Xiaodong Zhuang

List of Publications by Year
in descending order

113 papers	17,739 citations	23500 58 h-index	22102 113 g-index
117 all docs	117 docs citations	117 times ranked	18664 citing authors

#	Article	IF	Citations
1	Interface Engineering of MoS₂/Ni₃S₂ Heterostructures for Highly Enhanced Electrochemical Overallâ€Waterâ€Splitting Activity. Angewandte Chemie - International Edition, 2016, 55, 6702-6707.	7.2	1,159
2	Hierarchically porous carbons with optimized nitrogen doping as highly active electrocatalysts for oxygen reduction. Nature Communications, 2014, 5, 4973.	5.8	921
3	Efficient hydrogen production on MoNi4 electrocatalysts with fast water dissociation kinetics. Nature Communications, 2017, 8, 15437.	5.8	813
4	Vertically oriented cobalt selenide/NiFe layered-double-hydroxide nanosheets supported on exfoliated graphene foil: an efficient 3D electrode for overall water splitting. Energy and Environmental Science, 2016, 9, 478-483.	15.6	774
5	Boosting Oxygen Reduction of Single Iron Active Sites via Geometric and Electronic Engineering: Nitrogen and Phosphorus Dual Coordination. Journal of the American Chemical Society, 2020, 142, 2404-2412.	6.6	680
6	Accelerated Hydrogen Evolution Kinetics on NiFeâ€Layered Double Hydroxide Electrocatalysts by Tailoring Water Dissociation Active Sites. Advanced Materials, 2018, 30, 1706279.	11.1	601
7	Engineering water dissociation sites in MoS₂ nanosheets for accelerated electrocatalytic hydrogen production. Energy and Environmental Science, 2016, 9, 2789-2793.	15.6	503
8	Nitrogenâ€Doped Carbon Nanosheets with Sizeâ€Defined Mesopores as Highly Efficient Metalâ€Free Catalyst for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2014, 53, 1570-1574.	7.2	457
9	Twoâ€Dimensional Soft Nanomaterials: A Fascinating World of Materials. Advanced Materials, 2015, 27, 403-427.	11.1	437
10	Atomically dispersed nickelâ€“nitrogenâ€“sulfur species anchored on porous carbon nanosheets for efficient water oxidation. Nature Communications, 2019, 10, 1392.	5.8	424
11	Efficient alkaline hydrogen evolution on atomically dispersed Niâ€“N_x Species anchored porous carbon with embedded Ni nanoparticles by accelerating water dissociation kinetics. Energy and Environmental Science, 2019, 12, 149-156.	15.6	416
12	Low-temperature synthesis of nitrogen/sulfur co-doped three-dimensional graphene frameworks as efficient metal-free electrocatalyst for oxygen reduction reaction. Carbon, 2013, 62, 296-301.	5.4	415
13	Interface Engineering of MoS₂/Ni₃S₂ Heterostructures for Highly Enhanced Electrochemical Overallâ€Waterâ€Splitting Activity. Angewandte Chemie, 2016, 128, 6814-6819.	1.6	403
14	Nitrogenâ€Doped Porous Carbon Superstructures Derived from Hierarchical Assembly of Polyimide Nanosheets. Advanced Materials, 2016, 28, 1981-1987.	11.1	390
15	Two-dimensional materials for miniaturized energy storage devices: from individual devices to smart integrated systems. Chemical Society Reviews, 2018, 47, 7426-7451.	18.7	384
16	Flexible Allâ€Solidâ€State Supercapacitors with High Volumetric Capacitances Boosted by Solution Processable MXene and Electrochemically Exfoliated Graphene. Advanced Energy Materials, 2017, 7, 1601847.	10.2	379
17	Molybdenum Carbide-Embedded Nitrogen-Doped Porous Carbon Nanosheets as Electrocatalysts for Water Splitting in Alkaline Media. ACS Nano, 2017, 11, 3933-3942.	7.3	367
18	Porous carbon nanosheets: Synthetic strategies and electrochemical energy related applications. Nano Today, 2019, 24, 103-119.	6.2	357

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19	A two-dimensional conjugated polymer framework with fully sp²-bonded carbon skeleton. Polymer Chemistry, 2016, 7, 4176-4181.	1.9	350
20	Scalable Fabrication and Integration of Graphene Microsupercapacitors through Full Inkjet Printing. ACS Nano, 2017, 11, 8249-8256.	7.3	280
21	Vertically Aligned MoS₂ Nanosheets Patterned on Electrochemically Exfoliated Graphene for Highâ€Performance Lithium and Sodium Storage. Advanced Energy Materials, 2018, 8, 1702254.	10.2	274
22	Synergetic Contribution of Boron and Feâ€“N_x Species in Porous Carbons toward Efficient Electrocatalysts for Oxygen Reduction Reaction. ACS Energy Letters, 2018, 3, 252-260.	8.8	269
23	Znâ€Ion Hybrid Microâ€Supercapacitors with Ultrahigh Areal Energy Density and Longâ€Term Durability. Advanced Materials, 2019, 31, e1806005.	11.1	266
24	Integrated Hierarchical Cobalt Sulfide/Nickel Selenide Hybrid Nanosheets as an Efficient Three-dimensional Electrode for Electrochemical and Photoelectrochemical Water Splitting. Nano Letters, 2017, 17, 4202-4209.	4.5	263
25	Graphene and its derivatives: switching ON and OFF. Chemical Society Reviews, 2012, 41, 4688.	18.7	257
26	Graphene Coupled Schiffâ€base Porous Polymers: Towards Nitrogenâ€enriched Porous Carbon Nanosheets with Ultrahigh Electrochemical Capacity. Advanced Materials, 2014, 26, 3081-3086.	11.1	224
27	Twoâ€Dimensional Sandwichâ€Type, Grapheneâ€Based Conjugated Microporous Polymers. Angewandte Chemie - International Edition, 2013, 52, 9668-9672.	7.2	220
28	Ternary Porous Cobalt Phosphoselenide Nanosheets: An Efficient Electrocatalyst for Electrocatalytic and Photoelectrochemical Water Splitting. Advanced Materials, 2017, 29, 1701589.	11.1	219
29	Sulfurâ€Enriched Conjugated Polymer Nanosheet Derived Sulfur and Nitrogen coâ€Doped Porous Carbon Nanosheets as Electrocatalysts for Oxygen Reduction Reaction and Zincâ€“Air Battery. Advanced Functional Materials, 2016, 26, 5893-5902.	7.8	214
30	Conjugated Microporous Polymers with Dimensionalityâ€Controlled Heterostructures for Green Energy Devices. Advanced Materials, 2015, 27, 3789-3796.	11.1	210
31	Atomic Ni Anchored Covalent Triazine Framework as High Efficient Electrocatalyst for Carbon Dioxide Conversion. Advanced Functional Materials, 2019, 29, 1806884.	7.8	210
32	Toward a molecular design of porous carbon materials. Materials Today, 2017, 20, 592-610.	8.3	202
33	Viologen-inspired functional materials: synthetic strategies and applications. Journal of Materials Chemistry A, 2019, 7, 23337-23360.	5.2	186
34	Metalâ€Phosphideâ€Containing Porous Carbons Derived from an Ionicâ€Polymer Framework and Applied as Highly Efficient Electrochemical Catalysts for Water Splitting. Advanced Functional Materials, 2015, 25, 3899-3906.	7.8	176
35	Dualâ€Template Synthesis of 2D Mesoporous Polypyrrole Nanosheets with Controlled Pore Size. Advanced Materials, 2016, 28, 8365-8370.	11.1	163
36	Efficient Electrochemical and Photoelectrochemical Water Splitting by a 3D Nanostructured Carbon Supported on Flexible Exfoliated Graphene Foil. Advanced Materials, 2017, 29, 1604480.	11.1	157

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37	Stimulusâ€Responsive Microâ€Supercapacitors with Ultrahigh Energy Density and Reversible Electrochromic Window. Advanced Materials, 2017, 29, 1604491.	11.1	153
38	A Novel Heterostructure Based on RuMo Nanoalloys and Nâ€doped Carbon as an Efficient Electrocatalyst for the Hydrogen Evolution Reaction. Advanced Materials, 2020, 32, e2005433.	11.1	151
39	Coordination Polymer Framework Based Onâ€Chip Microâ€Supercapacitors with AC Lineâ€Filtering Performance. Angewandte Chemie - International Edition, 2017, 56, 3920-3924.	7.2	140
40	Graphene and its derivatives for laser protection. Progress in Materials Science, 2016, 84, 118-157.	16.0	128
41	Twoâ€Dimensional Coreâ€Shelled Porous Hybrids as Highly Efficient Catalysts for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2016, 55, 6858-6863.	7.2	127
42	Polyaniline nanosheet derived B/N co-doped carbon nanosheets as efficient metal-free catalysts for oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 7742.	5.2	124
43	Bistable electrical switching and electronic memory effect in a solution-processable graphene oxide-donor polymer complex. Applied Physics Letters, 2009, 95, .	1.5	118
44	Quantitative Control of Pore Size of Mesoporous Carbon Nanospheres through the Selfâ€Assembly of Diblock Copolymer Micelles in Solution. Small, 2016, 12, 3155-3163.	5.2	117
45	Two-Dimensional Porous Polymers: From Sandwich-like Structure to Layered Skeleton. Accounts of Chemical Research, 2018, 51, 3191-3202.	7.6	108
46	Recent Advances in Earth-Abundant Heterogeneous Electrocatalysts for Photoelectrochemical Water Splitting. Small Methods, 2017, 1, 1700090.	4.6	106
47	Twoâ€Dimensional Mesoscaleâ€Ordered Conducting Polymers. Angewandte Chemie - International Edition, 2016, 55, 12516-12521.	7.2	89
48	Poly(Nâ€vinylcarbazole) chemically modified graphene oxide. Journal of Polymer Science Part A, 2010, 48, 2642-2649.	2.5	88
49	Thermoswitchable on-chip microsupercapacitors: one potential self-protection solution for electronic devices. Energy and Environmental Science, 2018, 11, 1717-1722.	15.6	79
50	Optimizing Microenvironment of Asymmetric N,Sâ€Coordinated Singleâ€Atom Fe via Axial Fifth Coordination toward Efficient Oxygen Electroreduction. Small, 2022, 18, e2105387.	5.2	72
51	Simultaneously Integrate Iron Single Atom and Nanocluster Triggered Tandem Effect for Boosting Oxygen Electroreduction. Small, 2022, 18, e2107225.	5.2	72
52	Charmâ€Braceletâ€Type Poly(Nâ€vinylcarbazole) Functionalized with Reduced Graphene Oxide for Broadband Optical Limiting. Chemistry - A European Journal, 2011, 17, 780-785.	1.7	68
53	Highly Efficient Electrocatalysts for Oxygen Reduction Reaction Based on 1D Ternary Doped Porous Carbons Derived from Carbon Nanotube Directed Conjugated Microporous Polymers. Advanced Functional Materials, 2016, 26, 8255-8265.	7.8	65
54	Dualâ€Graphene Rechargeable Sodium Battery. Small, 2017, 13, 1702449.	5.2	64

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55	Charge Transfer Salt and Graphene Heterostructureâ€Based Microâ€Supercapacitors with Alternating Current Lineâ€Filtering Performance. Small, 2019, 15, e1901494.	5.2	64
56	Boron, nitrogen, and phosphorous ternary doped graphene aerogel with hierarchically porous structures as highly efficient electrocatalysts for oxygen reduction reaction. New Journal of Chemistry, 2016, 40, 6022-6029.	1.4	62
57	Interfacial Approach toward Benzeneâ€Bridged Polypyrrole Filmâ€“Based Microâ€Supercapacitors with Ultrahigh Volumetric Power Density. Advanced Functional Materials, 2020, 30, 1908243.	7.8	60
58	Self-Assembly of Integrated Tubular Microsupercapacitors with Improved Electrochemical Performance and Self-Protective Function. ACS Nano, 2019, 13, 8067-8075.	7.3	57
59	A Dualâ€Stimuliâ€Responsive Sodiumâ€Bromine Battery with Ultrahigh Energy Density. Advanced Materials, 2018, 30, e1800028.	11.1	56
60	2D polyacrylonitrile brush derived nitrogen-doped carbon nanosheets for high-performance electrocatalysts in oxygen reduction reaction. Polymer Chemistry, 2014, 5, 2057-2064.	1.9	54
61	In situ nanoarchitecturing and active-site engineering toward highly efficient carbonaceous electrocatalysts. Nano Energy, 2019, 59, 207-215.	8.2	54
62	Nano-sandwiched metal hexacyanoferrate/graphene hybrid thin films for in-plane asymmetric micro-supercapacitors with ultrahigh energy density. Materials Horizons, 2019, 6, 1041-1049.	6.4	54
63	The art of two-dimensional soft nanomaterials. Science China Chemistry, 2019, 62, 1145-1193.	4.2	52
64	Azuleneâ€Based Molecules, Polymers, and Frameworks for Optoelectronic and Energy Applications. Small Methods, 2020, 4, 2000628.	4.6	50
65	Cobaloxime anchored MoS₂ nanosheets as electrocatalysts for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2018, 6, 138-144.	5.2	49
66	Carbon nanosheets supporting Niâ€“N3S single-atom sites for efficient electrocatalytic CO2 reduction. Carbon, 2021, 178, 488-496.	5.4	48
67	Rational synthesis of N/S-doped porous carbons as high efficient electrocatalysts for oxygen reduction reaction and Zn-Air batteries. Electrochimica Acta, 2018, 266, 17-26.	2.6	47
68	Hypercrosslinked porous polymer nanosheets: 2D RAFT agent directed emulsion polymerization for multifunctional applications. Polymer Chemistry, 2015, 6, 7171-7178.	1.9	43
69	Graphene-coupled nitrogen-enriched porous carbon nanosheets for energy storage. Journal of Materials Chemistry A, 2017, 5, 16732-16739.	5.2	42
70	2D Porous Polymers with sp²â€Carbon Connections and Sole sp²â€Carbon Skeletons. Advanced Functional Materials, 2020, 30, 2000857.	7.8	42
71	Supercapacitors with alternating current line-filtering performance. BMC Materials, 2020, 2, .	6.8	40
72	A room-temperature interfacial approach towards iron/nitrogen co-doped fibrous porous carbons as electrocatalysts for the oxygen reduction reaction and Znâ€“Air batteries. Nanoscale, 2019, 11, 10257-10265.	2.8	39

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73	A solution-processable polymer-grafted graphene oxide derivative for nonvolatile rewritable memory. Polymer Chemistry, 2014, 5, 2010-2017.	1.9	36
74	Inkjet Printed Disposable Highâ€Rate Onâ€Paper Microsupercapacitors. Advanced Functional Materials, 2022, 32, 2108773.	7.8	36
75	Sulfur-anchored azulene as a cathode material for Liâ€“S batteries. Chemical Communications, 2019, 55, 9047-9050.	2.2	31
76	Electrochemical reduction of carbon dioxide with nearly 100% carbon monoxide faradaic efficiency from vacancy-stabilized single-atom active sites. Journal of Materials Chemistry A, 2021, 9, 24955-24962.	5.2	30
77	Viologen-bridged polyaniline based multifunctional heterofilms for all-solid-state supercapacitors and memory devices. European Polymer Journal, 2018, 98, 125-136.	2.6	29
78	Viologenâ€Hypercrosslinked Ionic Porous Polymer Films as Active Layers for Electronic and Energy Storage Devices. Advanced Materials Interfaces, 2018, 5, 1701679.	1.9	27
79	BODIPY-based conjugated polymer covalently grafted reduced graphene oxide for flexible nonvolatile memory devices. Carbon, 2017, 116, 713-721.	5.4	26
80	High-index faceted binary-metal selenide nanosheet arrays as efficient 3D electrodes for alkaline hydrogen evolution. Nanoscale, 2019, 11, 17571-17578.	2.8	26
81	Vacancy modification of Prussian-blue nano-thin films for high energy-density micro-supercapacitors with ultralow RC time constant. Nano Energy, 2019, 60, 8-16.	8.2	26
82	Regulating the Spin State of Nickel in Molecular Catalysts for Boosting Carbon Dioxide Reduction. ACS Applied Energy Materials, 2021, 4, 2891-2898.	2.5	25
83	Copper-involved highly efficient oxygen reduction reaction in both alkaline and acidic media. Chemical Engineering Journal, 2022, 437, 135377.	6.6	25
84	Coordination Polymer Framework Based Onâ€Chip Microâ€Supercapacitors with AC Lineâ€Filtering Performance. Angewandte Chemie, 2017, 129, 3978-3982.	1.6	22
85	An interfacial engineering approach towards two-dimensional porous carbon hybrids for high performance energy storage and conversion. Journal of Materials Chemistry A, 2017, 5, 1567-1574.	5.2	22
86	B/N-Enriched Semi-Conductive Polymer Film for Micro-Supercapacitors with AC Line-Filtering Performance. Langmuir, 2021, 37, 2523-2531.	1.6	22
87	Twoâ€Dimensional Mesoscaleâ€Ordered Conducting Polymers. Angewandte Chemie, 2016, 128, 12704-12709.	1.6	21
88	Ultrathin PTAA interlayer in conjunction with azulene derivatives for the fabrication of inverted perovskite solar cells. Journal of Materials Chemistry C, 2021, 9, 14709-14719.	2.7	21
89	Atomic Ni and Cu co-anchored 3D nanoporous graphene as an efficient oxygen reduction electrocatalyst for zincâ€“air batteries. Nanoscale, 2021, 13, 10862-10870.	2.8	21
90	Toward Activity Origin of Electrocatalytic Hydrogen Evolution Reaction on Carbonâ€Rich Crystalline Coordination Polymers. Small, 2017, 13, 1700783.	5.2	16

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91	Viologen-based conjugated ionic polymer for nonvolatile rewritable memory device. European Polymer Journal, 2017, 94, 222-229.	2.6	16
92	In Situ Synthesis and Characterization of Poly(aryleneethynylene)â€Grafted Reduced Graphene Oxide. Chemistry - A European Journal, 2016, 22, 2247-2252.	1.7	14
93	Rational Control of Topological Defects in Porous Carbon for Highâ€Efficiency Carbon Dioxide Conversion. Advanced Materials Interfaces, 2021, 8, 2100051.	1.9	14
94	High-entropy carbons: From high-entropy aromatic species to single-atom catalysts for electrocatalysis. Chemical Engineering Journal, 2021, 426, 131320.	6.6	14
95	Polymer nanosheets derived porous carbon nanosheets as high efficient electrocatalysts for oxygen reduction reaction. Journal of Colloid and Interface Science, 2018, 516, 9-15.	5.0	13
96	Topological defect-containing Fe/N co-doped mesoporous carbon nanosheets as novel electrocatalysts for the oxygen reduction reaction and Znâ€“air batteries. Nanoscale, 2021, 13, 13249-13255.	2.8	13
97	Ionic Polyimide Derived Porous Carbon Nanosheets as Highâ€Efficiency Oxygen Reduction Catalysts for Znâ€“Air Batteries. Chemistry - A European Journal, 2020, 26, 6525-6534.	1.7	11
98	Perovskite oxide and polyazuleneâ€“based heterostructure for highâ€“performance supercapacitors. Journal of Applied Polymer Science, 2021, 138, 51198.	1.3	11
99	The philosophy of carbon: meso-entropy materials. Faraday Discussions, 2021, 227, 80-90.	1.6	10
100	S-enriched porous polymer derived N-doped porous carbons for electrochemical energy storage and conversion. Frontiers of Chemical Science and Engineering, 2018, 12, 346-357.	2.3	9
101	Porphyrinic conjugated microporous polymer anode for Li-ion batteries. Journal of Power Sources, 2022, 531, 231340.	4.0	9
102	Twoâ€Dimensional Nanostructures by the Assembly of nâ€Type Tetraazaanthraceneâ€Based Conjugated Molecules. ChemPhysChem, 2013, 14, 2954-2960.	1.0	8
103	Iron clusters boosted performance in electrocatalytic carbon dioxide conversion. Journal of Materials Chemistry A, 2020, 8, 21661-21667.	5.2	8
104	N-confused porphyrin-based conjugated microporous polymers. Chemical Communications, 2022, 58, 2339-2342.	2.2	8
105	Platinum Atoms and Nanoparticles Embedded Porous Carbons for Hydrogen Evolution Reaction. Materials, 2020, 13, 1513.	1.3	7
106	Modulating intramolecular electron and proton transfer kinetics for promoting carbon dioxide conversion. Chemical Communications, 2022, 58, 1966-1969.	2.2	6
107	Efficient Catalytic Conversion of 5â€Hydroxymethylfurfural to 2,5â€Furanâ€dicarboxylic Acid over Ruthenium Clusterâ€Embedded Ni(OH)2 Catalyst. ChemSusChem, 0, , .	3.6	5
108	Selfâ€Assembly Approach Towards MoS 2 â€Embedded Hierarchical Porous Carbons for Enhanced Electrocatalytic Hydrogen Evolution. Chemistry - A European Journal, 2021, 27, 2155-2164.	1.7	4

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109	Facile fabrication of graphene-based high-performance microsupercapacitors operating at a high temperature of 150 Â°C. Nanoscale Advances, 2021, 3, 4674-4679.	2.2	4
110	Tertiary amine-functionalized Co(II) porphyrin to enhance the electrochemical CO2 reduction activity. Journal of Materials Science, 2022, 57, 10129-10140.	1.7	4
111	A sulfur-containing polymer-plasticized poly(ethylene oxide)-based electrolyte enables highly effective lithium dendrite suppression. Journal of Materials Chemistry A, 2022, 10, 14849-14856.	5.2	4
112	Enhancing charge separation in conjugated microporous polymers for efficient photocatalytic hydrogen evolution. Materials Advances, 2021, 2, 7379-7383.	2.6	2
113	Covalent Triazine Frameworks and Porous Carbons: Perspective from an Azuleneâ€Based Case. Macromolecular Rapid Communications, 0, , 2200392.	2.0	2