

# Liang Chen

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

192  
papers

11,624  
citations

57  
h-index

103  
g-index

200  
ext. papers

14,015  
ext. citations

8.2  
avg. IF

6.78  
L-index

#	Paper	IF	Citations
192	Ligand Defect Density Regulation in Metal-Organic Frameworks by Functional Group Engineering on Linkers.. <i>Nano Letters</i> , <b>2022</b> ,	11.5	5
191	Photosynthetic and hydraulic traits influence forest resistance and resilience to drought stress across different biomes.. <i>Science of the Total Environment</i> , <b>2022</b> , 154517	10.2	4
190	Investigation on a Zr-based metal-organic framework (MOF-801) for the high-performance separation of light alkanes. <i>Chemical Communications</i> , <b>2021</b> , 57, 13008-13011	5.8	0
189	Tuning the magnetic properties of Fe <sub>3</sub> GeTe <sub>2</sub> by doping with 3d transition-metals. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2021</b> , 396, 127219	2.3	0
188	High-Throughput Screening of a Single-Atom Alloy for Electroreduction of Dinitrogen to Ammonia. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 16336-16344	9.5	13
187	MXenes as Superexcellent Support for Confining Single Atom: Properties, Synthesis, and Electrocatalytic Applications. <i>Small</i> , <b>2021</b> , 17, e2007113	11	13
186	Fast and Stable Electrochemical Production of H <sub>2</sub> O <sub>2</sub> by Electrode Architecture Engineering. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 7120-7129	8.3	8
185	Heterogeneous single-cluster catalysts (Mn <sub>3</sub> , Fe <sub>3</sub> , Co <sub>3</sub> , and Mo <sub>3</sub> ) supported on nitrogen-doped graphene for robust electrochemical nitrogen reduction. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 54, 612-619 <sup>12</sup>	12	19
184	Effects of stand age on tree biomass partitioning and allometric equations in Chinese fir ( <i>Cunninghamia lanceolata</i> ) plantations. <i>European Journal of Forest Research</i> , <b>2021</b> , 140, 317-332	2.7	9
183	Stability in subtropical forests: The role of tree species diversity, stand structure, environmental and socio-economic conditions. <i>Global Ecology and Biogeography</i> , <b>2021</b> , 30, 500-513	6.1	9
182	MOF-Derived Zinc-Doped Ruthenium Oxide Hollow Nanorods as Highly Active and Stable Electrocatalysts for Oxygen Evolution in Acidic Media. <i>ChemNanoMat</i> , <b>2021</b> , 7, 117-121	3.5	4
181	Tight coupling of fungal community composition with soil quality in a Chinese fir plantation chronosequence. <i>Land Degradation and Development</i> , <b>2021</b> , 32, 1164-1178	4.4	10
180	Recent advances on electrocatalytic fixation of nitrogen under ambient conditions. <i>Materials Chemistry Frontiers</i> , <b>2021</b> , 5, 5516-5533	7.8	4
179	Transformation from a non-radical to a radical pathway the amorphization of a Ni(OH) catalyst as a peroxymonosulfate activator for the ultrafast degradation of organic pollutants. <i>Nanoscale</i> , <b>2021</b> , 13, 7700-7708	7.7	0
178	Ultrathin Reduced Graphene Oxide/Organosilica Hybrid Membrane for Gas Separation. <i>Jacs Au</i> , <b>2021</b> , 1, 328-335		4
177	Recent Advance of Transition-Metal-Based Layered Double Hydroxide Nanosheets: Synthesis, Properties, Modification, and Electrocatalytic Applications. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2002863 <sup>21.8</sup>	21.8	43
176	Forest conversion to plantations: A meta-analysis of consequences for soil and microbial properties and functions. <i>Global Change Biology</i> , <b>2021</b> , 27, 5643-5656	11.4	6

175	Enhancement of Mass Transfer for Facilitating Industrial-Level CO <sub>2</sub> Electroreduction on Atomic Ni <sub>2</sub> N <sub>4</sub> Sites. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2102152	21.8	8
174	Systematical review of interactions between microplastics and microorganisms in the soil environment. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 418, 126288	12.8	21
173	Atomically Dispersed High-Density Al-N Sites in Porous Carbon for Efficient Photodriven CO Cycloaddition. <i>Advanced Materials</i> , <b>2021</b> , 33, e2103186	24	12
172	Ecosystem service multifunctionality of Chinese fir plantations differing in stand age and implications for sustainable management. <i>Science of the Total Environment</i> , <b>2021</b> , 788, 147791	10.2	2
171	Soil Fungal Communities and Enzyme Activities along Local Tree Species Diversity Gradient in Subtropical Evergreen Forest. <i>Forests</i> , <b>2021</b> , 12, 1321	2.8	
170	Microwave-assisted synthesis of Zr-based metal-organic framework (Zr-fum-fcu-MOF) for gas adsorption separation. <i>Chemical Physics Letters</i> , <b>2021</b> , 780, 138906	2.5	3
169	Enhanced catalytic performance of Pt by coupling with carbon defects. <i>Innovation(China)</i> , <b>2021</b> , 2, 1001617.8	17.8	2
168	Theoretical investigation of defective MXenes as potential electrocatalysts for CO reduction toward C products. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 12431-12438	3.6	2
167	Recent Progress in Low Pt Content Electrocatalysts for Hydrogen Evolution Reaction. <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 2000396	4.6	32
166	The soil properties and their effects on plant diversity in different degrees of rocky desertification. <i>Science of the Total Environment</i> , <b>2020</b> , 736, 139667	10.2	12
165	Ammonia Thermal Treatment toward Topological Defects in Porous Carbon for Enhanced Carbon Dioxide Electroreduction. <i>Advanced Materials</i> , <b>2020</b> , 32, e2001300	24	60
164	Effects of tree species richness on fine root production varied with stand density and soil nutrients in subtropical forests. <i>Science of the Total Environment</i> , <b>2020</b> , 733, 139344	10.2	6
163	Recent Advances in Metal-Organic Frameworks and Their Derived Materials for Electrocatalytic Water Splitting. <i>ChemElectroChem</i> , <b>2020</b> , 7, 1805-1824	4.3	27
162	Graphdiyne: A Rising Star of Electrocatalyst Support for Energy Conversion. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2000177	21.8	53
161	Transition metal based heterogeneous electrocatalysts for the oxygen evolution reaction at near-neutral pH. <i>Nanoscale</i> , <b>2020</b> , 12, 9924-9934	7.7	11
160	Strategy to improve gold nanoparticles loading efficiency on defect-free high silica ZSM-5 zeolite for the reduction of nitrophenols. <i>Chemosphere</i> , <b>2020</b> , 256, 127083	8.4	41
159	Mg-Doping improves the performance of Ru-based electrocatalysts for the acidic oxygen evolution reaction. <i>Chemical Communications</i> , <b>2020</b> , 56, 1749-1752	5.8	21
158	Anchoring single-unit-cell defect-rich bismuth molybdate layers on ultrathin carbon nitride nanosheet with boosted charge transfer for efficient photocatalytic ciprofloxacin degradation. <i>Journal of Colloid and Interface Science</i> , <b>2020</b> , 560, 701-713	9.3	42

157	Highly efficient N fixation catalysts: transition-metal carbides MC (MXenes). <i>Nanoscale</i> , <b>2020</b> , 12, 538-547.7	46
156	A Co-Doped Nanorod-like RuO Electro-catalyst with Abundant Oxygen Vacancies for Acidic Water Oxidation. <i>IScience</i> , <b>2020</b> , 23, 100756	6.1 61
155	Species richness and functional-trait effects on fine root biomass along a subtropical tree diversity gradient. <i>Plant and Soil</i> , <b>2020</b> , 446, 515-527	4.2 9
154	Visible/infrared light-driven high-efficiency CO <sub>2</sub> conversion into ethane based on a BiO synergistic catalyst. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 22327-22334	13 11
153	Organic matter stabilization in aggregates and density fractions in paddy soil depending on long-term fertilization: Tracing of pathways by <sup>13</sup> C natural abundance. <i>Soil Biology and Biochemistry</i> , <b>2020</b> , 149, 107931	7.5 19
152	Integrating PtNi nanoparticles on NiFe layered double hydroxide nanosheets as a bifunctional catalyst for hybrid sodium-air batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 16355-16365	13 13
151	Synergistic effects of heteroatom-decorated MXene catalysts for CO reduction reactions. <i>Nanoscale</i> , <b>2020</b> , 12, 15880-15887	7.7 13
150	Double Atom Catalysts: Heteronuclear Transition Metal Dimer Anchored on Nitrogen-Doped Graphene as Superior Electro-catalyst for Nitrogen Reduction Reaction. <i>Advanced Theory and Simulations</i> , <b>2020</b> , 3, 2000190	3.5 6
149	Effects of root exudate stoichiometry on CO <sub>2</sub> emission from paddy soil. <i>European Journal of Soil Biology</i> , <b>2020</b> , 101, 103247	2.9 3
148	Atomically dispersed Lewis acid sites boost 2-electron oxygen reduction activity of carbon-based catalysts. <i>Nature Communications</i> , <b>2020</b> , 11, 5478	17.4 38
147	Soil Phosphorus Bioavailability and Recycling Increased with Stand Age in Chinese Fir Plantations. <i>Ecosystems</i> , <b>2020</b> , 23, 973-988	3.9 19
146	Chromium-ruthenium oxide solid solution electrocatalyst for highly efficient oxygen evolution reaction in acidic media. <i>Nature Communications</i> , <b>2019</b> , 10, 162	17.4 201
145	Multiple charge-carrier transfer channels of Z-scheme bismuth tungstate-based photocatalyst for tetracycline degradation: Transformation pathways and mechanism. <i>Journal of Colloid and Interface Science</i> , <b>2019</b> , 555, 770-782	9.3 32
144	Theoretical Investigation on the Single Transition-Metal Atom-Decorated Defective MoS <sub>2</sub> for Electro-catalytic Ammonia Synthesis. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 36506-36514	9.5 49
143	CrC Nanoparticle-Embedded Carbon Nanofiber for Artificial Synthesis of NH <sub>3</sub> through N Fixation under Ambient Conditions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 35764-35769	9.5 30
142	Rationally Designed High-Performance Spin Filter Based on Two-Dimensional Half-Metal Cr <sub>2</sub> NO <sub>2</sub> . <i>Matter</i> , <b>2019</b> , 1, 1304-1315	12.7 13
141	Degradation of naphthalene with magnetic bio-char activate hydrogen peroxide: Synergism of bio-char and Fe-Mn binary oxides. <i>Water Research</i> , <b>2019</b> , 160, 238-248	12.5 183
140	Theoretical Screening of Single Transition Metal Atoms Embedded in MXene Defects as Superior Electro-catalyst of Nitrogen Reduction Reaction. <i>Small Methods</i> , <b>2019</b> , 3, 1900337	12.8 124

139	Metal-support interaction boosted electrocatalysis of ultrasmall iridium nanoparticles supported on nitrogen doped graphene for highly efficient water electrolysis in acidic and alkaline media. <i>Nano Energy</i> , <b>2019</b> , 62, 117-126	17.1	81
138	Contrasting patterns and drivers of soil fungal communities in subtropical deciduous and evergreen broadleaved forests. <i>Applied Microbiology and Biotechnology</i> , <b>2019</b> , 103, 5421-5433	5.7	12
137	Effects of stand age, richness and density on productivity in subtropical forests in China. <i>Journal of Ecology</i> , <b>2019</b> , 107, 2266-2277	6	52
136	Linkage between tree species richness and soil microbial diversity improves phosphorus bioavailability. <i>Functional Ecology</i> , <b>2019</b> , 33, 1549-1560	5.6	24
135	Fabrication of highly selective organosilica membrane for gas separation by mixing bis(triethoxysilyl)ethane with methyltriethoxysilane. <i>Separation and Purification Technology</i> , <b>2019</b> , 222, 162-167	8.3	10
134	Does rice straw application reduce NO emissions from surface flow constructed wetlands for swine wastewater treatment?. <i>Chemosphere</i> , <b>2019</b> , 226, 273-281	8.4	12
133	Hexagonal boron nitride nanosheet for effective ambient N <sub>2</sub> fixation to NH <sub>3</sub> . <i>Nano Research</i> , <b>2019</b> , 12, 919-924	10	88
132	Fabrication of novel magnetic MnFeO/bio-char composite and heterogeneous photo-Fenton degradation of tetracycline in near neutral pH. <i>Chemosphere</i> , <b>2019</b> , 224, 910-921	8.4	168
131	Fabricating Single-Atom Catalysts from Chelating Metal in Open Frameworks. <i>Advanced Materials</i> , <b>2019</b> , 31, e1808193	24	103
130	Design of thin and tubular MOFs-polymer mixed matrix membranes for highly selective separation of H <sub>2</sub> and CO <sub>2</sub> . <i>Separation and Purification Technology</i> , <b>2019</b> , 220, 197-205	8.3	15
129	The effect of Fe vacancies and Cu adhesion on the magnetic properties of FeGeTe. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 7588-7593	3.6	7
128	Transitional Metal Catalytic Pyrite Cathode Enables Ultrastable Four-Electron-Based All-Solid-State Lithium Batteries. <i>ACS Nano</i> , <b>2019</b> , 13, 9551-9560	16.7	28
127	Ultrafine Defective RuO <sub>2</sub> Electrocatalyst Integrated on Carbon Cloth for Robust Water Oxidation in Acidic Media. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901313	21.8	95
126	Split N and P addition decreases straw mineralization and the priming effect of a paddy soil: a 100-day incubation experiment. <i>Biology and Fertility of Soils</i> , <b>2019</b> , 55, 701-712	6.1	16
125	Electrochemical biosensor for amplified detection of Pb based on perfect match of reduced graphene oxide-gold nanoparticles and single-stranded DNAzyme. <i>Analytical and Bioanalytical Chemistry</i> , <b>2019</b> , 411, 7499-7509	4.4	13
124	A molecular-templating strategy to polyamine-incorporated porous organic polymers for unprecedented CO <sub>2</sub> capture and separation. <i>Science China Materials</i> , <b>2019</b> , 62, 448-454	7.1	9
123	Coexistence of piezoelectricity and magnetism in two-dimensional vanadium dichalcogenides. <i>Physical Chemistry Chemical Physics</i> , <b>2018</b> , 21, 132-136	3.6	53
122	Ultrasmall RuP nanoparticles on graphene: a highly efficient hydrogen evolution reaction electrocatalyst in both acidic and alkaline media. <i>Chemical Communications</i> , <b>2018</b> , 54, 3343-3346	5.8	77

121	Recent Progress in the Theoretical Investigation of Electrocatalytic Reduction of CO <sub>2</sub> . <i>Advanced Theory and Simulations</i> , <b>2018</b> , 1, 1800004	3.5	37
120	Efficient Hydrogen Evolution Electrocatalysis at Alkaline pH by Interface Engineering of NiP-CeO <sub>2</sub> . <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 548-552	5.1	63
119	Preparation of water-compatible molecularly imprinted thiol-functionalized activated titanium dioxide: Selective adsorption and efficient photodegradation of 2, 4-dinitrophenol in aqueous solution. <i>Journal of Hazardous Materials</i> , <b>2018</b> , 346, 113-123	12.8	120
118	Ultrafine PtO nanoparticles coupled with a Co(OH)F nanowire array for enhanced hydrogen evolution. <i>Chemical Communications</i> , <b>2018</b> , 54, 810-813	5.8	54
117	A Ni(OH) <sub>2</sub> /PtO <sub>2</sub> hybrid nanosheet array with ultralow Pt loading toward efficient and durable alkaline hydrogen evolution. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 1967-1970	13	119
116	Si/Ag/C Nanohybrids with in Situ Incorporation of Super-Small Silver Nanoparticles: Tiny Amount, Huge Impact. <i>ACS Nano</i> , <b>2018</b> , 12, 861-875	16.7	49
115	Selective phosphidation: an effective strategy toward CoP/CeO <sub>2</sub> interface engineering for superior alkaline hydrogen evolution electrocatalysis. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 1985-1990	13	151
114	Seasonality distribution of the abundance and activity of nitrification and denitrification microorganisms in sediments of surface flow constructed wetlands planted with <i>Myriophyllum elatinoides</i> during swine wastewater treatment. <i>Bioresource Technology</i> , <b>2018</b> , 248, 89-97	11	49
113	Study on biomolecules in extractives of fruit shell by GC-MS. <i>Saudi Journal of Biological Sciences</i> , <b>2018</b> , 25, 234-236	4	28
112	Self-supported CoMoS <sub>4</sub> nanosheet array as an efficient catalyst for hydrogen evolution reaction at neutral pH. <i>Nano Research</i> , <b>2018</b> , 11, 2024-2033	10	120
111	Critical pore dimensions for gases in a BTESE-derived organic-inorganic hybrid silica: A theoretical analysis. <i>Separation and Purification Technology</i> , <b>2018</b> , 191, 27-37	8.3	5
110	Stability and electronic properties of sulfur terminated two-dimensional early transition metal carbides and nitrides (MXene). <i>Computational Materials Science</i> , <b>2018</b> , 153, 303-308	3.2	27
109	Effects of Forest Restoration on Soil Carbon, Nitrogen, Phosphorus, and Their Stoichiometry in Hunan, Southern China. <i>Sustainability</i> , <b>2018</b> , 10, 1874	3.6	16
108	Phase-selective synthesis of self-supported RuP films for efficient hydrogen evolution electrocatalysis in alkaline media. <i>Nanoscale</i> , <b>2018</b> , 10, 13930-13935	7.7	47
107	High-Performance Electrohydrogenation of N <sub>2</sub> to NH <sub>3</sub> Catalyzed by Multishelled Hollow Cr <sub>2</sub> O <sub>3</sub> Microspheres under Ambient Conditions. <i>ACS Catalysis</i> , <b>2018</b> , 8, 8540-8544	13.1	218
106	Assembling Ultrasmall Copper-Doped Ruthenium Oxide Nanocrystals into Hollow Porous Polyhedra: Highly Robust Electrocatalysts for Oxygen Evolution in Acidic Media. <i>Advanced Materials</i> , <b>2018</b> , 30, e1801351	24	199
105	Insights into High Conductivity of the Two-Dimensional Iodine-Oxidized sp <sup>2</sup> -c-COF. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 43595-43602	9.5	17
104	High magnetoresistance in ultra-thin two-dimensional Cr-based MXenes. <i>Nanoscale</i> , <b>2018</b> , 10, 19492-19497	13	13



103	Ultrathin-Nanosheets-Composed CoSP Nanobrushes as an All-pH Highly Efficient Catalyst toward Hydrogen Evolution. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 15618-15623	8.3	11
102	Boosted Electrocatalytic N <sub>2</sub> Reduction to NH <sub>3</sub> by Defect-Rich MoS <sub>2</sub> Nanoflower. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1801357	21.8	371
101	Electrochemical Ammonia Synthesis via Nitrogen Reduction Reaction on a MoS Catalyst: Theoretical and Experimental Studies. <i>Advanced Materials</i> , <b>2018</b> , 30, e1800191	24	524
100	Recent progress in single-atom electrocatalysts: concept, synthesis, and applications in clean energy conversion. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 14025-14042	13	160
99	Electrochemical N fixation to NH under ambient conditions: MoN nanorod as a highly efficient and selective catalyst. <i>Chemical Communications</i> , <b>2018</b> , 54, 8474-8477	5.8	224
98	Particle size studies to reveal crystallization mechanisms of the metal organic framework HKUST-1 during sonochemical synthesis. <i>Ultrasonics Sonochemistry</i> , <b>2017</b> , 34, 365-370	8.9	32
97	Topotactic Conversion of $\beta$ -FeO Nanowires into FeP as a Superior Fluorosensor for Nucleic Acid Detection: Insights from Experiment and Theory. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 2191-2195	7.8	34
96	Al-Doped CoP nanoarray: a durable water-splitting electrocatalyst with superhigh activity. <i>Nanoscale</i> , <b>2017</b> , 9, 4793-4800	7.7	200
95	Facile synthesis of MOFs with uncoordinated carboxyl groups for selective CO <sub>2</sub> capture via postsynthetic covalent modification. <i>RSC Advances</i> , <b>2017</b> , 7, 3713-3719	3.7	34
94	In situ formation of a 3D core/shell structured Ni <sub>3</sub> N@NiBi nanosheet array: an efficient non-noble-metal bifunctional electrocatalyst toward full water splitting under near-neutral conditions. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 7806-7810	13	172
93	Cobalt-Borate Nanoarray: An Efficient and Durable Electrocatalyst for Water Oxidation under Benign Conditions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 15383-15387	9.5	26
92	Bimetallic Nickel-Substituted Cobalt-Borate Nanowire Array: An Earth-Abundant Water Oxidation Electrocatalyst with Superior Activity and Durability at Near Neutral pH. <i>Small</i> , <b>2017</b> , 13, 1700394	11	84
91	Self-Standing CoP Nanosheets Array: A Three-Dimensional Bifunctional Catalyst Electrode for Overall Water Splitting in both Neutral and Alkaline Media. <i>ChemElectroChem</i> , <b>2017</b> , 4, 1840-1845	4.3	322
90	Enhanced Electrocatalysis for Energy-Efficient Hydrogen Production over CoP Catalyst with Nonelectroactive Zn as a Promoter. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1700020	21.8	428
89	Metal-Organic Frameworks for Carbon Dioxide Capture and Methane Storage. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601296	21.8	260
88	Co-based nanowire films as complementary hydrogen- and oxygen-evolving electrocatalysts in neutral electrolyte. <i>Catalysis Science and Technology</i> , <b>2017</b> , 7, 2689-2694	5.5	34
87	A NiCoO@Ni-Co-Ci core-shell nanowire array as an efficient electrocatalyst for water oxidation at near-neutral pH. <i>Chemical Communications</i> , <b>2017</b> , 53, 7812-7815	5.8	40
86	Three-Dimensional Nickel-Borate Nanosheets Array for Efficient Oxygen Evolution at Near-Neutral pH. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 6959-6963	4.8	38

85	Pore-neck resistance to light gases in a microporous BTESE-derived silica: A comparison of membrane and xerogel powder. <i>Journal of Membrane Science</i> , <b>2017</b> , 531, 36-46	9.6	4
84	Formation of New Phases to Improve the Visible-Light Photocatalytic Activity of TiO <sub>2</sub> (B) Via Introducing Alien Elements. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 52-59	3.8	1
83	Benzoate Anion-Intercalated Layered Cobalt Hydroxide Nanoarray: An Efficient Electrocatalyst for the Oxygen Evolution Reaction. <i>ChemSusChem</i> , <b>2017</b> , 10, 4004-4008	8.3	42
82	Tuning magnetic properties of Cr <sub>2</sub> M <sub>2</sub> C <sub>3</sub> T <sub>2</sub> (M = Ti and V) using extensile strain. <i>Computational Materials Science</i> , <b>2017</b> , 139, 313-319	3.2	22
81	Two-dimensional semiconducting gold. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	10
80	An amorphous FeMoS nanorod array toward efficient hydrogen evolution electrocatalysis under neutral conditions. <i>Chemical Communications</i> , <b>2017</b> , 53, 9000-9003	5.8	108
79	A self-supported NiMoS <sub>4</sub> nanoarray as an efficient 3D cathode for the alkaline hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 16585-16589	13	94
78	Self-Templating Construction of Hollow Amorphous CoMoS Nanotube Array towards Efficient Hydrogen Evolution Electrocatalysis at Neutral pH. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 12718-12723	4.8	40
77	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. <i>Journal of Solid State Chemistry</i> , <b>2017</b> , 255, 108-114	3.3	23
76	Metal-Organic Frameworks-Derived Porous In <sub>2</sub> O <sub>3</sub> Hollow Nanorod for High-Performance Ethanol Gas Sensor. <i>ChemistrySelect</i> , <b>2017</b> , 2, 10918-10925	1.8	33
75	Nanoscale MOF/organosilica membranes on tubular ceramic substrates for highly selective gas separation. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 1812-1819	35.4	73
74	Se-Ni(OH) <sub>2</sub> -shelled vertically oriented NiSe nanowires as a superior electrocatalyst toward urea oxidation reaction of fuel cells. <i>Electrochimica Acta</i> , <b>2017</b> , 248, 243-249	6.7	43
73	Spatiotemporal and species variations in prokaryotic communities associated with sediments from surface-flow constructed wetlands for treating swine wastewater. <i>Chemosphere</i> , <b>2017</b> , 185, 1-10	8.4	17
72	Fe-Based Metal-Organic Framework and Its Derivatives for Reversible Lithium Storage. <i>Journal of Materials Science and Technology</i> , <b>2017</b> , 33, 768-774	9.1	23
71	Mn Doping of CoP Nanosheets Array: An Efficient Electrocatalyst for Hydrogen Evolution Reaction with Enhanced Activity at All pH Values. <i>ACS Catalysis</i> , <b>2017</b> , 7, 98-102	13.1	362
70	Irrigation management and phosphorus addition alter the abundance of carbon dioxide-fixing autotrophs in phosphorus-limited paddy soil. <i>FEMS Microbiology Ecology</i> , <b>2017</b> , 93,	4.3	14
69	Differential Permeability of Proton Isotopes through Graphene and Graphene Analogue Monolayer. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 3395-400	6.4	30
68	Monopolar Magnetic MOF-74 with Hybrid Node NiFe. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 26908-26914	3.9	5



67	N-rich porous carbon with high CO <sub>2</sub> capture capacity derived from polyamine-incorporated metal-organic framework materials. <i>RSC Advances</i> , <b>2016</b> , 6, 53017-53024	3.7	20
66	Facile synthesis of Fe-MOF/RGO and its application as a high performance anode in lithium-ion batteries. <i>RSC Advances</i> , <b>2016</b> , 6, 30763-30768	3.7	78
65	Amine-functionalized metal-organic frameworks: structure, synthesis and applications. <i>RSC Advances</i> , <b>2016</b> , 6, 32598-32614	3.7	117
64	Hybrid organosilica membrane with high CO <sub>2</sub> permselectivity fabricated by a two-step hot coating method. <i>Journal of Membrane Science</i> , <b>2016</b> , 506, 31-37	9.6	16
63	Tunable electronic and magnetic properties of Cr <sub>2</sub> M <sub>2</sub> C <sub>2</sub> T <sub>2</sub> (M = Ti or V; T = O, OH or F). <i>Applied Physics Letters</i> , <b>2016</b> , 109, 203109	3.4	55
62	Investigation of magnetic and electronic properties of transition metal doped Sc <sub>2</sub> C <sub>2</sub> T <sub>2</sub> (T = O, OH or F) using a first principles study. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 12914-9	3.6	53
61	Ternary FeCoP Nanowire Array as a Robust Hydrogen Evolution Reaction Electrocatalyst with Pt-like Activity: Experimental and Theoretical Insight. <i>Nano Letters</i> , <b>2016</b> , 16, 6617-6621	11.5	531
60	Formation and Stability of Low-Dimensional Structures for Group VIII B and IB Transition Metals: The Role of sd Hybridization. <i>Advanced Science</i> , <b>2016</b> , 3, 1500314	13.6	6
59	Kinetically Stabilized Pd@Pt Core-shell Octahedral Nanoparticles with Thin Pt Layers for Enhanced Catalytic Hydrogenation Performance. <i>ACS Catalysis</i> , <b>2015</b> , 5, 1335-1343	13.1	62
58	An exceptionally stable functionalized metal-organic framework for lithium storage. <i>Chemical Communications</i> , <b>2015</b> , 51, 697-9	5.8	117
57	The stabilities and electronic structures of single-layer bismuth oxyhalides for photocatalytic water splitting. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 25854-61	3.6	90
56	Enhanced selective CO <sub>2</sub> adsorption on polyamine/MIL-101(Cr) composites. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 14658-14665	13	98
55	Study on Superior Tree Selection Methods of Phoebe Hui in Hunan. <i>Advanced Materials Research</i> , <b>2014</b> , 1010-1012, 1198-1201	0.5	
54	First-principles study of microporous magnets M-MOF-74 (M = Ni, Co, Fe, Mn): the role of metal centers. <i>Inorganic Chemistry</i> , <b>2013</b> , 52, 9356-62	5.1	79
53	A highly permeable mixed matrix membrane containing CAU-1-NH <sub>2</sub> for H <sub>2</sub> and CO <sub>2</sub> separation. <i>Chemical Communications</i> , <b>2013</b> , 49, 8513-5	5.8	66
52	Sol-gel auto-combustion synthesis of Ni <sub>0.5</sub> Zr <sub>1.5</sub> O <sub>2</sub> catalysts for carbon dioxide reforming of methane. <i>RSC Advances</i> , <b>2013</b> , 3, 22285	3.7	20
51	Remarkable CO <sub>2</sub> /CH <sub>4</sub> selectivity and CO <sub>2</sub> adsorption capacity exhibited by polyamine-decorated metal-organic framework adsorbents. <i>Chemical Communications</i> , <b>2013</b> , 49, 6873-5	5.8	106
50	A hollow ceramic fiber supported ZIF-8 membrane with enhanced gas separation performance prepared by hot dip-coating seeding. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 13046	13	51

49	Designed Synthesis of Functionalized Two-Dimensional Metal-Organic Frameworks with Preferential CO <sub>2</sub> Capture. <i>ChemPlusChem</i> , <b>2013</b> , 78, 86-91	2.8	45
48	High performance ZIF-8 molecular sieve membrane on hollow ceramic fiber via crystallizing-rubbing seed deposition. <i>Chemical Engineering Journal</i> , <b>2013</b> , 220, 1-5	14.7	102
47	Methane reforming with carbon dioxide over mesoporous nickel-alumina composite catalyst. <i>Chemical Engineering Journal</i> , <b>2013</b> , 221, 25-31	14.7	78
46	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. <i>Langmuir</i> , <b>2013</b> , 29, 7591-9	4	53
45	Synthesis of thin amine-functionalized MIL-53 membrane with high hydrogen permeability. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 10795-10801	6.7	9
44	Polyethyleneimine incorporated metal-organic frameworks adsorbent for highly selective CO <sub>2</sub> capture. <i>Scientific Reports</i> , <b>2013</b> , 3, 1859	4.9	196
43	Facile synthesis of aluminum-based metal-organic frameworks with different morphologies and structures through an OH(-)-assisted method. <i>Chemistry - an Asian Journal</i> , <b>2013</b> , 8, 1873-8	4.5	11
42	Surface-termination-dependent Pd bonding and aggregation of nanoparticles on LaFeO <sub>3</sub> (001). <i>Journal of Chemical Physics</i> , <b>2013</b> , 138, 144705	3.9	9
41	Catalytic Oxygen Activation on Helical Gold Nanowires. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 11189-11194	3.8	12
40	Direct synthesis of amine-functionalized MIL-101(Cr) nanoparticles and application for CO <sub>2</sub> capture. <i>RSC Advances</i> , <b>2012</b> , 2, 6417	3.7	177
39	Highly efficient synthesis of aromatic azos catalyzed by unsupported ultra-thin Pt nanowires. <i>Chemical Communications</i> , <b>2012</b> , 48, 3445-7	5.8	81
38	Understanding the chiral selectivity of gold nanotubes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2012</b> , 376, 2707-2711	2.3	6
37	A rapid and sensitive colorimetric assay method for Co <sup>2+</sup> based on the modified Au nanoparticles (NPs): understanding the involved interactions from experiments and simulations. <i>Talanta</i> , <b>2012</b> , 94, 271-7	6.2	32
36	Catalyzed activation of CO <sub>2</sub> by a Lewis-base site in UiO-66 hybrid metal organic frameworks. <i>Chemical Science</i> , <b>2012</b> , 3, 2708	9.4	26
35	Density functional study of hydrogen spillover on direct Pd-doped metal-organic frameworks IRMOF-1. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 5081-5089	6.7	17
34	Spin-flip phenomena at the Co/graphene/Co interfaces. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 133111	3.4	11
33	A first principles study of gas adsorption on charged CuBTC. <i>Computational and Theoretical Chemistry</i> , <b>2011</b> , 976, 153-160	2	48
32	First principles study of oxygen adsorption and dissociation on the Pd/Au surface alloys. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 7112-20	3.6	8

31	Force fields for metallic clusters and nanoparticles. <i>Journal of Computational Chemistry</i> , <b>2011</b> , 32, 1711-205	3.5	8
30	Ultrathin platinum nanowire catalysts for direct C-N coupling of carbonyls with aromatic nitro compounds under 1 bar of hydrogen. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 14283-7	4.8	63
29	The isomeric effect on the adjacent Si dimer didechlorination of trans and iso-dichloroethylene on Si(100)-2 $\times$ 1. <i>Physical Chemistry Chemical Physics</i> , <b>2011</b> , 13, 7121-8	3.6	2
28	Oxidation of benzylic compounds by gold nanowires at 1 atm O <sub>2</sub> . <i>Chemical Communications</i> , <b>2011</b> , 47, 1303-5	5.8	37
27	Defect-induced magnetism in neutron irradiated 6H-SiC single crystals. <i>Physical Review Letters</i> , <b>2011</b> , 106, 087205	7.4	128
26	Molecular simulation of CO <sub>2</sub> , N <sub>2</sub> and CH <sub>4</sub> adsorption and separation in ZIF-78 and ZIF-79. <i>Molecular Simulation</i> , <b>2011</b> , 37, 1131-1142	2	23
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24	A first-principles study on the adhesion of Pt layers to NiO(100) and IrO <sub>2</sub> (110) surfaces. <i>Journal of Physics Condensed Matter</i> , <b>2010</b> , 22, 015003	1.8	2
23	Origin of Rh and Pd agglomeration on the CeO <sub>2</sub> (111) surface. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	17
22	Vacancy-mediated diffusion of carbon in cobalt and its influence on CO activation. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 7848-55	3.6	34
21	A Comparative Study of Hydrogen Spillover on Pd and Pt Decorated MoO <sub>3</sub> (010) Surfaces from First Principles. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 3052-3058	3.8	23
20	Hydrogen adsorption and desorption on the Pt and Pd subnano clusters [a review]. <i>Frontiers of Physics in China</i> , <b>2009</b> , 4, 356-366		23
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18	Hydrogen Absorption and Diffusion in Bulk $\beta$ -MoO <sub>3</sub> . <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 11399-11407	3.8	104
17	A Dominant Dissociation Mode of cis-Dichloroethylene on Si(100)2 $\times$ 1: Adjacent Si Dimer Double Dechlorination. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 21797-21804	3.8	3
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12	Influence of CO Poisoning on Hydrogen Chemisorption onto a Pt <sub>6</sub> Cluster. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 13937-13942	3.8	30
11	Hydrogen spillover in the context of hydrogen storage using solid-state materials. <i>Energy and Environmental Science</i> , <b>2008</b> , 1, 338	35.4	116
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9	Polysulfone and functionalized carbon nanotube mixed matrix membranes for gas separation: Theory and experiment. <i>Journal of Membrane Science</i> , <b>2007</b> , 294, 147-158	9.6	310
8	Mechanistic Study on Hydrogen Spillover onto Graphitic Carbon Materials. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 18995-19000	3.8	156
7	First principles study of adsorption and dissociation of CO on W(111). <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 1344-9	3.4	21
6	Formation of odd-numbered clusters of CO <sub>2</sub> adsorbed on nanotube bundles. <i>Physical Review Letters</i> , <b>2005</b> , 94, 125701	7.4	28
5	Displacement of CO <sub>2</sub> by Xe in single-walled carbon nanotube bundles. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	24
4	Trapped CO <sub>2</sub> in Carbon Nanotube Bundles. <i>Journal of Physical Chemistry B</i> , <b>2003</b> , 107, 12930-12941	3.4	91
3	Adsorption of CF <sub>4</sub> on the internal and external surfaces of opened single-walled carbon nanotubes: a vibrational spectroscopy study. <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 5889-96	16.4	103
2	Understanding the CO <sub>2</sub> /CH <sub>4</sub> /N <sub>2</sub> Separation Performance of Nanoporous Amorphous N-Doped Carbon Combined Hybrid Monte Carlo with Machine Learning. <i>Advanced Theory and Simulations</i> , 2100378 <sup>3.5</sup>		0
1	Ultra-small RuO <sub>2</sub> nanoparticles supported on carbon cloth as a high-performance pseudocapacitive electrode. <i>Advanced Composites and Hybrid Materials</i> , 1	8.7	0