

Fazhi Zhang

List of Publications by Year in descending order

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papers

4,582
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101543

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docs citations

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times ranked

5666
citing authors

#	ARTICLE	IF	CITATIONS
1	Corrosion Resistance of Superhydrophobic Layered Double Hydroxide Films on Aluminum. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 2466-2469.	13.8	481
2	Layered double hydroxide films: synthesis, properties and applications. <i>Chemical Communications</i> , 2010, 46, 5197.	4.1	407
3	One-Step Hydrothermal Crystallization of a Layered Double Hydroxide/Alumina Bilayer Film on Aluminum and Its Corrosion Resistance Properties. <i>Langmuir</i> , 2009, 25, 9894-9897.	3.5	171
4	Fabrication and photocatalytic performance of a $Zn_xCd_{1-x}S$ solid solution prepared by sulfuration of a single layered double hydroxide precursor. <i>Applied Catalysis B: Environmental</i> , 2011, 102, 147-156.	20.2	156
5	Layered Double Hydroxides as Catalytic Materials: Recent Development. <i>Catalysis Surveys From Asia</i> , 2008, 12, 253-265.	2.6	152
6	Well-dispersed bi-component-active $CoO/CoFe_2O_4$ nanocomposites with tunable performances as anode materials for lithium-ion batteries. <i>Chemical Communications</i> , 2012, 48, 410-412.	4.1	141
7	Sulfur-doped mesoporous carbon from surfactant-intercalated layered double hydroxide precursor as high-performance anode nanomaterials for both Li-ion and Na-ion batteries. <i>Carbon</i> , 2015, 93, 143-150.	10.3	135
8	Morphologies, Preparations and Applications of Layered Double Hydroxide Micro-/Nanostructures. <i>Materials</i> , 2010, 3, 5220-5235.	2.9	127
9	Hierarchically scaffolded CoP/CoP_2 nanoparticles: controllable synthesis and their application as a well-matched bifunctional electrocatalyst for overall water splitting. <i>Nanoscale</i> , 2017, 9, 5677-5685.	5.6	123
10	Crystal-Face-Selective Supporting of Gold Nanoparticles on Layered Double Hydroxide as Efficient Catalyst for Epoxidation of Styrene. <i>ACS Catalysis</i> , 2011, 1, 232-237.	11.2	122
11	Fabrication of oriented layered double hydroxide films by spin coating and their use in corrosion protection. <i>Chemical Engineering Journal</i> , 2008, 141, 362-367.	12.7	116
12	Transformation Mechanism of Magnesium and Aluminum Precursor Solution into Crystallites of Layered Double Hydroxide. <i>Chemistry of Materials</i> , 2012, 24, 81-87.	6.7	106
13	Fabrication and photocatalytic properties of novel $ZnO/ZnAl_2O_4$ nanocomposite with $ZnAl_2O_4$ dispersed inside ZnO network. <i>AIChE Journal</i> , 2012, 58, 573-582.	3.6	104
14	Synthesis of layered double hydroxide anionic clays intercalated by carboxylate anions. <i>Materials Chemistry and Physics</i> , 2004, 85, 207-214.	4.0	99
15	Facile preparation of pure CaAl-layered double hydroxides and their application as a hardening accelerator in concrete. <i>Chemical Engineering Journal</i> , 2009, 155, 881-885.	12.7	97
16	Highly crystalline activated layered double hydroxides as solid acid-base catalysts. <i>AIChE Journal</i> , 2007, 53, 932-940.	3.6	92
17	In situ growth of layered double hydroxide films on anodic aluminum oxide/aluminum and its catalytic feature in aldol condensation of acetone. <i>Chemical Engineering Science</i> , 2008, 63, 4055-4062.	3.8	89
18	Boosting Hydrogen Production by Electrooxidation of Urea over 3D Hierarchical Ni_4N/Cu_3N Nanotube Arrays. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13278-13285.	6.7	80

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19	Layered double hydroxides used as flame retardant for engineering plastic acrylonitrile- <i>butadiene</i> -styrene (ABS). <i>Journal of Physics and Chemistry of Solids</i> , 2012, 73, 1514-1517.	4.0	79
20	A <i>Z</i> -scheme ZnIn ₂ S ₄ /Nb ₂ O ₅ nanocomposite: constructed and used as an efficient bifunctional photocatalyst for H ₂ evolution and oxidation of 5-hydroxymethylfurfural. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 437-446.	6.0	71
21	Triple-Confined Well-Dispersed Biactive NiCo ₂ S ₄ /Ni _{0.96} S on Graphene Aerogel for High-Efficiency Lithium Storage. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 32853-32861.	8.0	66
22	Layered double hydroxide/eggshell membrane: An inorganic biocomposite membrane as an efficient adsorbent for Cr(VI) removal. <i>Chemical Engineering Journal</i> , 2011, 166, 81-87.	12.7	63
23	Comparison of the evolution and growth processes of films of M/Al-layered double hydroxides with M=Ni or Zn. <i>Chemical Engineering Science</i> , 2009, 64, 2617-2622.	3.8	57
24	Novel mesoporous ZnxCd1-xS nanoparticles as highly efficient photocatalysts. <i>Applied Catalysis B: Environmental</i> , 2012, 125, 11-20.	20.2	57
25	A General and Scalable Formulation of Pure CaAl-Layered Double Hydroxide via an Organic/Water Solution Route. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 6567-6572.	3.7	54
26	Preparation of layered double hydroxide films with different orientations on the opposite sides of a glass substrate by in situ hydrothermal crystallization. <i>Chemical Communications</i> , 2009, , 6836.	4.1	53
27	Exchange-biased NiFe ₂ O ₄ /NiO nanocomposites derived from NiFe-layered double hydroxides as a single precursor. <i>Nano Research</i> , 2010, 3, 200-210.	10.4	53
28	Preparation of Layered Double Hydroxide Microspheres by Spray Drying. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 5746-5750.	3.7	52
29	Eco-efficient synthesis route of carbon-encapsulated transition metal phosphide with improved cycle stability for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014, 2, 921-925.	10.3	52
30	Experimental and theoretical investigation into the elimination of organic pollutants from solution by layered double hydroxides. <i>Applied Catalysis B: Environmental</i> , 2013, 140-141, 241-248.	20.2	48
31	Preparation of macrospherical magnesia-rich magnesium aluminate spinel catalysts for methanolysis of soybean oil. <i>Chemical Engineering Science</i> , 2008, 63, 4306-4312.	3.8	45
32	An egg-shell type Ni/Al ₂ O ₃ catalyst derived from layered double hydroxides precursor for selective hydrogenation of pyrolysis gasoline. <i>Applied Catalysis A: General</i> , 2013, 468, 204-215.	4.3	41
33	Composition regulation of bimetallic RuPd catalysts supported on porous alumina spheres for selective hydrogenation. <i>Chemical Engineering Journal</i> , 2015, 259, 43-52.	12.7	40
34	Double-Confined Nickel Nanocatalyst Derived from Layered Double Hydroxide Precursor: Atomic Scale Insight into Microstructure Evolution. <i>Chemistry of Materials</i> , 2016, 28, 6296-6304.	6.7	39
35	Photodeposited Pd Nanoparticles with Disordered Structure for Phenylacetylene Semihydrogenation. <i>Scientific Reports</i> , 2017, 7, 42172.	3.3	39
36	Pd Nanoparticles on Layered Double Hydroxide as Efficient Catalysts for Solvent-Free Oxidation of Benzyl Alcohol Using Molecular Oxygen: Effect of Support Basic Properties. <i>Catalysis Letters</i> , 2013, 143, 206-218.	2.6	37

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37	Formation of photo- and thermo-stable layered double hydroxide films with photo-responsive wettability by intercalation of functionalized azobenzenes. <i>Chemical Engineering Science</i> , 2009, 64, 4350-4357.	3.8	36
38	Synthesis of Oriented Layered Double Hydroxide Thin Films on Sulfonated Polystyrene Substrates. <i>Chemistry Letters</i> , 2005, 34, 1610-1611.	1.3	35
39	Pd nanoparticles supported on hydrotalcite-modified porous alumina spheres as selective hydrogenation catalyst. <i>AIChE Journal</i> , 2012, 58, 1853-1861.	3.6	34
40	Self-Healing of Layered Double Hydroxide Film by Dissolution/Recrystallization for Corrosion Protection of Aluminum. <i>Journal of the Electrochemical Society</i> , 2013, 160, C480-C486.	2.9	34
41	Preparation of Nickel-Aluminum-Containing Layered Double Hydroxide Films by Secondary (Seeded) Growth Method and Their Electrochemical Properties. <i>Langmuir</i> , 2015, 31, 6704-6712.	3.5	34
42	Preparation of microspherical Zr^{4+} -zirconium phosphate catalysts for conversion of fatty acid methyl esters to monoethanolamides. <i>Journal of Colloid and Interface Science</i> , 2010, 349, 571-577.	9.4	31
43	<i>In Situ</i> Crystallized Zirconium Phenylphosphonate Films with Crystals Vertically to the Substrate and Their Hydrophobic, Dielectric, and Anticorrosion Properties. <i>Langmuir</i> , 2010, 26, 179-182.	3.5	30
44	CuS Nanosheet Arrays for Electrochemical CO_2 Reduction with Surface Reconstruction and the Effect on Selective Formation of Formate. <i>ACS Applied Energy Materials</i> , 2021, 4, 4376-4384.	5.1	30
45	Acid-Etched Co_3O_4 Nanoparticles on Nickel Foam: The Highly Reactive (311) Facet and Enriched Defects for Boosting Methanol Oxidation Electrocatalysis. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 29491-29499.	8.0	28
46	Solid-Solution Sulfides Derived from Tunable Layered Double Hydroxide Precursors/Graphene Aerogel for Pseudocapacitors and Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 42742-42750.	8.0	27
47	Ammonia Etching to Generate Oxygen Vacancies on CuMn_2O_4 for Highly Efficient Electrocatalytic Oxidation of 5-Hydroxymethylfurfural. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 11790-11797.	6.7	26
48	Enhanced catalytic performances of Ag nanoparticles supported on layered double hydroxide for styrene epoxidation. <i>Journal of Materials Science</i> , 2013, 48, 5899-5903.	3.7	25
49	Supported Nickel-Cobalt Bimetallic Catalysts Derived from Layered Double Hydroxide Precursors for Selective Hydrogenation of Pyrolysis Gasoline. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 15600-15610.	3.7	25
50	Synergistic lithium storage of a multi-component $\text{Co}_2\text{SnO}_4/\text{Co}_3\text{O}_4/\text{Al}_2\text{O}_3/\text{C}$ composite from a single-source precursor. <i>RSC Advances</i> , 2015, 5, 69932-69938.	3.6	25
51	Partially reduced Ni^{2+} , Fe^{3+} -layered double hydroxide for ethanol electrocatalysis. <i>Journal of Materials Science</i> , 2019, 54, 14515-14523.	3.7	24
52	The Principle of Introducing Halogen Ions Into Fe^{2+} -FeOOH: Controlling Electronic Structure and Electrochemical Performance. <i>Nano-Micro Letters</i> , 2020, 12, 107.	27.0	24
53	Engineered morphologies of layered double hydroxide nanoarchitected shell microspheres and their calcined products. <i>Chemical Engineering Science</i> , 2011, 66, 2157-2163.	3.8	23
54	Fabrication and anticorrosion properties of composite films of silica/layered double hydroxide. <i>Surface and Coatings Technology</i> , 2017, 326, 200-206.	4.8	22

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55	Construction of Ta-Cu ₇ S ₄ negative electrode for high-performance all-solid-state asymmetric supercapacitor. <i>Chemical Engineering Journal</i> , 2021, 403, 126471.	12.7	22
56	Multi-vacancy Co ₃ O ₄ on nickel foam synthesized via a one-step hydrothermal method for high-efficiency electrocatalytic benzyl alcohol oxidation. <i>Journal of Materials Science</i> , 2021, 56, 6689-6703.	3.7	22
57	Intercalation of perfluorobutane sulfonate into layered double hydroxides. <i>Applied Clay Science</i> , 2010, 48, 641-645.	5.2	21
58	Oriented CoFe ₂ O ₄ /CoO Nanocomposite Films from Layered Double Hydroxide Precursor Films by Calcination: Ferromagnetic Nanoparticles Embedded in an Antiferromagnetic Matrix for Beating the Superparamagnetic Limit. <i>Journal of Physical Chemistry C</i> , 2012, 116, 5288-5294.	3.1	19
59	Effects of Varying the Preparation Conditions on the Dielectric Constant of Mixed Metal Oxide Films Derived from Layered Double Hydroxide Precursor Films. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 10864-10869.	3.7	18
60	One-Pot Conversion of Dimethyl Terephthalate into 1,4-Cyclohexanedimethanol with Supported Trimetallic RuPtSn Catalysts. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 619-625.	3.7	18
61	Zirconium phenylphosphonate-anchored methyltrioxorhenium as novel heterogeneous catalyst for epoxidation of cyclohexene. <i>Journal of Colloid and Interface Science</i> , 2015, 437, 58-64.	9.4	18
62	Graphene-supported binary active Mn _{0.25} Co _{0.75} O solid solution derived from a CoMn-layered double hydroxide precursor for highly improved lithium storage. <i>RSC Advances</i> , 2016, 6, 19716-19722.	3.6	16
63	Flame-retardant and smoke-suppressing wood obtained by the <i>in situ</i> growth of a hydrotalcite-like compound on the inner surfaces of vessels. <i>New Journal of Chemistry</i> , 2019, 43, 16359-16366.	2.8	16
64	Polygonal CuS Nanoprisms Fabricated by Grinding Reaction for Advanced Quasi-Solid-State Asymmetry Supercapacitors. <i>ACS Applied Energy Materials</i> , 2021, 4, 12631-12640.	5.1	14
65	Nitrogen-doped carbon and high-content alumina containing bi-active cobalt oxides for efficient storage of lithium. <i>Journal of Colloid and Interface Science</i> , 2016, 462, 183-190.	9.4	12
66	Electric-Field-Assisted Enhanced Electron Transfer to Boost Supercapacitor Negative Electrode Performance for a Fabricated Fe ₇ S ₈ /FeOOH Nano-Heterostructure. <i>Advanced Electronic Materials</i> , 2020, 6, 1900953.	5.1	12
67	Heterostructure Ni ₃ S ₄ @MoS ₂ with interfacial electron redistribution used for enhancing hydrogen evolution. <i>RSC Advances</i> , 2021, 11, 19630-19638.	3.6	12
68	Facile fabrication of spherical architecture of Ni/Al layered double hydroxide based on <i>in situ</i> transformation mechanism. <i>AIChE Journal</i> , 2014, 60, 4027-4036.	3.6	11
69	Comparative analysis of the dynamic contact angles for two types of superhydrophobic layered double hydroxide film surfaces. <i>Chemical Engineering Science</i> , 2009, 64, 2957-2962.	3.8	9
70	Catalytic hydrogenation of a pyrolysis gasoline model feed over supported NiRu bimetallic catalysts with Ru content from 0.01 wt% to 0.1 wt%. <i>Applied Catalysis A: General</i> , 2018, 568, 183-190.	4.3	9
71	Activated MoS ₂ by Constructing Single Atomic Cation Vacancies for Accelerated Hydrogen Evolution Reaction. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 26846-26857.	8.0	9
72	Confined hexahedral nickel nanoparticle catalyst for catalytic hydrogenation reaction. <i>Journal of Materials Science</i> , 2018, 53, 4884-4896.	3.7	8

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73	Confined NiRu Bimetallic Catalysts for the Hydrogenation of Dimethyl Terephthalate to Dimethyl Cyclohexane-1,4-dicarboxylate. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 22702-22708.	3.7	8
74	The role of hydrotalcite-modified porous alumina spheres in bimetallic RuPd catalysts for selective hydrogenation. <i>Catalysis Communications</i> , 2014, 55, 19-23.	3.3	7
75	Iron-containing palygorskite clay as Fenton reagent for the catalytic degradation of phenol in water. <i>RSC Advances</i> , 2021, 11, 29537-29542.	3.6	7
76	An amorphous NiCuFeP@Cu ₃ P nanoarray for an efficient hydrogen evolution reaction. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 1446-1455.	6.0	7
77	Preparation of zirconium phenylphosphonate films with different crystallite orientations on polystyrene substrates by in situ hydrothermal crystallization. <i>Thin Solid Films</i> , 2011, 519, 3552-3556.	1.8	6
78	A hierarchical Nb ₂ O ₅ @NiFe-MMO rod array, fabricated and used as a structured photocatalyst. <i>RSC Advances</i> , 2019, 9, 6177-6183.	3.6	6
79	Enhanced improvement of soda saline-alkali soil by in-situ formation of super-stable mineralization structure based on CaFe layered double hydroxide and its large-scale application. <i>Chemosphere</i> , 2022, , 134543.	8.2	6
80	Heteroatom Modification of Heterostructured CuS/Mn ₃ O ₄ with Rich Defects for Solid-State Supercapacitors. <i>Energy & Fuels</i> , 2022, 36, 5433-5443.	5.1	5
81	A density functional theory study of gold clusters supported on layered double hydroxides. <i>Structural Chemistry</i> , 2014, 25, 883-893.	2.0	4
82	Cu ₉ S ₅ /Fe ₂ O ₃ Nanospheres as Advanced Negative Electrode Materials for High Performance Battery-like Hybrid Capacitors. <i>ACS Applied Energy Materials</i> , 2022, 5, 7016-7025.	5.1	2
83	Template-free fabrication of hierarchically meso/macroporous architecture of layered double hydroxide by dry gel conversion method. <i>Journal of Sol-Gel Science and Technology</i> , 2017, 83, 609-617.	2.4	1