Zai-Lai Xie

List of Publications by Year
in descending order

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74 papers	3,690 citations	126708 33 h-index	133063 59 g-index
78 all docs	78 docs citations	78 times ranked	5098 citing authors

#	Article	IF	Citations
1	Role of carbon quantum dots on Nickel titanate to promote water oxidation reaction under visible light illumination. Journal of Colloid and Interface Science, 2022, 607, 203-209.	5.0	19
2	Identification of active sites of B/N co-doped nanocarbons in selective oxidation of benzyl alcohol. Journal of Colloid and Interface Science, 2022, 608, 2801-2808.	5.0	18
3	A generalized approach to adjust the catalytic activity of borocarbonitride for alkane oxidative dehydrogenation reactions. Journal of Catalysis, 2022, 405, 105-115.	3.1	15
4	Recent progress of carbon-based metal-free materials in thermal-driven catalysis. Journal of Energy Chemistry, 2021, 58, 318-335.	7.1	35
5	Two dimensional nanocarbons from biomass and biological molecules: Synthetic strategies and energy related applications. Journal of Energy Chemistry, 2021, 54, 795-814.	7.1	52
6	Fluorinated poly(fluorenyl ether)s with linear multi-cationic side chains for vanadium redox flow batteries. Science China Materials, 2021, 64, 349-361.	3.5	13
7	Single-atom cobalt-fused biomolecule-derived nitrogen-doped carbon nanosheets for selective oxidation reactions. Physical Chemistry Chemical Physics, 2021, 23, 14276-14283.	1.3	12
8	Propane dehydrogenation catalyzed by single Lewis acid site in Sn-Beta zeolite. Journal of Catalysis, 2021, 395, 155-167.	3.1	54
9	Spatial Sites Separation Strategy to Fabricate Atomically Isolated Nickel Catalysts for Efficient CO2 Electroreduction. , 2021, 3, 454-461.		34
10	Coupled porosity and heterojunction engineering: MOF-derived porous Co3O4 embedded on TiO2 nanotube arrays for water remediation. Chemosphere, 2021, 274, 129799.	4.2	5
11	Microcrystalline cellulose derived hierarchically porous nanocarbons via a template-free method for high performance supercapacitors. Diamond and Related Materials, 2021, 117, 108462.	1.8	7
12	Self-template synthesis of hollow Fe-doped CoP prisms with enhanced oxygen evolution reaction activity. Journal of Energy Chemistry, 2021, 62, 415-422.	7.1	60
13	New insight into structural transformations of borocarbonitride in oxidative dehydrogenation of propane. Applied Catalysis A: General, 2021, 628, 118402.	2.2	12
14	Boosting the HER electrocatalytic activity over RuCu-supported carbon nanosheets as efficient pH-independent catalysts. FlatChem, 2021, 30, 100302.	2.8	5
15	Three-Dimensional Porous Hexagonal Boron Nitride Fibers as Metal-Free Catalysts with Enhanced Catalytic Activity for Oxidative Dehydrogenation of Propane. Industrial & Engineering Chemistry Research, 2021, 60, 17949-17958.	1.8	10
16	Photo-fluorination of nanodiamonds catalyzing oxidative dehydrogenation reaction of ethylbenzene. Nature Communications, 2021, 12, 6542.	5.8	14
17	Porous carbon nanosheets from biological nucleobase precursor as efficient pH-independent oxygen reduction electrocatalyst. Carbon, 2020, 156, 179-186.	5.4	45
18	Glucose-derived hydrothermal carbons as energy storage booster for vanadium redox flow batteries. Journal of Energy Chemistry, 2020, 45, 31-39.	7.1	27

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19	Chloromethylation and Quaternization of Poly(aryl ether ketone sulfone)s with Clustered Electron-rich Phenyl Groups for Anion Exchange Membranes. Chinese Journal of Polymer Science (English Edition), 2020, 38, 278-287.	2.0	10
20	Building microsphereâ€“nanosheet structures in N-doped carbon to improve its performance in the oxygen reduction reaction and vanadium redox flow batteries. Sustainable Energy and Fuels, 2020, 4, 559-570.	2.5	16
21	Propane Dehydrogenation over Pt Clusters Localized at the Sn Single-Site in Zeolite Framework. ACS Catalysis, 2020, 10, 818-828.	5.5	136
22	The role of carbon dots â€“ derived underlayer in hematite photoanodes. Nanoscale, 2020, 12, 20220-20229.	2.8	9
23	Highly Selective CO₂ Electroreduction to CH₄ by Inâ€…Situ Generated Cu₂O Singleâ€Type Sites on a Conductive MOF: Stabilizing Key Intermediates with Hydrogen Bonding. Angewandte Chemie - International Edition, 2020, 59, 23641-23648.	7.2	335
24	Luminescent Ionogels with Excellent Transparency, High Mechanical Strength, and High Conductivity. Nanomaterials, 2020, 10, 2521.	1.9	3
25	Nucleobase derived boron and nitrogen co-doped carbon nanosheets as efficient catalysts for selective oxidation and reduction reactions. Nanoscale, 2020, 12, 7797-7803.	2.8	20
26	Methanol conversion on borocarbonitride catalysts: Identification and quantification of active sites. Science Advances, 2020, 6, eaba5778.	4.7	45
27	Template-free synthesis of graphene-like carbons as efficient carbocatalysts for selective oxidation of alkanes. Green Chemistry, 2020, 22, 1291-1300.	4.6	33
28	Three-dimensional mesoporous graphene-like carbons derived from a biomolecule exhibiting high-performance oxygen reduction activity. Sustainable Energy and Fuels, 2019, 3, 2809-2818.	2.5	10
29	Surface Engineering of Rh Catalysts with N/S-Codoped Carbon Nanosheets toward High-Performance Hydrogen Evolution from Seawater. ACS Sustainable Chemistry and Engineering, 2019, 7, 18835-18843.	3.2	47
30	Pd-Supported N/S-Codoped Graphene-Like Carbons Boost Quinoline Hydrogenation Activity. ACS Sustainable Chemistry and Engineering, 2019, 7, 11369-11376.	3.2	34
31	Copper Sulfides: Smallâ€Sized CuS Nanoparticles/N, S Coâ€Doped rGO Composites as the Anode Materials for Highâ€Performance Lithiumâ€Ion Batteries (Adv. Mater. Interfaces 6/2019). Advanced Materials Interfaces, 2019, 6, 1970040.	1.9	0
32	Smallâ€Sized CuS Nanoparticles/N, S Coâ€Doped rGO Composites as the Anode Materials for Highâ€Performance Lithiumâ€Ion Batteries. Advanced Materials Interfaces, 2019, 6, 1900038.	1.9	25
33	Biomass Derived Grapheneâ€Like Carbons for Electrocatalytic Oxygen Reduction Reaction. ChemNanoMat, 2019, 5, 682-689.	1.5	39
34	Mesoporous Carbons Derived from Pyrolysis of Organosilicaâ€Based Ionogels for Oxygen Reduction Reaction. ChemistrySelect, 2019, 4, 13828-13834.	0.7	1
35	Biomolecule-derived N/S co-doped CNT-graphene hybrids exhibiting excellent electrochemical activities. Journal of Power Sources, 2019, 413, 408-417.	4.0	72
36	Surfactant-assisted hydrothermal synthesis of nitrogen doped Mo2C@C composites as highly efficient electrocatalysts for hydrogen evolution reaction. International Journal of Hydrogen Energy, 2019, 44, 3702-3710.	3.8	55

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37	In-situ fabrication of nitrogen-doped carbon nanosheets containing highly dispersed single iron atoms for oxygen reduction reaction. Journal of Power Sources, 2019, 412, 125-133.	4.0	92
38	One-Step Synthesis of N, P-Codoped Carbon Nanosheets Encapsulated CoP Particles for Highly Efficient Oxygen Evolution Reaction. Frontiers in Chemistry, 2019, 7, 805.	1.8	17
39	Highly compressible three-dimensional graphene hydrogel for foldable all-solid-state supercapacitor. Journal of Power Sources, 2018, 384, 214-222.	4.0	98
40	Mg²⁺ incorporated Co-based MOF precursors for hierarchical CNT-containing porous carbons with ORR activity. Dalton Transactions, 2018, 47, 2810-2819.	1.6	25
41	Microporous carbons derived from organosilica-containing carbon dots with outstanding supercapacitance. Dalton Transactions, 2018, 47, 5961-5967.	1.6	17
42	Hydrothermal synthesis of core-shell MoO2/Î±-Mo2C heterojunction as high performance electrocatalyst for hydrogen evolution reaction. Applied Surface Science, 2018, 427, 693-701.	3.1	88
43	Hydration of phenylacetylene on sulfonated carbon materials: active site and intrinsic catalytic activity. RSC Advances, 2018, 8, 38150-38156.	1.7	9
44	Multiple heteroatom-doped few-layer carbons for the electrochemical oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 22277-22286.	5.2	81
45	Organosilica-based ionogel derived nitrogen-doped microporous carbons for high performance supercapacitor electrodes. Inorganic Chemistry Frontiers, 2018, 5, 3091-3098.	3.0	9
46	Formation of Nâ€rich Hierarchically Porous Carbon via Direct Growth ZIFâ€8 on C₃N₄ Nanosheet with Enhancing Electrochemical Performance. ChemistrySelect, 2018, 3, 6440-6449.	0.7	15
47	Improving ORR activity of carbon nanotubes by hydrothermal carbon deposition method. Journal of Energy Chemistry, 2017, 26, 712-718.	7.1	74
48	Hybrid organic-inorganic dyeionogels: Reversibly pH-responsive materials based dye-ionic liquids with improved structural stability and flexibility. Sensors and Actuators B: Chemical, 2017, 249, 486-492.	4.0	20
49	Carbonâ€Doped BN Nanosheets for the Oxidative Dehydrogenation of Ethylbenzene. Angewandte Chemie - International Edition, 2017, 56, 8231-8235.	7.2	185
50	Carbonâ€Doped BN Nanosheets for the Oxidative Dehydrogenation of Ethylbenzene. Angewandte Chemie, 2017, 129, 8343-8347.	1.6	51
51	Biomass-derived hierarchical porous carbons: boosting the energy density of supercapacitors via an ionothermal approach. Journal of Materials Chemistry A, 2017, 5, 13009-13018.	5.2	159
52	Nitrogen-Doped Carbon Nanotube-Supported Pd Catalyst for Improved Electrocatalytic Performance toward Ethanol Electrooxidation. Nano-Micro Letters, 2017, 9, 28.	14.4	39
53	2D quasi-ordered nitrogen and sulfur co-doped carbon materials from ionic liquid as metal-free electrocatalysts for ORR. RSC Advances, 2017, 7, 17941-17949.	1.7	22
54	Biomass derived 2D carbonsviaa hydrothermal carbonization method as efficient bifunctional ORR/HER electrocatalysts. Journal of Materials Chemistry A, 2017, 5, 23481-23488.	5.2	166

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55	Fine decoration of carbon nanotubes with metal organic frameworks for enhanced performance in supercapacitance and oxygen reduction reaction. Science Bulletin, 2017, 62, 1132-1141.	4.3	37
56	Dualâ€Emission Luminescence of Magnesium Coordination Polymers Based on Mixed Organic Ligands. Chemistry - A European Journal, 2016, 22, 1334-1339.	1.7	24
57	Higher Alcohol Synthesis Over Rh Catalysts: Conditioning of Rh/N-CNTs by Co and Mn Entrapped in the Support. Catalysis Letters, 2016, 146, 2417-2424.	1.4	11
58	Ionothermal synthesis of microporous and mesoporous carbon aerogels from fructose as electrode materials for supercapacitors. Journal of Materials Chemistry A, 2016, 4, 4497-4505.	5.2	66
59	A photochromic dual-functional Mg-CP exhibits white-emission after modification with CuI. Journal of Materials Chemistry C, 2016, 4, 2438-2441.	2.7	12
60	Modification of the carbide microstructure by N- and S-functionalization of the support in Mo_xC/CNT catalysts. Catalysis Science and Technology, 2016, 6, 3468-3475.	2.1	10
61	An ionothermally synthesized Mg-based coordination polymer as a precursor for preparing porous carbons. CrystEngComm, 2015, 17, 4288-4292.	1.3	17
62	Nature of the Nâ€“Pd Interaction in Nitrogen-Doped Carbon Nanotube Catalysts. ACS Catalysis, 2015, 5, 2740-2753.	5.5	355
63	Ionic Liquid Based Approaches to Carbon Materials Synthesis. European Journal of Inorganic Chemistry, 2015, 2015, 1137-1147.	1.0	63
64	Mesoporous graphite nanoflakes via ionothermal carbonization of fructose and their use in dye removal. RSC Advances, 2014, 4, 37423-37430.	1.7	31
65	Dyeâ€Ionogels: Protonâ€Responsive Ionogels Based on a Dyeâ€Ionic Liquid Exhibiting Reversible Color Change. Advanced Functional Materials, 2014, 24, 2837-2843.	7.8	34
66	Higher Alcohol Synthesis: Product Analysis Using the Concept of Effective Carbon Numbers. Chemie-Ingenieur-Technik, 2013, 85, 1290-1293.	0.4	3
67	The multifunctional roles of the ionic liquid [Bmim][BF4] in the creation of cadmium metalâ€“organic frameworks. CrystEngComm, 2012, 14, 4894.	1.3	32
68	A transparent, flexible, ion conductive, and luminescent PMMA ionogel based on a Pt/Eu bimetallic complex and the ionic liquid [Bmim][N(Tf)2]. Journal of Materials Chemistry, 2012, 22, 8110.	6.7	54
69	Synthesis of mesoporous carbon/iron carbide hybrids with unusually high surface areas from the ionic liquid precursor [Bmim][FeCl4]. CrystEngComm, 2012, 14, 4946.	1.3	20
70	Ionic-liquid-induced ferroelectric polarization in poly(vinylidene fluoride) thin films. Applied Physics Letters, 2012, 100, .	1.5	56
71	Hierarchical porous carbonaceous materials via ionothermal carbonization of carbohydrates. Journal of Materials Chemistry, 2011, 21, 7434.	6.7	131
72	Thermomorphic Behavior of the Ionic Liquids [C₄mim][FeCl₄] and [C₁₂mim][FeCl₄]. ChemPhysChem, 2011, 12, 364-368.	1.0	56

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73	Transparent, flexible, and paramagnetic ionogels based on PMMA and the iron-based ionic liquid 1-butyl-3-methylimidazolium tetrachloroferrate(iii) [Bmim][FeCl4]. Journal of Materials Chemistry, 2010, 20, 9543.	6.7	70
74	A Novel Method to Immobilize Ru Nanoparticles on SBA-15 Firmly by Ionic Liquid and Hydrogenation of Arene. Catalysis Letters, 2005, 103, 59-62.	1.4	63