Zhonghua Zhu

List of Publications by Year
in descending order

314 papers	26,114 citations	5558 82 h-index	8138 148 g-index
326 all docs	326 docs citations	326 times ranked	26786 citing authors

#	Article	IF	Citations
1	Ultrathin Ironâ€Cobalt Oxide Nanosheets with Abundant Oxygen Vacancies for the Oxygen Evolution Reaction. Advanced Materials, 2017, 29, 1606793.	11.1	1,144
2	Nanoporous Graphitic-C₃N₄@Carbon Metal-Free Electrocatalysts for Highly Efficient Oxygen Reduction. Journal of the American Chemical Society, 2011, 133, 20116-20119.	6.6	958
3	Nitrogenâ€Enriched Nonporous Carbon Electrodes with Extraordinary Supercapacitance. Advanced Functional Materials, 2009, 19, 1800-1809.	7.8	720
4	Nitrogen-Doped Graphene for Generation and Evolution of Reactive Radicals by Metal-Free Catalysis. ACS Applied Materials & Interfaces, 2015, 7, 4169-4178.	4.0	677
5	Hybrid Graphene and Graphitic Carbon Nitride Nanocomposite: Gap Opening, Electronâ€"Hole Puddle, Interfacial Charge Transfer, and Enhanced Visible Light Response. Journal of the American Chemical Society, 2012, 134, 4393-4397.	6.6	565
6	Microstructure and electrochemical double-layer capacitance of carbon electrodes prepared by zinc chloride activation of sugar cane bagasse. Journal of Power Sources, 2010, 195, 912-918.	4.0	475
7	Nanoporous carbon electrode from waste coffee beans for high performance supercapacitors. Electrochemistry Communications, 2008, 10, 1594-1597.	2.3	435
8	A Perovskite Electrocatalyst for Efficient Hydrogen Evolution Reaction. Advanced Materials, 2016, 28, 6442-6448.	11.1	429
9	Identification of active sites for acidic oxygen reduction on carbon catalysts with and without nitrogen doping. Nature Catalysis, 2019, 2, 688-695.	16.1	423
10	Surface controlled generation of reactive radicals from persulfate by carbocatalysis on nanodiamonds. Applied Catalysis B: Environmental, 2016, 194, 7-15.	10.8	390
11	Phosphate removal from wastewater using red mud. Journal of Hazardous Materials, 2008, 158, 35-42.	6.5	380
12	Metal organic framework based mixed matrix membranes: an overview on filler/polymer interfaces. Journal of Materials Chemistry A, 2018, 6, 293-312.	5.2	377
13	Advanced synthesis of materials for intermediate-temperature solid oxide fuel cells. Progress in Materials Science, 2012, 57, 804-874.	16.0	372
14	Non precious metal catalysts for the PEM fuel cell cathode. International Journal of Hydrogen Energy, 2012, 37, 357-372.	3.8	331
15	Characterisation and environmental application of an Australian natural zeolite for basic dye removal from aqueous solution. Journal of Hazardous Materials, 2006, 136, 946-952.	6.5	329
16	Graphdiyne: a versatile nanomaterial for electronics and hydrogen purification. Chemical Communications, 2011, 47, 11843.	2.2	329
17	The physical and surface chemical characteristics of activated carbons and the adsorption of methylene blue from wastewater. Journal of Colloid and Interface Science, 2005, 284, 440-446.	5.0	305
18	Multifunctional Porous Graphene for Nanoelectronics and Hydrogen Storage: New Properties Revealed by First Principle Calculations. Journal of the American Chemical Society, 2010, 132, 2876-2877.	6.6	304

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19	Facile synthesis of nitrogen doped reduced graphene oxide as a superior metal-free catalyst for oxidation. Chemical Communications, 2013, 49, 9914.	2.2	294
20	Uncommon Pyrazoyl-Carboxyl Bifunctional Ligand-Based Microporous Lanthanide Systems: Sorption and Luminescent Sensing Properties. Inorganic Chemistry, 2016, 55, 3952-3959.	1.9	276
21	Recent Progress on Advanced Materials for Solidâ€Oxide Fuel Cells Operating Below 500 Â°C. Advanced Materials, 2017, 29, 1700132.	11.1	257
22	Hybrid Graphene/Titania Nanocomposite: Interface Charge Transfer, Hole Doping, and Sensitization for Visible Light Response. Journal of Physical Chemistry Letters, 2011, 2, 894-899.	2.1	252
23	Excellent performance of mesoporous Co3O4/MnO2 nanoparticles in heterogeneous activation of peroxymonosulfate for phenol degradation in aqueous solutions. Applied Catalysis B: Environmental, 2012, 127, 330-335.	10.8	243
24	Effects of acidic treatment of activated carbons on dye adsorption. Dyes and Pigments, 2007, 75, 306-314.	2.0	238
25	Geopolymeric adsorbents from fly ash for dye removal from aqueous solution. Journal of Colloid and Interface Science, 2006, 300, 52-59.	5.0	228
26	Highly defective CeO₂ as a promoter for efficient and stable water oxidation. Journal of Materials Chemistry A, 2015, 3, 634-640.	5.2	225
27	A Surfactantâ€Free and Scalable General Strategy for Synthesizing Ultrathin Twoâ€Dimensional Metalâ€"Organic Framework Nanosheets for the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2019, 58, 13565-13572.	7.2	205
28	Coal ash conversion into effective adsorbents for removal of heavy metals and dyes from wastewater. Journal of Hazardous Materials, 2006, 133, 243-251.	6.5	191
29	Layer structured graphite oxide as a novel adsorbent for humic acid removal from aqueous solution. Journal of Colloid and Interface Science, 2009, 333, 114-119.	5.0	184
30	Catalytic ammonia decomposition over Ru/carbon catalysts: The importance of the structure of carbon support. Applied Catalysis A: General, 2007, 320, 166-172.	2.2	182
31	Ultrasmall Waterâ€Soluble and Biocompatible Magnetic Iron Oxide Nanoparticles as Positive and Negative Dual Contrast Agents. Advanced Functional Materials, 2012, 22, 2387-2393.	7.8	181
32	A niobium and tantalum co-doped perovskite cathode for solid oxide fuel cells operating below 500â€‰Â°C. Nature Communications, 2017, 8, 13990.	5.8	180
33	Sulfurâ€Modified Oxygen Vacancies in Ironâ€"Cobalt Oxide Nanosheets: Enabling Extremely High Activity of the Oxygen Evolution Reaction to Achieve the Industrial Water Splitting Benchmark. Angewandte Chemie - International Edition, 2020, 59, 14664-14670.	7.2	178
34	Defectiveâ€Activatedâ€Carbonâ€Supported Mnâ€"Co Nanoparticles as a Highly Efficient Electrocatalyst for Oxygen Reduction. Advanced Materials, 2016, 28, 8771-8778.	11.1	175
35	Dots versus Antidots: Computational Exploration of Structure, Magnetism, and Half-Metallicity in Boronâ^'Nitride Nanostructures. Journal of the American Chemical Society, 2009, 131, 17354-17359.	6.6	174
36	Porous MOF with Highly Efficient Selectivity and Chemical Conversion for CO₂. ACS Applied Materials & Interfaces, 2017, 9, 17969-17976.	4.0	173

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37	Defectâ€Induced Ptâ€“Coâ€“Se Coordinated Sites with Highly Asymmetrical Electronic Distribution for Boosting Oxygenâ€Involving Electrocatalysis. Advanced Materials, 2019, 31, e1805581.	11.1	168
38	Tuning oxygen vacancies in two-dimensional iron-cobalt oxide nanosheets through hydrogenation for enhanced oxygen evolution activity. Nano Research, 2018, 11, 3509-3518.	5.8	167
39	Mixed Matrix Membranes with Strengthened MOFs/Polymer Interfacial Interaction and Improved Membrane Performance. ACS Applied Materials & Interfaces, 2014, 6, 5609-5618.	4.0	163
40	Ionic Liquids as the MOFs/Polymer Interfacial Binder for Efficient Membrane Separation. ACS Applied Materials & Interfaces, 2016, 8, 32041-32049.	4.0	157
41	Lithiumâ€Catalyzed Dehydrogenation of Ammonia Borane within Mesoporous Carbon Framework for Chemical Hydrogen Storage. Advanced Functional Materials, 2009, 19, 265-271.	7.8	156
42	Activated carbon becomes active for oxygen reduction and hydrogen evolution reactions. Chemical Communications, 2016, 52, 8156-8159.	2.2	145
43	Double-layer capacitance of waste coffee ground activated carbons in an organic electrolyte. Electrochemistry Communications, 2009, 11, 974-977.	2.3	144
44	Calcium-doped lanthanum nickelate layered perovskite and nickel oxide nano-hybrid for highly efficient water oxidation. Nano Energy, 2015, 12, 115-122.	8.2	144
45	An ab initio study on gas sensing properties of graphene and Si-doped graphene. European Physical Journal B, 2011, 81, 475-479.	0.6	143
46	Amphiphobic PVDF composite membranes for anti-fouling direct contact membrane distillation. Journal of Membrane Science, 2016, 505, 61-69.	4.1	141
47	Mixed matrix membranes incorporated with size-reduced Cu-BTC for improved gas separation. Journal of Materials Chemistry A, 2013, 1, 6350.	5.2	140
48	High activity electrocatalysts from metalâ€“organic framework-carbon nanotube templates for the oxygen reduction reaction. Carbon, 2015, 82, 417-424.	5.4	140
49	Honeycomb Metalâ€“Organic Framework with Lewis Acidic and Basic Bifunctional Sites: Selective Adsorption and CO₂ Catalytic Fixation. ACS Applied Materials & Interfaces, 2018, 10, 10965-10973.	4.0	138
50	Î±-MnO2 activation of peroxymonosulfate for catalytic phenol degradation in aqueous solutions. Catalysis Communications, 2012, 26, 144-148.	1.6	136
51	Surface modification of carbon fuels for direct carbon fuel cells. Journal of Power Sources, 2009, 186, 1-9.	4.0	135
52	Evaluation of raw coals as fuels for direct carbon fuel cells. Journal of Power Sources, 2010, 195, 4051-4058.	4.0	134
53	High performance cobalt-free perovskite cathode for intermediate temperature solid oxide fuel cells. Journal of Materials Chemistry, 2010, 20, 9619.	6.7	133
54	Metallic and Carbon Nanotube-Catalyzed Coupling of Hydrogenation in Magnesium. Journal of the American Chemical Society, 2007, 129, 15650-15654.	6.6	131

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55	High activity and durability of novel perovskite electrocatalysts for water oxidation. Materials Horizons, 2015, 2, 495-501.	6.4	128
56	Mixed-Matrix Membranes with Metalâ€“Organic Framework-Decorated CNT Fillers for Efficient CO₂ Separation. ACS Applied Materials & Interfaces, 2015, 7, 14750-14757.	4.0	124
57	Efficient light hydrocarbon separation and CO₂ capture and conversion in a stable MOF with oxalamide-decorated polar tubes. Chemical Communications, 2017, 53, 12970-12973.	2.2	121
58	Plasmaâ€Triggered Synergy of Exfoliation, Phase Transformation, and Surface Engineering in Cobalt Diselenide for Enhanced Water Oxidation. Angewandte Chemie - International Edition, 2018, 57, 16421-16425.	7.2	120
59	Characteristics of coal fly ash and adsorption application. Fuel, 2008, 87, 3469-3473.	3.4	119
60	Activated carbon monoliths with hierarchical pore structure from tar pitch and coal powder for the adsorption of CO2, CH4 and N2. Carbon, 2016, 103, 115-124.	5.4	116
61	Novel B-site ordered double perovskite Ba₂Bi_{0.1}Sc_{0.2}Co_{1.7}O_{6âˆ’x}for highly efficient oxygen reduction reaction. Energy and Environmental Science, 2011, 4, 872-875.	15.6	112
62	An Uncommon Carboxylâ€Decorated Metalâ€“Organic Framework with Selective Gas Adsorption and Catalytic Conversion of CO₂. Chemistry - A European Journal, 2018, 24, 865-871.	1.7	112
63	Enhanced gas permeability by fabricating functionalized multi-walled carbon nanotubes and polyethersulfone nanocomposite membrane. Separation and Purification Technology, 2011, 78, 76-82.	3.9	109
64	Cobalt Oxide and Cobaltâ€Graphitic Carbon Coreâ€“Shell Based Catalysts with Remarkably High Oxygen Reduction Reaction Activity. Advanced Science, 2016, 3, 1600060.	5.6	109
65	In situ synthesis of zeolitic imidazolate frameworks/carbon nanotube composites with enhanced CO2 adsorption. Dalton Transactions, 2014, 43, 7028.	1.6	108
66	A single boron atom doped boron nitride edge as a metal-free catalyst for N₂ fixation. Physical Chemistry Chemical Physics, 2019, 21, 1110-1116.	1.3	107
67	Factors That Determine the Performance of Carbon Fuels in the Direct Carbon Fuel Cell. Industrial & Engineering Chemistry Research, 2008, 47, 9670-9677.	1.8	106
68	C-BN Single-Walled Nanotubes from Hybrid Connection of BN/C Nanoribbons: Prediction by <i>ab initio</i> Density Functional Calculations. Journal of the American Chemical Society, 2009, 131, 1682-1683.	6.6	106
69	Effects of acid treatments of carbon on N2O and NO reduction by carbon-supported copper catalysts. Carbon, 2000, 38, 451-464.	5.4	103
70	Novel cage-like MOF for gas separation, CO₂ conversion and selective adsorption of an organic dye. Inorganic Chemistry Frontiers, 2020, 7, 746-755.	3.0	99
71	Solidâ€Oxide Fuel Cells: Recent Progress on Advanced Materials for Solidâ€Oxide Fuel Cells Operating Below 500 Â°C (Adv. Mater. 48/2017). Advanced Materials, 2017, 29, 1770345.	11.1	97
72	Porous Polyethersulfone-Supported Zeolitic Imidazolate Framework Membranes for Hydrogen Separation. Journal of Physical Chemistry C, 2012, 116, 13264-13270.	1.5	96

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73	Nanosheets Co₃O₄ Interleaved with Graphene for Highly Efficient Oxygen Reduction. ACS Applied Materials & Interfaces, 2015, 7, 21373-21380.	4.0	96
74	Effects of nitrogen doping on the structure of carbon nanotubes (CNTs) and activity of Ru/CNTs in ammonia decomposition. Chemical Engineering Journal, 2010, 156, 404-410.	6.6	95
75	Humic acid adsorption on fly ash and its derived unburned carbon. Journal of Colloid and Interface Science, 2007, 315, 41-46.	5.0	93
76	Synthesis and Structure Characterization of Chromium Oxide Prepared by Solid Thermal Decomposition Reaction. Journal of Physical Chemistry B, 2006, 110, 178-183.	1.2	92
77	A Comparative Study of Oxygen Reduction Reaction on Bi- and La-Doped SrFeO[sub 3âˆ'Î´] Perovskite Cathodes. Journal of the Electrochemical Society, 2011, 158, B132.	1.3	92
78	Sulfurâ€Modified Oxygen Vacancies in Ironâ€"Cobalt Oxide Nanosheets: Enabling Extremely High Activity of the Oxygen Evolution Reaction to Achieve the Industrial Water Splitting Benchmark. Angewandte Chemie, 2020, 132, 14772-14778.	1.6	89
79	Halloysite-Nanotube-Supported Ru Nanoparticles for Ammonia Catalytic Decomposition to Produce CO_{<i>x</i>}-Free Hydrogen. Energy & Fuels, 2011, 25, 3408-3416.	2.5	88
80	Significant improvement of surface area and CO2 adsorption of Cuâ€"BTC via solvent exchange activation. RSC Advances, 2013, 3, 17065.	1.7	88
81	First principle studies of zigzag AlN nanoribbon. Chemical Physics Letters, 2009, 469, 183-185.	1.2	86
82	Solvent or Temperature Induced Diverse Coordination Polymers of Silver(I) Sulfate and Bipyrazole Systems: Syntheses, Crystal Structures, Luminescence, and Sorption Properties. Inorganic Chemistry, 2013, 52, 14018-14027.	1.9	86
83	Metalâ€"support interface of a novel Niâ€"CeO2 catalyst for dry reforming of methane. Catalysis Communications, 2013, 31, 25-31.	1.6	86
84	Investigation of Gas Permeability in Carbon Nanotube (CNT)âˆ'Polymer Matrix Membranes via Modifying CNTs with Functional Groups/Metals and Controlling Modification Location. Journal of Physical Chemistry C, 2011, 115, 6661-6670.	1.5	83
85	A new cathode for solid oxide fuel cells capable of in situ electrochemical regeneration. Journal of Materials Chemistry, 2011, 21, 15343.	6.7	81
86	Amorphous Iron Oxide Decorated 3D Heterostructured Electrode for Highly Efficient Oxygen Reduction. Chemistry of Materials, 2011, 23, 4193-4198.	3.2	80
87	A density functional theory study on CO2 capture and activation by graphene-like boron nitride with boron vacancy. Catalysis Today, 2011, 175, 271-275.	2.2	80
88	Structural, electrical and electrochemical characterizations of SrNb0.1Co0.9O3âˆ'Î´ as a cathode of solid oxide fuel cells operating below 600Â°C. International Journal of Hydrogen Energy, 2010, 35, 1356-1366.	3.8	78
89	Insights into Hydrogen Atom Adsorption on and the Electrochemical Properties of Nitrogen-Substituted Carbon Materials. Journal of Physical Chemistry B, 2005, 109, 16744-16749.	1.2	77
90	Shape-tuned electrodeposition of bismuth-based nanosheets on flow-through hollow fiber gas diffusion electrode for high-efficiency CO2 reduction to formate. Applied Catalysis B: Environmental, 2021, 286, 119945.	10.8	77

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91	A comparative study of chemical treatment by FeCl₃, MgCl₂, and ZnCl₂ on microstructure, surface chemistry, and double-layercapacitance of carbons from waste biomass. Journal of Materials Research, 2010, 25, 1451-1459.	1.2	76
92	Nano-Biocatalysts of Cyt <i>c</i>@ZIF-8/GO Composites with High Recyclability via a de Novo Approach. ACS Applied Materials & Interfaces, 2018, 10, 16066-16076.	4.0	74
93	Effect of ionic liquids (ILs) on MOFs/polymer interfacial enhancement in mixed matrix membranes. Journal of Membrane Science, 2019, 587, 117157.	4.1	74
94	Hydrogen diffusion and effect of grain size on hydrogenation kinetics in magnesium hydrides. Journal of Materials Research, 2008, 23, 336-340.	1.2	72
95	Modification of Coal as a Fuel for the Direct Carbon Fuel Cell. Journal of Physical Chemistry A, 2010, 114, 3855-3862.	1.1	72
96	A Cationic MOF with High Uptake and Selectivity for CO₂ due to Multiple CO₂â€Philic Sites. Chemistry - A European Journal, 2015, 21, 16525-16531.	1.7	72
97	Synthesis and characterization of three amino-functionalized metalâ€"organic frameworks based on the 2-aminoterephthalic ligand. Dalton Transactions, 2015, 44, 8190-8197.	1.6	72
98	Electric Power and Synthesis Gas Coâ€generation From Methane with Zero Waste Gas Emission. Angewandte Chemie - International Edition, 2011, 50, 1792-1797.	7.2	71
99	A New Porous MOF with Two Uncommon Metalâ€"Carboxylateâ€"Pyrazolate Clusters and High CO₂/N₂ Selectivity. Inorganic Chemistry, 2015, 54, 1841-1846.	1.9	71
100	Catalytic partial oxidation of methane to syngas: review of perovskite catalysts and membrane reactors. Catalysis Reviews - Science and Engineering, 2021, 63, 1-67.	5.7	71
101	Empirical Analysis of the Contributions of Mesopores and Micropores to the Double-Layer Capacitance of Carbons. Journal of Physical Chemistry C, 2009, 113, 19335-19343.	1.5	70
102	Evaluation and optimization of Bi1â^'xSrxFeO3â^'Î´ perovskites as cathodes of solid oxide fuel cells. International Journal of Hydrogen Energy, 2011, 36, 3179-3186.	3.8	70
103	Tuning the Product Selectivity of the Cu Hollow Fiber Gas Diffusion Electrode for Efficient CO₂ Reduction to Formate by Controlled Surface Sn Electrodeposition. ACS Applied Materials & Interfaces, 2020, 12, 21670-21681.	4.0	69
104	Electronic structure methods applied to gasâ€"carbon reactions. Carbon, 2003, 41, 635-658.	5.4	68
105	H₂ purification by functionalized graphdiyne â€" role of nitrogen doping. Journal of Materials Chemistry A, 2015, 3, 6767-6771.	5.2	67
106	Gate opening effect of zeolitic imidazolate framework ZIF-7 for adsorption of CH₄ and CO₂ from N₂. Journal of Materials Chemistry A, 2017, 5, 21389-21399.	5.2	67
107	Multiple Functions of Gas Separation and Vapor Adsorption in a New MOF with Open Tubular Channels. ACS Applied Materials & Interfaces, 2021, 13, 4102-4109.	4.0	67
108	Catalytic ammonia decomposition over CMK-3 supported Ru catalysts: Effects of surface treatments of supports. Carbon, 2007, 45, 11-20.	5.4	66

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109	Hierarchical CO2-protective shell for highly efficient oxygen reduction reaction. Scientific Reports, 2012, 2, 327.	1.6	66
110	Propylene/propane selective mixed matrix membranes with grape-branched MOF/CNT filler. Journal of Materials Chemistry A, 2016, 4, 6084-6090.	5.2	65
111	A Surfactantâ€Free and Scalable General Strategy for Synthesizing Ultrathin Twoâ€Dimensional Metalâ€“Organic Framework Nanosheets for the Oxygen Evolution Reaction. Angewandte Chemie, 2019, 131, 13699-13706.	1.6	64
112	Efficient C₂H<i>_n</i> Hydrocarbons and VOC Adsorption and Separation in an MOF with Lewis Basic and Acidic Decorated Active Sites. ACS Applied Materials & Interfaces, 2020, 12, 41785-41793.	4.0	64
113	A density functional theory study of CO2 and N2 adsorption on aluminium nitride single walled nanotubes. Journal of Materials Chemistry, 2010, 20, 10426.	6.7	62
114	Electrocatalytically Switchable CO₂ Capture: First Principle Computational Exploration of Carbon Nanotubes with Pyridinic Nitrogen. ChemSusChem, 2014, 7, 435-441.	3.6	62
115	Predicting a new class of metal-organic frameworks as efficient catalyst for bi-functional oxygen evolution/reduction reactions. Journal of Catalysis, 2018, 367, 206-211.	3.1	61
116	Comparative Study of Li, Na, and K Adsorptions on Graphite by Using ab Initio Method. Langmuir, 2004, 20, 10751-10755.	1.6	60
117	Defect engineering and characterization of active sites for efficient electrocatalysis. Nanoscale, 2021, 13, 3327-3345.	2.8	60
118	Composite cathodes for protonic ceramic fuel cells: Rationales and materials. Composites Part B: Engineering, 2022, 238, 109881.	5.9	59
119	Catalytic Ammonia Decomposition over Industrial-Waste-Supported Ru Catalysts. Environmental Science & Technology, 2007, 41, 3758-3762.	4.6	58
120	Ordered Mesoporous Carbons Enriched with Nitrogen: Application to Hydrogen Storage. Journal of Physical Chemistry C, 2010, 114, 8639-8645.	1.5	58
121	One-pot synthesis of carbon nanotubeâ€“graphene hybrids via syngas production. Journal of Materials Chemistry A, 2014, 2, 1418-1428.	5.2	58
122	A novel CO2-resistant ceramic dual-phase hollow fiber membrane for oxygen separation. Journal of Membrane Science, 2017, 522, 91-99.	4.1	58
123	Oneâ€Step C₂H₄Purification from Ternary C₂H₆/C₂H₄/C₂H₂Mixtures by a Robust Metalâ€“Organic Framework with Customized Pore Environment. Angewandte Chemie - International Edition, 2022, 61, .	7.2	57
124	Catalytic reduction of NO by CO over copper-oxide supported mesoporous silica. Applied Catalysis A: General, 2011, 409-410, 55-65.	2.2	56
125	A comparative study of different carbon fuels in an electrolyte-supported hybrid direct carbon fuel cell. Applied Energy, 2013, 108, 402-409.	5.1	55
126	Adsorption of Carbon Dioxide and Nitrogen on Single-Layer Aluminum Nitride Nanostructures Studied by Density Functional Theory. Journal of Physical Chemistry C, 2010, 114, 7846-7849.	1.5	53

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127	Fine-Tuning the Coordinatively Unsaturated Metal Sites of Metalâ€"Organic Frameworks by Plasma Engraving for Enhanced Electrocatalytic Activity. ACS Applied Materials & Interfaces, 2019, 11, 44300-44307.	4.0	53
128	Graphitic Carbon Nanofibers Synthesized by the Chemical Vapor Deposition (CVD) Method and Their Electrochemical Performances in Supercapacitors. Energy & Fuels, 2008, 22, 4139-4145.	2.5	52
129	Fluorination-induced magnetism in boron nitride nanotubes from ab initio calculations. Applied Physics Letters, 2008, 92, 102515.	1.5	52
130	Phase Transition of a Cobaltâ€Free Perovskite as a Highâ€Performance Cathode for Intermediateâ€Temperature Solid Oxide Fuel Cells. ChemSusChem, 2012, 5, 2023-2031.	3.6	52
131	A comparative study of SrCo_{0.8}Nb_{0.2}O_{3â^'Î´}and SrCo_{0.8}Ta_{0.2}O_{3â^'Î´}as low-temperature solid oxide fuel cell cathodes: effect of non-geometry factors on the oxygen reduction reaction. Journal of Materials Chemistry A, 2015, 3, 24064-24070.	5.2	52
132	Nitrogen-Doped Carbon Foams Synthesized from Banana Peel and Zinc Complex Template for Adsorption of CO₂, CH₄, and N₂. Energy & Fuels, 2016, 30, 7298-7309.	2.5	52
133	Computational screening of MN₄ (M = Tiâ€"Cu) based metal organic frameworks for CO₂ reduction using the d-band centre as a descriptor. Nanoscale, 2020, 12, 6188-6194.	2.8	52
134	A Comparative Study of Carbon Gasification with O2and CO2by Density Functional Theory Calculations. Energy & Fuels, 2002, 16, 1359-1368.	2.5	51
135	Semiconductor nanowires for thermoelectrics. Journal of Materials Chemistry, 2012, 22, 22821.	6.7	51
136	Hierarchically structured metalâ€"organic framework/vertically-aligned carbon nanotubes hybrids for CO2 capture. RSC Advances, 2013, 3, 25360.	1.7	51
137	Silicon-doped graphene edges: an efficient metal-free catalyst for the reduction of CO₂ into methanol and ethanol. Catalysis Science and Technology, 2019, 9, 6800-6807.	2.1	51
138	Comparative study of hydrogen storage in Li- and K-doped carbon materialsâ€"â€"theoretically revisited. Carbon, 2004, 42, 2509-2514.	5.4	50
139	Comparative Studies of SrCo_{1â^'<i>x</i>}Ta_{<i>x</i>}O_{3â^'<i>Î´</i>} (<i>x</i>=0.05â€"0.4) Oxides as Cathodes for Lowâ€Temperature Solidâ€Oxide Fuel Cells. ChemElectroChem, 2015, 2, 1331-1338.	1.7	50
140	Surface-etched halloysite nanotubes in mixed matrix membranes for efficient gas separation. Separation and Purification Technology, 2017, 173, 63-71.	3.9	50
141	Deactivation and Regeneration of Oxygen Reduction Reactivity on Double Perovskite Ba₂Bi_{0.1}Sc_{0.2}Co_{1.7}O_{6â^'<i>x</i>}Cathode for Intermediate-Temperature Solid Oxide Fuel Cells. Chemistry of Materials, 2011, 23, 1618-1624.	3.2	49
142	Molecular Orbital Theory Calculations of the H2Oâ^'Carbon Reaction. Energy & Fuels, 2002, 16, 847-854.	2.5	48
143	Pore channel surface modification for enhancing anti-fouling membrane distillation. Applied Surface Science, 2018, 443, 217-226.	3.1	48
144	Computational Design and Experimental Validation of the Optimal Bimetal-Doped SrCoO_{3â^'Î´} Perovskite as Solid Oxide Fuel Cell Cathode. Journal of the American Chemical Society, 2021, 143, 9507-9514.	6.6	48

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145	Influence of calcination temperatures of Feitknecht compound precursor on the structure of Niâ€"Al2O3 catalyst and the corresponding catalytic activity in methane decomposition to hydrogen and carbon nanofibers. Applied Catalysis A: General, 2009, 362, 1-7.	2.2	46
146	Selective catalytic reduction of NO by CO over CuO supported on SBA-15: Effect of CuO loading on the activity of catalysts. Catalysis Today, 2011, 166, 188-193.	2.2	46
147	SrCo0.85Fe0.1P0.05O3â^'Î´ perovskite as a cathode for intermediate-temperature solid oxide fuel cells. Journal of Materials Chemistry A, 2013, 1, 13632.	5.2	46
148	Halloysite Nanotube Supported Ru Nanocatalysts Synthesized by the Inclusion of Preformed Ru Nanoparticles for Preferential Oxidation of CO in H₂-Rich Atmosphere. Journal of Physical Chemistry C, 2013, 117, 4141-4151.	1.5	46
149	Hexagonal Sphericon Hematite with High Performance for Water Oxidation. Advanced Materials, 2017, 29, 1703792.	11.1	46
150	Diluted Magnetic Semiconductor Nanowires Prepared by the Solutionâ€"Liquidâ€"Solid Method. Angewandte Chemie - International Edition, 2010, 49, 2777-2781.	7.2	45
151	A facile method to synthesize boron-doped Ni/Fe alloy nano-chains as electrocatalyst for water oxidation. Journal of Power Sources, 2017, 349, 68-74.	4.0	45
152	The preparation of activated carbon discs from tar pitch and coal powder for adsorption of CO 2 , CH 4 and N 2. Microporous and Mesoporous Materials, 2017, 238, 19-26.	2.2	45
153	Hydrogen adsorption in nitrogen enriched ordered mesoporous carbons doped with nickel nanoparticles. Carbon, 2011, 49, 398-405.	5.4	44
154	Selective catalytic reduction of NO with CO using different metal-oxides incorporated in MCM-41. Chemical Engineering Journal, 2014, 255, 437-444.	6.6	43
155	Structural Diversity of Cadmium(II) Coordination Polymers Induced by Tuning the Coordination Sites of Isomeric Ligands. Inorganic Chemistry, 2016, 55, 8871-8880.	1.9	43
156	Interfacial engineering of a polymerâ€"MOF composite by <i>in situ</i> vitrification. Chemical Communications, 2020, 56, 3609-3612.	2.2	43
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314	A Novel Method to Purposely Modify the Anode/Electrolyte Interface in Solid Oxide Fuel Cells. ChemistrySelect, 2019, 4, 13835-13840.	0.7	0