

# Zai-Lai Xie

## 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.

77  
papers

2,475  
citations

26  
h-index

48  
g-index

78  
ext. papers

3,077  
ext. citations

7.4  
avg, IF

5.77  
L-index

#	Paper	IF	Citations
77	Role of carbon quantum dots on Nickel titanate to promote water oxidation reaction under visible light illumination. <i>Journal of Colloid and Interface Science</i> , <b>2022</b> , 607, 203-209	9.3	4
76	Identification of active sites of B/N co-doped nanocarbons in selective oxidation of benzyl alcohol. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> ,	9.3	4
75	Photo-fluorination of nanodiamonds catalyzing oxidative dehydrogenation reaction of ethylbenzene. <i>Nature Communications</i> , <b>2021</b> , 12, 6542	17.4	3
74	A Generalized Approach to Adjust the Catalytic Activity of Borocarbonitride for Alkane Oxidative Dehydrogenation Reactions. <i>Journal of Catalysis</i> , <b>2021</b> ,	7.3	1
73	New insight into structural transformations of borocarbonitride in oxidative dehydrogenation of propane. <i>Applied Catalysis A: General</i> , <b>2021</b> , 628, 118402	5.1	1
72	Boosting the HER electrocatalytic activity over RuCu-supported carbon nanosheets as efficient pH-independent catalysts. <i>FlatChem</i> , <b>2021</b> , 30, 100302	5.1	1
71	Propane dehydrogenation catalyzed by single Lewis acid site in Sn-Beta zeolite. <i>Journal of Catalysis</i> , <b>2021</b> , 395, 155-167	7.3	21
70	Spatial Sites Separation Strategy to Fabricate Atomically Isolated Nickel Catalysts for Efficient CO <sub>2</sub> Electroreduction <b>2021</b> , 3, 454-461		20
69	Coupled porosity and heterojunction engineering: MOF-derived porous CoO embedded on TiO nanotube arrays for water remediation. <i>Chemosphere</i> , <b>2021</b> , 274, 129799	8.4	1
68	Recent progress of carbon-based metal-free materials in thermal-driven catalysis. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 58, 318-335	12	8
67	Two dimensional nanocarbons from biomass and biological molecules: Synthetic strategies and energy related applications. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 54, 795-814	12	21
66	Fluorinated poly(fluorenyl ether)s with linear multi-cationic side chains for vanadium redox flow batteries. <i>Science China Materials</i> , <b>2021</b> , 64, 349-361	7.1	6
65	Single-atom cobalt-fused biomolecule-derived nitrogen-doped carbon nanosheets for selective oxidation reactions. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 14276-14283	3.6	1
64	Microcrystalline cellulose derived hierarchically porous nanocarbons via a template-free method for high performance supercapacitors. <i>Diamond and Related Materials</i> , <b>2021</b> , 117, 108462	3.5	1
63	Self-template synthesis of hollow Fe-doped CoP prisms with enhanced oxygen evolution reaction activity. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 62, 415-422	12	12
62	Nucleobase derived boron and nitrogen co-doped carbon nanosheets as efficient catalysts for selective oxidation and reduction reactions. <i>Nanoscale</i> , <b>2020</b> , 12, 7797-7803	7.7	9
61	Methanol conversion on borocarbonitride catalysts: Identification and quantification of active sites. <i>Science Advances</i> , <b>2020</b> , 6, eaba5778	14.3	20

60	Template-free synthesis of graphene-like carbons as efficient carbocatalysts for selective oxidation of alkanes. <i>Green Chemistry</i> , <b>2020</b> , 22, 1291-1300	10	18
59	Chloromethylation and Quaternization of Poly(aryl ether ketone sulfone)s with Clustered Electron-rich Phenyl Groups for Anion Exchange Membranes. <i>Chinese Journal of Polymer Science (English Edition)</i> , <b>2020</b> , 38, 278-287	3.5	8
58	Building microsphere/nanosheet structures in N-doped carbon to improve its performance in the oxygen reduction reaction and vanadium redox flow batteries. <i>Sustainable Energy and Fuels</i> , <b>2020</b> , 4, 559-570	5.8	7
57	Propane Dehydrogenation over Pt Clusters Localized at the Sn Single-Site in Zeolite Framework. <i>ACS Catalysis</i> , <b>2020</b> , 10, 818-828	13.1	67
56	The role of carbon dots - derived underlayer in hematite photoanodes. <i>Nanoscale</i> , <b>2020</b> , 12, 20220-20229	7	2
55	Highly Selective CO Electroreduction to CH <sub>4</sub> by In Situ Generated Cu <sub>2</sub> O Single-Type Sites on a Conductive MOF: Stabilizing Key Intermediates with Hydrogen Bonding. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 23641-23648	16.4	117
54	Luminescent Ionogels with Excellent Transparency, High Mechanical Strength, and High Conductivity. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	2
53	Porous carbon nanosheets from biological nucleobase precursor as efficient pH-independent oxygen reduction electrocatalyst. <i>Carbon</i> , <b>2020</b> , 156, 179-186	10.4	26
52	Glucose-derived hydrothermal carbons as energy storage booster for vanadium redox flow batteries. <i>Journal of Energy Chemistry</i> , <b>2020</b> , 45, 31-39	12	13
51	Pd-Supported N/S-Codoped Graphene-Like Carbons Boost Quinoline Hydrogenation Activity. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 11369-11376	8.3	22
50	Copper Sulfides: Small-Sized CuS Nanoparticles/N, S Co-Doped rGO Composites as the Anode Materials for High-Performance Lithium-Ion Batteries (Adv. Mater. Interfaces 6/2019). <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1970040	4.6	
49	Small-Sized CuS Nanoparticles/N, S Co-Doped rGO Composites as the Anode Materials for High-Performance Lithium-Ion Batteries. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1900038	4.6	21
48	Biomass Derived Graphene-Like Carbons for Electrocatalytic Oxygen Reduction Reaction. <i>ChemNanoMat</i> , <b>2019</b> , 5, 682-689	3.5	27
47	Three-dimensional mesoporous graphene-like carbons derived from a biomolecule exhibiting high-performance oxygen reduction activity. <i>Sustainable Energy and Fuels</i> , <b>2019</b> , 3, 2809-2818	5.8	6
46	Surface Engineering of Rh Catalysts with N/S-Codoped Carbon Nanosheets toward High-Performance Hydrogen Evolution from Seawater. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 18835-18843	8.3	24
45	One-Step Synthesis of N, P-Codoped Carbon Nanosheets Encapsulated CoP Particles for Highly Efficient Oxygen Evolution Reaction. <i>Frontiers in Chemistry</i> , <b>2019</b> , 7, 805	5	10
44	Mesoporous Carbons Derived from Pyrolysis of Organosilica-Based Ionogels for Oxygen Reduction Reaction. <i>ChemistrySelect</i> , <b>2019</b> , 4, 13828-13834	1.8	1
43	Biomolecule-derived N/S co-doped CNT-graphene hybrids exhibiting excellent electrochemical activities. <i>Journal of Power Sources</i> , <b>2019</b> , 413, 408-417	8.9	60

42	Surfactant-assisted hydrothermal synthesis of nitrogen doped Mo <sub>2</sub> C@C composites as highly efficient electrocatalysts for hydrogen evolution reaction. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 3702-3710	6.7	35
41	In-situ fabrication of nitrogen-doped carbon nanosheets containing highly dispersed single iron atoms for oxygen reduction reaction. <i>Journal of Power Sources</i> , <b>2019</b> , 412, 125-133	8.9	73
40	Highly compressible three-dimensional graphene hydrogel for foldable all-solid-state supercapacitor. <i>Journal of Power Sources</i> , <b>2018</b> , 384, 214-222	8.9	80
39	Mg incorporated Co-based MOF precursors for hierarchical CNT-containing porous carbons with ORR activity. <i>Dalton Transactions</i> , <b>2018</b> , 47, 2810-2819	4.3	18
38	Microporous carbons derived from organosilica-containing carbon dots with outstanding supercapacitance. <i>Dalton Transactions</i> , <b>2018</b> , 47, 5961-5967	4.3	13
37	Hydrothermal synthesis of core-shell MoO <sub>2</sub> /Mo <sub>2</sub> C heterojunction as high performance electrocatalyst for hydrogen evolution reaction. <i>Applied Surface Science</i> , <b>2018</b> , 427, 693-701	6.7	68
36	Formation of N-rich Hierarchically Porous Carbon via Direct Growth ZIF-8 on C <sub>3</sub> N <sub>4</sub> Nanosheet with Enhancing Electrochemical Performance. <i>ChemistrySelect</i> , <b>2018</b> , 3, 6440-6449	1.8	9
35	Hydration of phenylacetylene on sulfonated carbon materials: active site and intrinsic catalytic activity.. <i>RSC Advances</i> , <b>2018</b> , 8, 38150-38156	3.7	8
34	Multiple heteroatom-doped few-layer carbons for the electrochemical oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 22277-22286	13	58
33	Organosilica-based ionogel derived nitrogen-doped microporous carbons for high performance supercapacitor electrodes. <i>Inorganic Chemistry Frontiers</i> , <b>2018</b> , 5, 3091-3098	6.8	7
32	Improving ORR activity of carbon nanotubes by hydrothermal carbon deposition method. <i>Journal of Energy Chemistry</i> , <b>2017</b> , 26, 712-718	12	59
31	Hybrid organic-inorganic dyeionogels: Reversibly pH-responsive materials based dye-ionic liquids with improved structural stability and flexibility. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 249, 486-492	8.5	15
30	Carbon-Doped BN Nanosheets for the Oxidative Dehydrogenation of Ethylbenzene. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 8231-8235	16.4	132
29	Carbon-Doped BN Nanosheets for the Oxidative Dehydrogenation of Ethylbenzene. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 8343-8347	3.6	38
28	Biomass-derived hierarchical porous carbons: boosting the energy density of supercapacitors via an ionothermal approach. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 13009-13018	13	124
27	Nitrogen-Doped Carbon Nanotube-Supported Pd Catalyst for Improved Electrocatalytic Performance toward Ethanol Electrooxidation. <i>Nano-Micro Letters</i> , <b>2017</b> , 9, 28	19.5	29
26	2D quasi-ordered nitrogen and sulfur co-doped carbon materials from ionic liquid as metal-free electrocatalysts for ORR. <i>RSC Advances</i> , <b>2017</b> , 7, 17941-17949	3.7	21
25	Biomass derived 2D carbons via a hydrothermal carbonization method as efficient bifunctional ORR/HER electrocatalysts. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 23481-23488	13	122

24	Fine decoration of carbon nanotubes with metal organic frameworks for enhanced performance in supercapacitance and oxygen reduction reaction. <i>Science Bulletin</i> , <b>2017</b> , 62, 1132-1141	10.6	33
23	Nanocarbon/bionic Liquid Hybrid Materials for Heterogeneous Catalysis <b>2017</b> , 497-533		
22	Ionothermal synthesis of microporous and mesoporous carbon aerogels from fructose as electrode materials for supercapacitors. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 4497-4505	13	55
21	A photochromic dual-functional Mg-CP exhibits white-emission after modification with CuI. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 2438-2441	7.1	12
20	Modification of the carbide microstructure by N- and S-functionalization of the support in MoxC/CNT catalysts. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 3468-3475	5.5	9
19	Dual-Emission Luminescence of Magnesium Coordination Polymers Based on Mixed Organic Ligands. <i>Chemistry - A European Journal</i> , <b>2016</b> , 22, 1334-9	4.8	22
18	Higher Alcohol Synthesis Over Rh Catalysts: Conditioning of Rh/N-CNTs by Co and Mn Entrapped in the Support. <i>Catalysis Letters</i> , <b>2016</b> , 146, 2417-2424	2.8	9
17	Nature of the N/Bd Interaction in Nitrogen-Doped Carbon Nanotube Catalysts. <i>ACS Catalysis</i> , <b>2015</b> , 5, 2740-2753	13.1	273
16	Ionic Liquid Based Approaches to Carbon Materials Synthesis. <i>European Journal of Inorganic Chemistry</i> , <b>2015</b> , 2015, 1137-1147	2.3	52
15	An ionothermally synthesized Mg-based coordination polymer as a precursor for preparing porous carbons. <i>CrystEngComm</i> , <b>2015</b> , 17, 4288-4292	3.3	15
14	Mesoporous graphite nanoflakes via ionothermal carbonization of fructose and their use in dye removal. <i>RSC Advances</i> , <b>2014</b> , 4, 37423-37430	3.7	26
13	Dyelonogels: Proton-Responsive Ionogels Based on a Dye-Ionic Liquid Exhibiting Reversible Color Change. <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 2837-2843	15.6	30
12	Higher Alcohol Synthesis: Product Analysis Using the Concept of Effective Carbon Numbers. <i>Chemie-Ingenieur-Technik</i> , <b>2013</b> , 85, 1290-1293	0.8	3
11	The multifunctional roles of the ionic liquid [Bmim][BF <sub>4</sub> ] in the creation of cadmium metal/organic frameworks. <i>CrystEngComm</i> , <b>2012</b> , 14, 4894	3.3	26
10	A transparent, flexible, ion conductive, and luminescent PMMA ionogel based on a Pt/Eu bimetallic complex and the ionic liquid [Bmim][N(Tf) <sub>2</sub> ]. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 8110		49
9	Synthesis of mesoporous carbon/iron carbide hybrids with unusually high surface areas from the ionic liquid precursor [Bmim][FeCl <sub>4</sub> ]. <i>CrystEngComm</i> , <b>2012</b> , 14, 4946	3.3	19
8	Ionic-liquid-induced ferroelectric polarization in poly(vinylidene fluoride) thin films. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 062903	3.4	49
7	Thermomorphic behavior of the ionic liquids [C <sub>4</sub> mim][FeCl <sub>4</sub> ] and [C <sub>12</sub> mim][FeCl <sub>4</sub> ]. <i>ChemPhysChem</i> , <b>2011</b> , 12, 364-8	3.2	47

6	Crystalline Open-Framework Selenidostannates Synthesized in Ionic Liquids. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 11597-11601	3.6	20
5	Hierarchical porous carbonaceous materials via ionothermal carbonization of carbohydrates. <i>Journal of Materials Chemistry</i> , <b>2011</b> , 21, 7434		106
4	Transparent, flexible, and paramagnetic ionogels based on PMMA and the iron-based ionic liquid 1-butyl-3-methylimidazolium tetrachloroferrate(III) [Bmim][FeCl <sub>4</sub> ]. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 9543		57
3	Three-Dimensional Chiral Microporous Germanium Antimony Sulfide with Ion-Exchange Properties. <i>Angewandte Chemie</i> , <b>2008</b> , 120, 8751-8754	3.6	25
2	A Novel Method to Immobilize Ru Nanoparticles on SBA-15 Firmly by Ionic Liquid and Hydrogenation of Arene. <i>Catalysis Letters</i> , <b>2005</b> , 103, 59-62	2.8	58
1	Three-Dimensional Porous Hexagonal Boron Nitride Fibers as Metal-Free Catalysts with Enhanced Catalytic Activity for Oxidative Dehydrogenation of Propane. <i>Industrial &amp; Engineering Chemistry Research</i> ,	3.9	1