Liang Chen

List of Publications by Year
in descending order

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Version: 2024-02-01

196 papers	16,374 citations	13068 68 h-index	17546 121 g-index
200 all docs	200 docs citations	200 times ranked	16978 citing authors

#	Article	IF	Citations
1	Electrochemical Ammonia Synthesis via Nitrogen Reduction Reaction on a MoS₂ Catalyst: Theoretical and Experimental Studies. Advanced Materials, 2018, 30, e1800191.	11.1	697
2	Ternary Fe_xCo_{1â€“x}P Nanowire Array as a Robust Hydrogen Evolution Reaction Electrocatalyst with Pt-like Activity: Experimental and Theoretical Insight. Nano Letters, 2016, 16, 6617-6621.	4.5	618
3	Enhanced Electrocatalysis for Energyâ€Efficient Hydrogen Production over CoP Catalyst with Nonelectroactive Zn as a Promoter. Advanced Energy Materials, 2017, 7, 1700020.	10.2	519
4	Boosted Electrocatalytic N₂ Reduction to NH₃ by Defectâ€Rich MoS₂ Nanoflower. Advanced Energy Materials, 2018, 8, 1801357.	10.2	482
5	Mn Doping of CoP Nanosheets Array: An Efficient Electrocatalyst for Hydrogen Evolution Reaction with Enhanced Activity at All pH Values. ACS Catalysis, 2017, 7, 98-102.	5.5	461
6	Chromium-ruthenium oxide solid solution electrocatalyst for highly efficient oxygen evolution reaction in acidic media. Nature Communications, 2019, 10, 162.	5.8	396
7	Assembling Ultrasmall Copperâ€Doped Ruthenium Oxide Nanocrystals into Hollow Porous Polyhedra: Highly Robust Electrocatalysts for Oxygen Evolution in Acidic Media. Advanced Materials, 2018, 30, e1801351.	11.1	353
8	Polysulfone and functionalized carbon nanotube mixed matrix membranes for gas separation: Theory and experiment. Journal of Membrane Science, 2007, 294, 147-158.	4.1	346
9	Selfâ€Standing CoP Nanosheets Array: A Threeâ€Dimensional Bifunctional Catalyst Electrode for Overall Water Splitting in both Neutral and Alkaline Media. ChemElectroChem, 2017, 4, 1840-1845.	1.7	345
10	Degradation of naphthalene with magnetic bio-char activate hydrogen peroxide: Synergism of bio-char and Feâ€“Mn binary oxides. Water Research, 2019, 160, 238-248.	5.3	335
11	Metalâ€Organic Frameworks for Carbon Dioxide Capture and Methane Storage. Advanced Energy Materials, 2017, 7, 1601296.	10.2	334
12	Electrochemical N₂fixation to NH₃under ambient conditions: Mo₂N nanorod as a highly efficient and selective catalyst. Chemical Communications, 2018, 54, 8474-8477.	2.2	287
13	Fabrication of novel magnetic MnFe2O4/bio-char composite and heterogeneous photo-Fenton degradation of tetracycline in near neutral pH. Chemosphere, 2019, 224, 910-921.	4.2	287
14	High-Performance Electrohydrogenation of N₂ to NH₃ Catalyzed by Multishelled Hollow Cr₂O₃ Microspheres under Ambient Conditions. ACS Catalysis, 2018, 8, 8540-8544.	5.5	280
15	Al-Doped CoP nanoarray: a durable water-splitting electrocatalyst with superhigh activity. Nanoscale, 2017, 9, 4793-4800.	2.8	268
16	Recent progress in single-atom electrocatalysts: concept, synthesis, and applications in clean energy conversion. Journal of Materials Chemistry A, 2018, 6, 14025-14042.	5.2	224
17	Polyethyleneimine Incorporated Metal-Organic Frameworks Adsorbent for Highly Selective CO2 Capture. Scientific Reports, 2013, 3, 1859.	1.6	223
18	Theoretical Screening of Single Transition Metal Atoms Embedded in MXene Defects as Superior Electrocatalyst of Nitrogen Reduction Reaction. Small Methods, 2019, 3, 1900337.	4.6	213

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19	Selective phosphidation: an effective strategy toward CoP/CeO₂ interface engineering for superior alkaline hydrogen evolution electrocatalysis. Journal of Materials Chemistry A, 2018, 6, 1985-1990.	5.2	212
20	Direct synthesis of amine-functionalized MIL-101(Cr) nanoparticles and application for CO2 capture. RSC Advances, 2012, 2, 6417.	1.7	209
21	In situ formation of a 3D core/shell structured Ni₃N@Niâ€“Bi nanosheet array: an efficient non-noble-metal bifunctional electrocatalyst toward full water splitting under near-neutral conditions. Journal of Materials Chemistry A, 2017, 5, 7806-7810.	5.2	196
22	Ultrafine Defective RuO₂ Electrocatayst Integrated on Carbon Cloth for Robust Water Oxidation in Acidic Media. Advanced Energy Materials, 2019, 9, 1901313.	10.2	182
23	Mechanistic Study on Hydrogen Spillover onto Graphitic Carbon Materials. Journal of Physical Chemistry C, 2007, 111, 18995-19000.	1.5	174
24	Amine-functionalized metalâ€“organic frameworks: structure, synthesis and applications. RSC Advances, 2016, 6, 32598-32614.	1.7	169
25	Fabricating Singleâ€Atom Catalysts from Chelating Metal in Open Frameworks. Advanced Materials, 2019, 31, e1808193.	11.1	153
26	Metal-support interaction boosted electrocatalysis of ultrasmall iridium nanoparticles supported on nitrogen doped graphene for highly efficient water electrolysis in acidic and alkaline media. Nano Energy, 2019, 62, 117-126.	8.2	151
27	Self-supported CoMoS4 nanosheet array as an efficient catalyst for hydrogen evolution reaction at neutral pH. Nano Research, 2018, 11, 2024-2033.	5.8	147
28	Preparation of water-compatible molecularly imprinted thiol-functionalized activated titanium dioxide: Selective adsorption and efficient photodegradation of 2, 4-dinitrophenol in aqueous solution. Journal of Hazardous Materials, 2018, 346, 113-123.	6.5	146
29	An exceptionally stable functionalized metalâ€“organic framework for lithium storage. Chemical Communications, 2015, 51, 697-699.	2.2	145
30	Defect-Induced Magnetism in Neutron Irradiated 6<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>H</mml:mi></mml:math>-SiC Single Crystals. Physical Review Letters, 2011, 106, 087205.	2.9	143
31	Recent Advance of Transitionâ€Metalâ€Based Layered Double Hydroxide Nanosheets: Synthesis, Properties, Modification, and Electrocatalytic Applications. Advanced Energy Materials, 2021, 11, 2002863.	10.2	137
32	A Ni(OH)₂â€“PtO₂ hybrid nanosheet array with ultralow Pt loading toward efficient and durable alkaline hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 1967-1970.	5.2	134
33	Hydrogen spillover in the context of hydrogen storage using solid-state materials. Energy and Environmental Science, 2008, 1, 338.	15.6	133
34	Ammonia Thermal Treatment toward Topological Defects in Porous Carbon for Enhanced Carbon Dioxide Electroreduction. Advanced Materials, 2020, 32, e2001300.	11.1	130
35	Hydrogen Absorption and Diffusion in Bulk Î±-MoO₃. Journal of Physical Chemistry C, 2009, 113, 11399-11407.	1.5	126
36	A Co-Doped Nanorod-like RuO2 Electrocatalyst with Abundant Oxygen Vacancies for Acidic Water Oxidation. IScience, 2020, 23, 100756.	1.9	125

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37	An amorphous FeMoS₄ nanorod array toward efficient hydrogen evolution electrocatalysis under neutral conditions. Chemical Communications, 2017, 53, 9000-9003.	2.2	124
38	Systematical review of interactions between microplastics and microorganisms in the soil environment. Journal of Hazardous Materials, 2021, 418, 126288.	6.5	123
39	Enhanced selective CO₂ adsorption on polyamine/MIL-101(Cr) composites. Journal of Materials Chemistry A, 2014, 2, 14658-14665.	5.2	121
40	Remarkable CO2/CH4 selectivity and CO2 adsorption capacity exhibited by polyamine-decorated metalâ€“organic framework adsorbents. Chemical Communications, 2013, 49, 6873.	2.2	120
41	Hexagonal boron nitride nanosheet for effective ambient N2 fixation to NH3. Nano Research, 2019, 12, 919-924.	5.8	120
42	High performance ZIF-8 molecular sieve membrane on hollow ceramic fiber via crystallizing-rubbing seed deposition. Chemical Engineering Journal, 2013, 220, 1-5.	6.6	118
43	Facile synthesis of Fe-MOF/RGO and its application as a high performance anode in lithium-ion batteries. RSC Advances, 2016, 6, 30763-30768.	1.7	118
44	A self-supported NiMoS₄ nanoarray as an efficient 3D cathode for the alkaline hydrogen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 16585-16589.	5.2	114
45	Atomically dispersed Lewis acid sites boost 2-electron oxygen reduction activity of carbon-based catalysts. Nature Communications, 2020, 11, 5478.	5.8	114
46	Effects of stand age, richness and density on productivity in subtropical forests in China. Journal of Ecology, 2019, 107, 2266-2277.	1.9	111
47	Adsorption of CF4on the Internal and External Surfaces of Opened Single-Walled Carbon Nanotubes:Â A Vibrational Spectroscopy Study. Journal of the American Chemical Society, 2003, 125, 5889-5896.	6.6	108
48	The stabilities and electronic structures of single-layer bismuth oxyhalides for photocatalytic water splitting. Physical Chemistry Chemical Physics, 2014, 16, 25854-25861.	1.3	105
49	Ultrasmall Ru₂P nanoparticles on graphene: a highly efficient hydrogen evolution reaction electrocatalyst in both acidic and alkaline media. Chemical Communications, 2018, 54, 3343-3346.	2.2	102
50	Graphdiyne: A Rising Star of Electrocatalyst Support for Energy Conversion. Advanced Energy Materials, 2020, 10, 2000177.	10.2	100
51	On the Mechanisms of Hydrogen Spillover in MoO₃. Journal of Physical Chemistry C, 2008, 112, 1755-1758.	1.5	98
52	Bimetallic Nickelâ€Substituted Cobaltâ€Borate Nanowire Array: An Earthâ€Abundant Water Oxidation Electrocatalyst with Superior Activity and Durability at Near Neutral pH. Small, 2017, 13, 1700394.	5.2	95
53	Nanoscale MOF/organosilica membranes on tubular ceramic substrates for highly selective gas separation. Energy and Environmental Science, 2017, 10, 1812-1819.	15.6	95
54	Trapped CO2in Carbon Nanotube Bundles. Journal of Physical Chemistry B, 2003, 107, 12930-12941.	1.2	94

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55	First-Principles Study of Microporous Magnets M-MOF-74 (M = Ni, Co, Fe, Mn): the Role of Metal Centers. Inorganic Chemistry, 2013, 52, 9356-9362.	1.9	94
56	Highly efficient synthesis of aromatic azos catalyzed by unsupported ultra-thin Pt nanowires. Chemical Communications, 2012, 48, 3445.	2.2	89
57	Theoretical Investigation on the Single Transition-Metal Atom-Decorated Defective MoS₂ for Electrocatalytic Ammonia Synthesis. ACS Applied Materials & Interfaces, 2019, 11, 36506-36514.	4.0	88
58	Methane reforming with carbon dioxide over mesoporous nickelâ€“alumina composite catalyst. Chemical Engineering Journal, 2013, 221, 25-31.	6.6	85
59	Recent Progress in Low Pt Content Electrocatalysts for Hydrogen Evolution Reaction. Advanced Materials Interfaces, 2020, 7, 2000396.	1.9	84
60	Tunable electronic and magnetic properties of Cr2Mâ€²â€‰=â€‰Ti or V; Tâ€‰=â€‰O, OH or F). Applied Physics Letters, 2016, 109, .	1.5	81
61	Linkage between tree species richness and soil microbial diversity improves phosphorus bioavailability. Functional Ecology, 2019, 33, 1549-1560.	1.7	81
62	Coexistence of piezoelectricity and magnetism in two-dimensional vanadium dichalcogenides. Physical Chemistry Chemical Physics, 2019, 21, 132-136.	1.3	80
63	Density Functional Study of Sequential H2 Dissociative Chemisorption on a Pt6 Cluster. Journal of Physical Chemistry C, 2007, 111, 5514-5519.	1.5	79
64	A highly permeable mixed matrix membrane containing CAU-1-NH2 for H2 and CO2 separation. Chemical Communications, 2013, 49, 8513.	2.2	78
65	Efficient Hydrogen Evolution Electrocatalysis at Alkaline pH by Interface Engineering of Ni₂Pâ€“CeO₂. Inorganic Chemistry, 2018, 57, 548-552.	1.9	78
66	Se-Ni(OH)2-shelled vertically oriented NiSe nanowires as a superior electrocatalyst toward urea oxidation reaction of fuel cells. Electrochimica Acta, 2017, 248, 243-249.	2.6	77
67	Kinetically Stabilized Pd@Pt Coreâ€“Shell Octahedral Nanoparticles with Thin Pt Layers for Enhanced Catalytic Hydrogenation Performance. ACS Catalysis, 2015, 5, 1335-1343.	5.5	72
68	Highly efficient N₂ fixation catalysts: transition-metal carbides M₂C (MXenes). Nanoscale, 2020, 12, 538-547.	2.8	71
69	Ultrathin Platinum Nanowire Catalysts for Direct Cï¿½N Coupling of Carbonyls with Aromatic Nitro Compounds under 1â€…Bar of Hydrogen. Chemistry - A European Journal, 2011, 17, 14283-14287.	1.7	70
70	Investigation of magnetic and electronic properties of transition metal doped Sc₂CT₂(T = O, OH or F) using a first principles study. Physical Chemistry Chemical Physics, 2016, 18, 12914-12919.	1.3	70
71	Atomically Dispersed Highâ€Density Alâ€“N₄ Sites in Porous Carbon for Efficient Photodriven CO₂ Cycloaddition. Advanced Materials, 2021, 33, e2103186.	11.1	69
72	Si/Ag/C Nanohybrids with in Situ Incorporation of Super-Small Silver Nanoparticles: Tiny Amount, Huge Impact. ACS Nano, 2018, 12, 861-875.	7.3	67

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73	Phase-selective synthesis of self-supported RuP films for efficient hydrogen evolution electrocatalysis in alkaline media. Nanoscale, 2018, 10, 13930-13935.	2.8	67
74	Ultrafine PtO₂ nanoparticles coupled with a Co(OH)F nanowire array for enhanced hydrogen evolution. Chemical Communications, 2018, 54, 810-813.	2.2	65
75	Seasonality distribution of the abundance and activity of nitrification and denitrification microorganisms in sediments of surface flow constructed wetlands planted with Myriophyllum elatinoides during swine wastewater treatment. Bioresource Technology, 2018, 248, 89-97.	4.8	61
76	A hollow ceramic fiber supported ZIF-8 membrane with enhanced gas separation performance prepared by hot dip-coating seeding. Journal of Materials Chemistry A, 2013, 1, 13046.	5.2	60
77	A first principles study of gas adsorption on charged CuBTC. Computational and Theoretical Chemistry, 2011, 976, 153-160.	1.1	58
78	High-Throughput Screening of a Single-Atom Alloy for Electroreduction of Dinitrogen to Ammonia. ACS Applied Materials & Interfaces, 2021, 13, 16336-16344.	4.0	58
79	Anchoring single-unit-cell defect-rich bismuth molybdate layers on ultrathin carbon nitride nanosheet with boosted charge transfer for efficient photocatalytic ciprofloxacin degradation. Journal of Colloid and Interface Science, 2020, 560, 701-713.	5.0	57
80	Heterogeneous single-cluster catalysts (Mn3, Fe3, Co3, and Mo3) supported on nitrogen-doped graphene for robust electrochemical nitrogen reduction. Journal of Energy Chemistry, 2021, 54, 612-619.	7.1	57
81	Strategy to improve gold nanoparticles loading efficiency on defect-free high silica ZSM-5 zeolite for the reduction of nitrophenols. Chemosphere, 2020, 256, 127083.	4.2	57
82	Colorimetric Response of Dithizone Product and Hexadecyl Trimethyl Ammonium Bromide Modified Gold Nanoparticle Dispersion to 10 Types of Heavy Metal Ions: Understanding the Involved Molecules from Experiment to Simulation. Langmuir, 2013, 29, 7591-7599.	1.6	56
83	Benzoate Anionâ€Intercalated Layered Cobalt Hydroxide Nanoarray: An Efficient Electrocatalyst for the Oxygen Evolution Reaction. ChemSusChem, 2017, 10, 4004-4008.	3.6	56
84	Enhancement of Mass Transfer for Facilitating Industrialâ€Level CO₂ Electroreduction on Atomic Niï¿¿N₄ Sites. Advanced Energy Materials, 2021, 11, 2102152.	10.2	56
85	Hydrogen dissociative chemisorption and desorption on saturated subnano palladium clusters (Pdn, n) Tj ETQq1 1 0.784314 rgBT /Ov	1.3	55
86	Metalâ€Organic Frameworksâ€Derived Porous In₂O₃ Hollow Nanorod for Highâ€Performance Ethanol Gas Sensor. ChemistrySelect, 2017, 2, 10918-10925.	0.7	55
87	Particle size studies to reveal crystallization mechanisms of the metal organic framework HKUST-1 during sonochemical synthesis. Ultrasonics Sonochemistry, 2017, 34, 365-370.	3.8	52
88	MXenes as Superexcellent Support for Confining Single Atom: Properties, Synthesis, and Electrocatalytic Applications. Small, 2021, 17, e2007113.	5.2	52
89	Soil Phosphorus Bioavailability and Recycling Increased with Stand Age in Chinese Fir Plantations. Ecosystems, 2020, 23, 973-988.	1.6	51
90	Organic matter stabilization in aggregates and density fractions in paddy soil depending on long-term fertilization: Tracing of pathways by 13C natural abundance. Soil Biology and Biochemistry, 2020, 149, 107931.	4.2	51

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91	An Enhanced Hydrogen Adsorption Enthalpy for Fluoride Intercalated Graphite Compounds. Journal of the American Chemical Society, 2009, 131, 17732-17733.	6.6	50
92	Recent Progress in the Theoretical Investigation of Electrocatalytic Reduction of CO₂. Advanced Theory and Simulations, 2018, 1, 1800004.	1.3	50
93	A NiCo₂O₄@Niâ€“Coâ€“Ci coreâ€“shell nanowire array as an efficient electrocatalyst for water oxidation at near-neutral pH. Chemical Communications, 2017, 53, 7812-7815.	2.2	49
94	Designed Synthesis of Functionalized Twoâ€Dimensional Metalâ€“Organic Frameworks with Preferential CO₂ Capture. ChemPlusChem, 2013, 78, 86-91.	1.3	48
95	Facile synthesis of MOFs with uncoordinated carboxyl groups for selective CO₂ capture via postsynthetic covalent modification. RSC Advances, 2017, 7, 3713-3719.	1.7	48
96	Selfâ€Templating Construction of Hollow Amorphous CoMoS₄ Nanotube Array towards Efficient Hydrogen Evolution Electrocatalysis at Neutral pH. Chemistry - A European Journal, 2017, 23, 12718-12723.	1.7	48
97	Recent Advances in Metalâ€Organic Frameworks and Their Derived Materials for Electrocatalytic Water Splitting. ChemElectroChem, 2020, 7, 1805-1824.	1.7	47
98	Stability and electronic properties of sulfur terminated two-dimensional early transition metal carbides and nitrides (MXene). Computational Materials Science, 2018, 153, 303-308.	1.4	46
99	Transitional Metal Catalytic Pyrite Cathode Enables Ultrastable Four-Electron-Based All-Solid-State Lithium Batteries. ACS Nano, 2019, 13, 9551-9560.	7.3	46
100	Forest conversion to plantations: A metaâ€analysis of consequences for soil and microbial properties and functions. Global Change Biology, 2021, 27, 5643-5656.	4.2	46
101	Multiple charge-carrier transfer channels of Z-scheme bismuth tungstate-based photocatalyst for tetracycline degradation: Transformation pathways and mechanism. Journal of Colloid and Interface Science, 2019, 555, 770-782.	5.0	45
102	Topotactic Conversion of Î±-Fe₂O₃ Nanowires into FeP as a Superior Fluorosensor for Nucleic Acid Detection: Insights from Experiment and Theory. Analytical Chemistry, 2017, 89, 2191-2195.	3.2	44
103	Threeâ€Dimensional Nickelâ€“Borate Nanosheets Array for Efficient Oxygen Evolution at Nearâ€Neutral pH. Chemistry - A European Journal, 2017, 23, 6959-6963.	1.7	43
104	Cr₃C₂ Nanoparticle-Embedded Carbon Nanofiber for Artificial Synthesis of NH₃ through N₂ Fixation under Ambient Conditions. ACS Applied Materials & Interfaces, 2019, 11, 35764-35769.	4.0	43
105	Stability in subtropical forests: The role of tree species diversity, stand structure, environmental and socioâ€economic conditions. Global Ecology and Biogeography, 2021, 30, 500-513.	2.7	43
106	Differential Permeability of Proton Isotopes through Graphene and Graphene Analogue Monolayer. Journal of Physical Chemistry Letters, 2016, 7, 3395-3400.	2.1	40
107	Tuning magnetic properties of Cr2M2C3T2 (M = Ti and V) using extensile strain. Computational Materials Science, 2017, 139, 313-319.	1.4	40
108	Oxidation of benzylic compounds by gold nanowires at 1 atm O₂. Chemical Communications, 2011, 47, 1303-1305.	2.2	39

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109	Co-based nanowire films as complementary hydrogen- and oxygen-evolving electrocatalysts in neutral electrolyte. Catalysis Science and Technology, 2017, 7, 2689-2694.	2.1	39
110	Study on biomolecules in extractives of Camellia oleifera fruit shell by GCâ€“MS. Saudi Journal of Biological Sciences, 2018, 25, 234-236.	1.8	39
111	Vacancy-mediated diffusion of carbon in cobalt and its influence on CO activation. Physical Chemistry Chemical Physics, 2010, 12, 7848.	1.3	37
112	Fe-Based Metal-Organic Framework and Its Derivatives for Reversible Lithium Storage. Journal of Materials Science and Technology, 2017, 33, 768-774.	5.6	37
113	Insights into High Conductivity of the Two-Dimensional Iodine-Oxidized sp²-c-COF. ACS Applied Materials & Interfaces, 2018, 10, 43595-43602.	4.0	37
114	Split N and P addition decreases straw mineralization and the priming effect of a paddy soil: a 100-day incubation experiment. Biology and Fertility of Soils, 2019, 55, 701-712.	2.3	37
115	Mg-Doping improves the performance of Ru-based electrocatalysts for the acidic oxygen evolution reaction. Chemical Communications, 2020, 56, 1749-1752.	2.2	36
116	The soil properties and their effects on plant diversity in different degrees of rocky desertification. Science of the Total Environment, 2020, 736, 139667.	3.9	36
117	Effects of stand age on tree biomass partitioning and allometric equations in Chinese fir (Cunninghamia lanceolata) plantations. European Journal of Forest Research, 2021, 140, 317-332.	1.1	36
118	A rapid and sensitive colorimetric assay method for Co2+ based on the modified Au nanoparticles (NPs): Understanding the involved interactions from experiments and simulations. Talanta, 2012, 94, 271-277.	2.9	35
119	Effects of Forest Restoration on Soil Carbon, Nitrogen, Phosphorus, and Their Stoichiometry in Hunan, Southern China. Sustainability, 2018, 10, 1874.	1.6	33
120	Influence of CO Poisoning on Hydrogen Chemisorption onto a Pt₆ Cluster. Journal of Physical Chemistry C, 2008, 112, 13937-13942.	1.5	32
121	Catalyzed activation of CO2 by a Lewis-base site in Wâ€“Cuâ€“BTC hybrid metal organic frameworks. Chemical Science, 2012, 3, 2708.	3.7	32
122	Synergistic effects of heteroatom-decorated MXene catalysts for CO reduction reactions. Nanoscale, 2020, 12, 15880-15887.	2.8	32
123	Formation of Odd-Numbered Clusters ofCO2Adsorbed on Nanotube Bundles. Physical Review Letters, 2005, 94, 125701.	2.9	31
124	Tight coupling of fungal community composition with soil quality in a Chinese fir plantation chronosequence. Land Degradation and Development, 2021, 32, 1164-1178.	1.8	31
125	Cobalt-Borate Nanoarray: An Efficient and Durable Electrocatalyst for Water Oxidation under Benign Conditions. ACS Applied Materials & Interfaces, 2017, 9, 15383-15387.	4.0	30
126	Rationally Designed High-Performance Spin Filter Based on Two-Dimensional Half-Metal Cr2NO2. Matter, 2019, 1, 1304-1315.	5.0	30

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127	Ligand Defect Density Regulation in Metalâ€“Organic Frameworks by Functional Group Engineering on Linkers. Nano Letters, 2022, 22, 838-845.	4.5	29
128	Contrasting patterns and drivers of soil fungal communities in subtropical deciduous and evergreen broadleaved forests. Applied Microbiology and Biotechnology, 2019, 103, 5421-5433.	1.7	28
129	Microwave-assisted synthesis of Zr-based metalâ€“organic framework (Zr-fum-fcu-MOF) for gas adsorption separation. Chemical Physics Letters, 2021, 780, 138906.	1.2	27
130	Displacement ofCO2by Xe in single-walled carbon nanotube bundles. Physical Review B, 2004, 70, .	1.1	26
131	Hydrogen adsorption and desorption on the Pt and Pd subnano clusters â€" a review. Frontiers of Physics in China, 2009, 4, 356-366.	1.0	26
132	A Comparative Study of Hydrogen Spillover on Pd and Pt Decorated MoO₃(010) Surfaces from First Principles. Journal of Physical Chemistry C, 2010, 114, 3052-3058.	1.5	26
133	Molecular simulation of CO₂, N₂and CH₄adsorption and separation in ZIF-78 and ZIF-79. Molecular Simulation, 2011, 37, 1131-1142.	0.9	26
134	In situ fabrication of ZnO@N-doped nanoporous carbon core-shell heterostructures with high photocatalytic and adsorption capacity by a calcination of ZnO@MOF strategy. Journal of Solid State Chemistry, 2017, 255, 108-114.	1.4	26
135	Irrigation management and phosphorus addition alter the abundance of carbon dioxide-fixing autotrophs in phosphorus-limited paddy soil. FEMS Microbiology Ecology, 2017, 93, .	1.3	26
136	High magnetoresistance in ultra-thin two-dimensional Cr-based MXenes. Nanoscale, 2018, 10, 19492-19497.	2.8	26
137	Design of thin and tubular MOFs-polymer mixed matrix membranes for highly selective separation of H2 and CO2. Separation and Purification Technology, 2019, 220, 197-205.	3.9	26
138	Double Atom Catalysts: Heteronuclear Transition Metal Dimer Anchored on Nitrogenâ€Doped Graphene as Superior Electrocatalyst for Nitrogen Reduction Reaction. Advanced Theory and Simulations, 2020, 3, 2000190.	1.3	26
139	Transition metal based heterogeneous electrocatalysts for the oxygen evolution reaction at near-neutral pH. Nanoscale, 2020, 12, 9924-9934.	2.8	25
140	Solâ€“gel auto-combustion synthesis of Niâ€“CexZr1â^'xO2 catalysts for carbon dioxide reforming of methane. RSC Advances, 2013, 3, 22285.	1.7	24
141	N-rich porous carbon with high CO₂ capture capacity derived from polyamine-incorporated metalâ€“organic framework materials. RSC Advances, 2016, 6, 53017-53024.	1.7	24
142	Visible/infrared light-driven high-efficiency CO₂ conversion into ethane based on a Bâ€“Co synergistic catalyst. Journal of Materials Chemistry A, 2020, 8, 22327-22334.	5.2	24
143	Fast and Stable Electrochemical Production of H₂O₂ by Electrode Architecture Engineering. ACS Sustainable Chemistry and Engineering, 2021, 9, 7120-7129.	3.2	24
144	Investigation on a Zr-based metalâ€“organic framework (MOF-801) for the high-performance separation of light alkanes. Chemical Communications, 2021, 57, 13008-13011.	2.2	23

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145	Fabrication of highly selective organosilica membrane for gas separation by mixing bis(triethoxysilyl)ethane with methyltriethoxysilane. Separation and Purification Technology, 2019, 222, 162-167.	3.9	22
146	First Principles Study of Adsorption and Dissociation of CO on W(111). Journal of Physical Chemistry B, 2006, 110, 1344-1349.	1.2	21
147	Integrating PtNi nanoparticles on NiFe layered double hydroxide nanosheets as a bifunctional catalyst for hybrid sodiumâ€“air batteries. Journal of Materials Chemistry A, 2020, 8, 16355-16365.	5.2	21
148	Spatiotemporal and species variations in prokaryotic communities associated with sediments from surface-flow constructed wetlands for treating swine wastewater. Chemosphere, 2017, 185, 1-10.	4.2	19
149	Does rice straw application reduce N2O emissions from surface flow constructed wetlands for swine wastewater treatment?. Chemosphere, 2019, 226, 273-281.	4.2	19
150	Origin of Rh and Pd agglomeration on the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>CeO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:ms Physical Review B, 2010, 82, .	1.1	18
151	Density functional study of hydrogen spillover on direct Pd-doped metal-organic frameworks IRMOF-1. International Journal of Hydrogen Energy, 2012, 37, 5081-5089.	3.8	18
152	Hybrid organosilica membrane with high CO2 permselectivity fabricated by a two-step hot coating method. Journal of Membrane Science, 2016, 506, 31-37.	4.1	18
153	MOFâ€Derived Zincâ€Doped Ruthenium Oxide Hollow Nanorods as Highly Active and Stable Electrocatalysts for Oxygen Evolution in Acidic Media. ChemNanoMat, 2021, 7, 117-121.	1.5	18
154	Ecosystem service multifunctionality of Chinese fir plantations differing in stand age and implications for sustainable management. Science of the Total Environment, 2021, 788, 147791.	3.9	18
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156	Species richness and functional-trait effects on fine root biomass along a subtropical tree diversity gradient. Plant and Soil, 2020, 446, 515-527.	1.8	16
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