

# Liang Chen

## List of Publications by Citations

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192  
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57  
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103  
g-index

200  
ext. papers

14,015  
ext. citations

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6.78  
L-index

#	Paper	IF	Citations
192	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
191	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
190	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
189	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
188	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
187	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
186	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
185	Metal-Organic Frameworks for Carbon Dioxide Capture and Methane Storage. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601296	21.8	260
184	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
183	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
182	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
181	Al-Doped CoP nanoarray: a durable water-splitting electrocatalyst with superhigh activity. <i>Nanoscale</i> , <b>2017</b> , 9, 4793-4800	7.7	200
180	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
179	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
178	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
177	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
176	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

175	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
174	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
173	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
172	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
171	Defect-induced magnetism in neutron irradiated 6H-SiC single crystals. <i>Physical Review Letters</i> , <b>2011</b> , 106, 087205	7.4	128
170	Theoretical Screening of Single Transition Metal Atoms Embedded in MXene Defects as Superior Electrocatalyst of Nitrogen Reduction Reaction. <i>Small Methods</i> , <b>2019</b> , 3, 1900337	12.8	124
169	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
168	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
167	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
166	An exceptionally stable functionalized metal-organic framework for lithium storage. <i>Chemical Communications</i> , <b>2015</b> , 51, 697-9	5.8	117
165	Amine-functionalized metal-organic frameworks: structure, synthesis and applications. <i>RSC Advances</i> , <b>2016</b> , 6, 32598-32614	3.7	117
164	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
163	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
162	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
161	Hydrogen Absorption and Diffusion in Bulk FeMoO <sub>3</sub> . <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 11399-11407	3.7	104
160	Fabricating Single-Atom Catalysts from Chelating Metal in Open Frameworks. <i>Advanced Materials</i> , <b>2019</b> , 31, e1808193	24	103
159	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
158	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

157	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
156	Ultrafine Defective RuO <sub>2</sub> Electrocatayst Integrated on Carbon Cloth for Robust Water Oxidation in Acidic Media. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901313	21.8	95
155	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
154	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
153	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
152	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
151	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
150	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
149	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
148	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
147	On the Mechanisms of Hydrogen Spillover in MoO <sub>3</sub> . <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 1755-1758	3.8	79
146	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
145	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
144	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
143	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
142	Density Functional Study of Sequential H <sub>2</sub> Dissociative Chemisorption on a Pt <sub>6</sub> Cluster. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 5514-5519	3.8	73
141	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
140	Efficient Hydrogen Evolution Electrocatalysis at Alkaline pH by Interface Engineering of NiP-CeO. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 548-552	5.1	63

139	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
138	Kinetically Stabilized Pd@Pt CoreShell Octahedral Nanoparticles with Thin Pt Layers for Enhanced Catalytic Hydrogenation Performance. <i>ACS Catalysis</i> , <b>2015</b> , 5, 1335-1343	13.1	62
137	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
136	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
135	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
134	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
133	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
132	Graphdiyne: A Rising Star of Electro catalyst Support for Energy Conversion. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2000177	21.8	53
131	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
130	Investigation of magnetic and electronic properties of transition metal doped Sc <sub>2</sub> CT <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
129	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
128	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
127	Theoretical Investigation on the Single Transition-Metal Atom-Decorated Defective MoS for Electro catalytic Ammonia Synthesis. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 36506-36514	9.5	49
126	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
125	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
124	A first principles study of gas adsorption on charged CuBTC. <i>Computational and Theoretical Chemistry</i> , <b>2011</b> , 976, 153-160	2	48
123	Phase-selective synthesis of self-supported RuP films for efficient hydrogen evolution electro catalysis in alkaline media. <i>Nanoscale</i> , <b>2018</b> , 10, 13930-13935	7.7	47
122	Hydrogen dissociative chemisorption and desorption on saturated subnano palladium clusters (Pd <sub>n</sub> , n = 2-9). <i>Physical Chemistry Chemical Physics</i> , <b>2008</b> , 10, 5445-51	3.6	47

121	Highly efficient N fixation catalysts: transition-metal carbides MC (MXenes). <i>Nanoscale</i> , <b>2020</b> , 12, 538-547.7	46
120	Designed Synthesis of Functionalized Two-Dimensional MetalOrganic Frameworks with Preferential CO <sub>2</sub> Capture. <i>ChemPlusChem</i> , <b>2013</b> , 78, 86-91	2.8 45
119	An enhanced hydrogen adsorption enthalpy for fluoride intercalated graphite compounds. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 17732-3	16.4 45
118	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
117	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	31.8 43
116	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
115	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
114	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
113	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
112	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
111	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
110	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
109	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
108	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
107	Topotactic Conversion of 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
106	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
105	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
104	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

103	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
102	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
101	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
100	Recent Progress in Low Pt Content Electrocatalysts for Hydrogen Evolution Reaction. <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 2000396	4.6	32
99	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
98	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
97	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
96	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
95	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
94	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
93	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
92	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
91	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
90	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
89	Catalyzed activation of CO <sub>2</sub> by a Lewis-base site in W <sub>6</sub> U <sub>6</sub> BTc hybrid metal organic frameworks. <i>Chemical Science</i> , <b>2012</b> , 3, 2708	9.4	26
88	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
87	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
86	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

85	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
84	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
83	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
82	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
81	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
80	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
79	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
78	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
77	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
76	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
75	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
74	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
73	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>		19
72	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
71	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
70	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
69	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
68	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



67	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
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60	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
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41	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
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