Anchoring Fe₃O₄ Nanoparticles on Carbon Nanotubes for Microwave-Induced Catalytic Degradation of Antibiotics. ACS Applied Materials & Interfaces, 2018, 10, 29467-29475.	8.0	83
9	The associations of heavy metals with crystalline iron oxides in the polluted soils around the mining areas in Guangdong Province, China. Chemosphere, 2016, 161, 181-189.	8.2	82
10	Diphenamid degradation via sulfite activation under visible LED using Fe (III) impregnated N-doped TiO2 photocatalyst. Applied Catalysis B: Environmental, 2019, 244, 823-835.	20.2	71
11	A comparative study about the effects of isomorphous substitution of transition metals (Ti, Cr, Mn,) Tj ETQq1 1 0.784314 rgBT /Overl 29-34.	4.8	70
12	Insight into the effect of manganese substitution on mesoporous hollow spinel cobalt oxides for catalytic oxidation of toluene. Journal of Colloid and Interface Science, 2021, 594, 713-726.	9.4	70
13	The catalytic oxidation of formaldehyde over palygorskite-supported copper and manganese oxides: Catalytic deactivation and regeneration. Applied Surface Science, 2019, 464, 287-293.	6.1	64
14	Surface structure-dependent pyrite oxidation in relatively dry and moist air: Implications for the reaction mechanism and sulfur evolution. Geochimica Et Cosmochimica Acta, 2018, 228, 259-274.	3.9	58
15	Natural Magnetite: an efficient catalyst for the degradation of organic contaminant. Scientific Reports, 2015, 5, 10139.	3.3	55
16	Synergetic effect of Cu and Mn oxides supported on palygorskite for the catalytic oxidation of formaldehyde: Dispersion, microstructure, and catalytic performance. Applied Clay Science, 2018, 161, 265-273.	5.2	55
17	The effect of transition metal substitution on the catalytic activity of magnetite in heterogeneous Fenton reaction: In interfacial view. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 435, 28-35.	4.7	54
18	An efficient catalyst of manganese supported on diatomite for toluene oxidation: Manganese species, catalytic performance, and structure-activity relationship. Microporous and Mesoporous Materials, 2017, 239, 101-110.	4.4	54

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19	Performance of Ti-pillared montmorillonite supported Fe catalysts for toluene oxidation: The effect of Fe on catalytic activity. Applied Clay Science, 2016, 132-133, 96-104.	5.2	47
20	The distinct effects of substitution and deposition of Ag in perovskite LaCoO3 on the thermally catalytic oxidation of toluene. Applied Surface Science, 2019, 489, 905-912.	6.1	47
21	Mechanisms on the morphology variation of hematite crystals by Al substitution: The modification of Fe and O reticular densities. Scientific Reports, 2016, 6, 35960.	3.3	43
22	The distinct effects of Mn substitution on the reactivity of magnetite in heterogeneous Fenton reaction and Pb(II) adsorption. Journal of Colloid and Interface Science, 2014, 426, 181-189.	9.4	40
23	Degradation of 2,4-dichlorophenol using palygorskite-supported bimetallic Fe/Ni nanocomposite as a heterogeneous catalyst. Applied Clay Science, 2019, 168, 276-286.	5.2	40
24	Facile surface improvement of LaCoO₃ perovskite with high activity and water resistance towards toluene oxidation: Ca substitution and citric acid etching. Catalysis Science and Technology, 2020, 10, 5829-5839.	4.1	40
25	Simultaneous adsorption of Cd(<scp>ii</scp>) and phosphate on Al₁₃ pillared montmorillonite. RSC Advances, 2015, 5, 77227-77234.	3.6	39
26	The variation of cationic microstructure in Mn-doped spinel ferrite during calcination and its effect on formaldehyde catalytic oxidation. Journal of Hazardous Materials, 2016, 306, 305-312.	12.4	38
27	Adsorption isotherm, mechanism, and geometry of Pb(II) on magnetites substituted with transition metals. Chemical Geology, 2017, 470, 132-140.	3.3	37
28	Ag₃PO₄ immobilized on hydroxy-metal pillared montmorillonite for the visible light driven degradation of acid red 18. Catalysis Science and Technology, 2016, 6, 4116-4123.	4.1	35
29	Effects of Al3+ doping on the structure and properties of goethite and its adsorption behavior towards phosphate. Journal of Environmental Sciences, 2016, 45, 18-27.	6.1	31
30	H₂S-Modified Natural Ilmenite: A Recyclable Magnetic Sorbent for Recovering Gaseous Elemental Mercury from Flue Gas. Industrial & Engineering Chemistry Research, 2017, 56, 10060-10068.	3.7	29
31	Catalytic degradation of Orange II in aqueous solution using diatomite-supported bimetallic Fe/Ni nanoparticles. RSC Advances, 2018, 8, 7687-7696.	3.6	29
32	<i>In Situ</i> Emergency Disposal of Liquid Mercury Leakage by Fe-Containing Sphalerite: Performance and Reaction Mechanism. Industrial & Engineering Chemistry Research, 2017, 56, 153-160.	3.7	28
33	Preparation and characterization of 3-aminopropyltriethoxysilane grafted montmorillonite and acid-activated montmorillonite. Science Bulletin, 2009, 54, 265-271.	9.0	27
34	Immobilization of facet-engineered Ag3PO4 on mesoporous Al2O3 for efficient industrial waste gas purification with indoor LED illumination. Applied Catalysis B: Environmental, 2019, 256, 117811.	20.2	27
35	The structural change of vermiculite during dehydration processes: A real-time in-situ XRD method. Applied Clay Science, 2019, 183, 105332.	5.2	26
36	The mechanism of defect induced hydroxylation on pyrite surfaces and implications for hydroxyl radical generation in prebiotic chemistry. Geochimica Et Cosmochimica Acta, 2019, 244, 163-172.	3.9	26

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37	Crystal habit-directed gold deposition on pyrite: Surface chemical interpretation of the pyrite morphology indicative of gold enrichment. Geochimica Et Cosmochimica Acta, 2019, 264, 191-204.	3.9	24
38	Competitive adsorption geometries for the arsenate As(V) and phosphate P(V) oxyanions on magnetite surfaces: Experiments and theory. American Mineralogist, 2021, 106, 374-388.	1.9	24
39	Environmental risk assessment of the potential â€œChemical Time Bombâ€• of ion-adsorption type rare earth elements in urban areas. Science of the Total Environment, 2022, 822, 153305.	8.0	24
40	Reduction removal of hexavalent chromium by zinc-substituted magnetite coupled with aqueous Fe(II) at neutral pH value. Journal of Colloid and Interface Science, 2017, 500, 20-29.	9.4	23
41	Effects of Mn average oxidation state on the oxidation behaviors of As(III) and Cr(III) by vernadite. Applied Geochemistry, 2018, 94, 35-45.	3.0	23
42	Magnetite-rutile symplectite derived from ilmenite-hematite solid solution in the Xinjie Fe-Ti oxide-bearing, mafic-ultramafic layered intrusion (SW China). American Mineralogist, 2015, 100, 2348-2351.	1.9	22
43	Morphology controllable syntheses of micro- and nano-iron pyrite mono- and poly-crystals: a review. RSC Advances, 2016, 6, 31988-31999.	3.6	22
44	BiVO4/Fe/Mt composite for visible-light-driven degradation of acid red 18. Applied Clay Science, 2016, 129, 27-34.	5.2	21
45	Sequestration of Gaseous Hg⁰ by Sphalerite with Fe Substitution: Performance, Mechanism, and Structureâ€"Activity Relationship. Journal of Physical Chemistry C, 2019, 123, 2828-2836.	3.1	21
46	Activity of manganese oxides supported on halloysite towards the thermal catalytic oxidation of formaldehyde: Constraint from the manganese precursor. Applied Clay Science, 2019, 182, 105280.	5.2	20
47	The influence of substituting metals (Ti, V, Cr, Mn, Co and Ni) on the thermal stability of magnetite. Journal of Thermal Analysis and Calorimetry, 2013, 111, 1317-1324.	3.6	19
48	The oxidation state and microstructural environment of transition metals (V, Co, and Ni) in magnetite: an XAFS study. Physics and Chemistry of Minerals, 2015, 42, 373-383.	0.8	16
49	Magnetite exsolution in ilmenite from the Fe-Ti oxide gabbro in the Xinjie intrusion (SW China) and sources of unusually strong remnant magnetization. American Mineralogist, 2016, 101, 2759-2767.	1.9	15
50	Fullerene modification of Ag₃PO₄ for the visible-light-driven degradation of acid red 18. RSC Advances, 2016, 6, 85962-85969.	3.6	15
51	Effects of Mn²⁺, Ni²⁺, and Cu²⁺ on the Formation and Transformation of Hydrosulfate Green Rust: Reaction Processes and Underlying Mechanisms. ACS Earth and Space Chemistry, 2019, 3, 519-530.	2.7	14
52	Remarkable effect of Co substitution in magnetite on the reduction removal of Cr(VI) coupled with aqueous Fe(II): Improvement mechanism and Cr fate. Science of the Total Environment, 2019, 656, 400-408.	8.0	14
53	Photoreductive Dissolution of Iron (Hydr)oxides and Its Geochemical Significance. ACS Earth and Space Chemistry, 2022, 6, 811-829.	2.7	14
54	The significant effect of photo-catalyzed redox reactions on the immobilization of chromium by hematite. Chemical Geology, 2019, 524, 228-236.	3.3	13

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55	Aggregative growth of quasi-octahedral iron pyrite mesocrystals in a polyol solution through oriented attachment. CrystEngComm, 2016, 18, 8823-8828.	2.6	12
56	Improvement of zinc substitution in the reactivity of magnetite coupled with aqueous Fe(II) towards nitrobenzene reduction. Journal of Colloid and Interface Science, 2018, 517, 104-112.	9.4	12
57	Effects of Zr substitution on soot combustion over cubic fluorite-structured nanoceria: Soot-ceria contact and interfacial oxygen evolution. Journal of Environmental Sciences, 2021, 101, 293-303.	6.1	12
58	Ferrihydrite Transformation Impacted by Adsorption and Structural Incorporation of Rare Earth Elements. ACS Earth and Space Chemistry, 2021, 5, 2768-2777.	2.7	9
59	Microorganisms Accelerate REE Mineralization in Supergene Environments. Applied and Environmental Microbiology, 2022, 88, .	3.1	9
60	Heterogeneous Reduction of 2-Chloronitrobenzene by Co-substituted Magnetite Coupled with Aqueous Fe²⁺: Performance, Factors, and Mechanism. ACS Earth and Space Chemistry, 2019, 3, 728-737.	2.7	7
61	Effect of electron structure on the catalytic activity of LaCoO₃ perovskite towards toluene oxidation. Chemical Communications, 2022, 58, 4731-4734.	4.1	7
62	Metal Substitution-Induced Reducing Capacity of Magnetite Coupled with Aqueous Fe(II). ACS Earth and Space Chemistry, 2020, 4, 905-911.	2.7	5
63	The Competitive Adsorption of Chromate and Sulfate on Ni-Substituted Magnetite Surfaces: An ATR-FTIR Study. Minerals (Basel, Switzerland), 2021, 11, 88.	2.0	4
64	Transformation of Ordered Albite into Kaolinite: Implication for the â€œBookletâ€•Morphology. ACS Earth and Space Chemistry, 2022, 6, 1133-1142.	2.7	3