Pengcheng Dai

List of Publications by Year
in descending order

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59 papers	4,222 citations	126907 33 h-index	123424 61 g-index
62 all docs	62 docs citations	62 times ranked	7169 citing authors

#	Article	IF	Citations
1	Metalâ€Organic Frameworks Derived Nanotube of Nickelâ€“Cobalt Bimetal Phosphides as Highly Efficient Electrocatalysts for Overall Water Splitting. Advanced Functional Materials, 2017, 27, 1703455.	14.9	597
2	High oxygen reduction activity on a metalâ€“organic framework derived carbon combined with high degree of graphitization and pyridinic-N dopants. Journal of Materials Chemistry A, 2017, 5, 789-795.	10.3	171
3	Nickel metalâ€“organic framework implanted on graphene and incubated to be ultrasmall nickel phosphide nanocrystals acts as a highly efficient water splitting electrocatalyst. Journal of Materials Chemistry A, 2018, 6, 1682-1691.	10.3	168
4	Metalâ€“organic frameworks: a promising platform for constructing non-noble electrocatalysts for the oxygen-reduction reaction. Journal of Materials Chemistry A, 2019, 7, 1964-1988.	10.3	165
5	Forming Buried Junctions to Enhance the Photovoltage Generated by Cuprous Oxide in Aqueous Solutions. Angewandte Chemie - International Edition, 2014, 53, 13493-13497.	13.8	160
6	Missing-node directed synthesis of hierarchical pores on a zirconium metalâ€“organic framework with tunable porosity and enhanced surface acidity via a microdroplet flow reaction. Journal of Materials Chemistry A, 2017, 5, 22372-22379.	10.3	159
7	In Situ Synthesis Strategy for Hierarchically Porous Ni₂P Polyhedrons from MOFs Templates with Enhanced Electrochemical Properties for Hydrogen Evolution. ACS Applied Materials & Interfaces, 2017, 9, 11642-11650.	8.0	158
8	Improving Hematite-based Photoelectrochemical Water Splitting with Ultrathin TiO₂ by Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2014, 6, 12005-12011.	8.0	155
9	Template-free synthesis of boron nitride foam-like porous monoliths and their high-end applications in water purification. Journal of Materials Chemistry A, 2016, 4, 1469-1478.	10.3	133
10	Phase selective synthesis of metastable orthorhombic Cu2ZnSnS4. Journal of Materials Chemistry, 2012, 22, 7502.	6.7	123
11	Adsorption Site Selective Occupation Strategy within a Metalâ€“Organic Framework for Highly Efficient Sieving Acetylene from Carbon Dioxide. Angewandte Chemie - International Edition, 2021, 60, 4570-4574.	13.8	117
12	Improved Li⁺ Storage through Homogeneous Nâ€Ðoping within Highly Branched Tubular Graphitic Foam. Advanced Materials, 2017, 29, 1603692.	21.0	113
13	Multifunctional Superelastic Foam-Like Boron Nitride Nanotubular Cellular-Network Architectures. ACS Nano, 2017, 11, 558-568.	14.6	110
14	Band-gap tunable (Cu2Sn)x/3Zn1â^'xS nanoparticles for solar cells. Chemical Communications, 2010, 46, 5749.	4.1	105
15	Solar Hydrogen Generation by Silicon Nanowires Modified with Platinum Nanoparticle Catalysts by Atomic Layer Deposition. Angewandte Chemie - International Edition, 2013, 52, 11119-11123.	13.8	100
16	Design of BN porous sheets with richly exposed (002) plane edges and their application as TiO2 visible light sensitizer. Nano Energy, 2015, 16, 19-27.	16.0	99
17	Spherical Superstructure of Boron Nitride Nanosheets Derived from Boron-Containing Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2020, 142, 8755-8762.	13.7	96
18	Porous copper zinc tin sulfide thin film as photocathode for double junction photoelectrochemical solar cells. Chemical Communications, 2012, 48, 3006.	4.1	89

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19	Bottom-Up Fabrication of Ultrathin 2D Zr Metalâ€“Organic Framework Nanosheets through a Facile Continuous Microdroplet Flow Reaction. Chemistry of Materials, 2018, 30, 3048-3059.	6.7	85
20	High-throughput fabrication of strutted graphene by ammonium-assisted chemical blowing for high-performance supercapacitors. Nano Energy, 2015, 16, 81-90.	16.0	83
21	Biomass-Derived Carbon Paper to Sandwich Magnetite Anode for Long-Life Li-Ion Battery. ACS Nano, 2019, 13, 11901-11911.	14.6	82
22	Densely Interconnected Porous BN Frameworks for Multifunctional and Isotropically Thermoconductive Polymer Composites. Advanced Functional Materials, 2018, 28, 1801205.	14.9	76
23	Highly dispersed Zn nanoparticles confined in a nanoporous carbon network: promising anode materials for sodium and potassium ion batteries. Journal of Materials Chemistry A, 2018, 6, 17371-17377.	10.3	75
24	Aluminum matrix composites reinforced with multi-walled boron nitride nanotubes fabricated by a high-pressure torsion technique. Materials and Design, 2015, 88, 451-460.	7.0	67
25	Pollutant capturing SERS substrate: porous boron nitride microfibers with uniform silver nanoparticle decoration. Nanoscale, 2015, 7, 18992-18997.	5.6	56
26	Monodispersed cation-disordered cubic AgInS2 nanocrystals with enhanced fluorescence. Applied Physics Letters, 2010, 96, .	3.3	51
27	Superstructure of a Metalâ€“Organic Framework Derived from Microdroplet Flow Reaction: An Intermediate State of Crystallization by Particle Attachment. ACS Nano, 2019, 13, 2901-2912.	14.6	47
28	Graphitic carbon nitride catalyzes selective oxidative dehydrogenation of propane. Applied Catalysis B: Environmental, 2020, 262, 118277.	20.2	47
29	Sustained-Release Method for the Directed Synthesis of ZIF-Derived Ultrafine Co-N-C ORR Catalysts with Embedded Co Quantum Dots. ACS Applied Materials & Interfaces, 2020, 12, 57847-57858.	8.0	46
30	One-step and scalable synthesis of Ni2P nanocrystals encapsulated in N,P-codoped hierarchically porous carbon matrix using a bipyridine and phosphonate linked nickel metalâ€“organic framework as highly efficient electrocatalysts for overall water splitting. Electrochimica Acta, 2019, 297, 755-766.	5.2	44
31	Cotton fabrics-derived flexible nitrogen-doped activated carbon cloth for high-performance supercapacitors in organic electrolyte. Electrochimica Acta, 2020, 354, 136717.	5.2	44
32	Boosting fast and stable potassium storage of iron selenide/carbon nanocomposites by electrolyte salt and solvent chemistry. Journal of Power Sources, 2021, 486, 229373.	7.8	41
33	Paper-Derived Flexible 3D Interconnected Carbon Microfiber Networks with Controllable Pore Sizes for Supercapacitors. ACS Applied Materials & Interfaces, 2018, 10, 37046-37056.	8.0	38
34	Boosting Fast and Stable Alkali Metal Ion Storage by Synergistic Engineering of Oxygen Vacancy and Amorphous Structure. Advanced Functional Materials, 2022, 32, 2106751.	14.9	38
35	Adsorption in Reversed Order of C₂ Hydrocarbons on an Ultramicroporous Fluorinated Metalâ€Organic Framework. Angewandte Chemie - International Edition, 2022, 61, .	13.8	34
36	Continuous synthesis for zirconium metal-organic frameworks with high quality and productivity via microdroplet flow reaction. Chinese Chemical Letters, 2018, 29, 849-853.	9.0	33

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37	High performance aluminum ion battery using polyaniline/ordered mesoporous carbon composite. Journal of Power Sources, 2020, 477, 228702.	7.8	33
38	Adsorption Site Selective Occupation Strategy within a Metalâ€“Organic Framework for Highly Efficient Sieving Acetylene from Carbon Dioxide. Angewandte Chemie, 2021, 133, 4620-4624.	2.0	33
39	Ultrafine TiO₂ Nanoparticles Confined in Nâ€Doped Porous Carbon Networks as Anodes of Highâ€Performance Sodiumâ€Ion Batteries. ChemElectroChem, 2017, 4, 1516-1522.	3.4	30
40	Hierarchical tubular structures constructed from rutile TiO2 nanorods with superior sodium storage properties. Electrochimica Acta, 2016, 211, 77-82.	5.2	29
41	A CoSeâ€“C@C coreâ€“shell structure with stable potassium storage performance realized by an effective solid electrolyte interphase layer. Journal of Materials Chemistry A, 2021, 9, 11397-11404.	10.3	28
42	Flexible conductive polymer composite materials based on strutted graphene foam. Composites Communications, 2021, 25, 100757.	6.3	27
43	Boosting ORR Catalytic Activity by Integrating Pyridineâ€N Dopants, a High Degree of Graphitization, and Hierarchical Pores into a MOFâ€Derived Nâ€Doped Carbon in a Tandem Synthesis. Chemistry - an Asian Journal, 2018, 13, 1318-1326.	3.3	24
44	Carbonates (bicarbonates)/reduced graphene oxide as anode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 24645-24650.	10.3	21
45	Lithium Borocarbide LiBC as an Anode Material for Rechargeable Li-Ion Batteries. Journal of Physical Chemistry C, 2018, 122, 18231-18236.	3.1	16
46	Metal-organic framework derived porous flakes of cobalt chalcogenides (CoX, XÂ=ÂO, S, Se and Te) rooted in carbon fibers as flexible electrode materials for pseudocapacitive energy storage. Electrochimica Acta, 2021, 369, 137681.	5.2	16
47	Carbon-coated NiSe nanoparticles anchored on reduced graphene oxide: a high-rate and long-life anode for potassium-ion batteries. Sustainable Energy and Fuels, 2021, 5, 3240-3246.	4.9	16
48	Porous Carbon Polyhedrons with High-Level Nitrogen-Doping for High-Performance Sodium-Ion Battery Anodes. ChemistrySelect, 2016, 1, 6442-6447.	1.5	14
49	Constructing ultrastable electrode/electrolyte interface for rapid potassium ion storage capability via salt chemistry and interfacial engineering. Nano Research, 2022, 15, 2083-2091.	10.4	13
50	Metal-organic Frameworks Derived CoS2-Co/N-doped Porous Carbon with Extremely High Electrocatalytic Stability for the Oxygen Reduction Reaction. International Journal of Electrochemical Science, 2016, 11, 9575-9584.	1.3	11
51	Synthesis of Mesoporous Î³-Al2O3 with Spongy Structure: In-Situ Conversion of Metal-Organic Frameworks and Improved Performance as Catalyst Support in Hydrodesulfurization. Materials, 2018, 11, 1067.	2.9	10
52	Impact of moderative ligand hydrolysis on morphology evolution and the morphology-dependent breathing effect performance of MIL-53(Al). CrystEngComm, 2018, 20, 2102-2111.	2.6	9
53	Nanoantenna Featuring Carbon Microtubes Derived from Bristle Fibers of Plane Trees for Supercapacitors in an Organic Electrolyte. ACS Applied Energy Materials, 2020, 3, 12627-12634.	5.1	9
54	High CO₂ separation performance on a metalâ€“organic framework composed of nano-cages lined with an ultra-high density of dual-side open metal sites. Materials Advances, 2022, 3, 493-497.	5.4	8

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55	Porous monolith of few-layered boron nitride for effective water cleanup. Journal of Materials Chemistry A, 2022, 10, 846-854.	10.3	8
56	Adsorption in Reversed Order of C₂ Hydrocarbons on an Ultramicroporous Fluorinated Metalâ€Organic Framework. Angewandte Chemie, 2022, 134, .	2.0	7
57	Nanoparticle-based screen printing of copper zinc tin sulfide thin film as photocathode for quantum dot sensitized solar cell. Materials Letters, 2015, 158, 198-201.	2.6	6
58	Easy and General Synthesis of Largeâ€Sized Mesoporous Rareâ€Earth Oxide Thin Films by â€²Micelle Assemblyâ€². Chemistry - an Asian Journal, 2015, 10, 2590-2593.	3.3	2
59	Carbonyl Groups Modified Graphite Sheets Catalyze Oxidative Dehydrogenation of Propane to Propene. Wuji Cailiao Xuebao/Journal of Inorganic Materials, 2019, , 15.	1.3	1