Zhonghua Zhu

List of Publications by Year
in descending order

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		5574	8167
314	26,114	82	148
papers	citations	h-index	g-index

326	326	326	26786
all docs	docs citations	times ranked	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.	21.0	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.	13.7	958
3	Nitrogenâ€Enriched Nonporous Carbon Electrodes with Extraordinary Supercapacitance. Advanced Functional Materials, 2009, 19, 1800-1809.	14.9	720
4	Nitrogen-Doped Graphene for Generation and Evolution of Reactive Radicals by Metal-Free Catalysis. ACS Applied Materials & Interfaces, 2015, 7, 4169-4178.	8.0	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.	13.7	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.	7.8	475
7	Nanoporous carbon electrode from waste coffee beans for high performance supercapacitors. Electrochemistry Communications, 2008, 10, 1594-1597.	4.7	435
8	A Perovskite Electrocatalyst for Efficient Hydrogen Evolution Reaction. Advanced Materials, 2016, 28, 6442-6448.	21.0	429
9	Identification of active sites for acidic oxygen reduction on carbon catalysts with and without nitrogen doping. Nature Catalysis, 2019, 2, 688-695.	34.4	423
10	Surface controlled generation of reactive radicals from persulfate by carbocatalysis on nanodiamonds. Applied Catalysis B: Environmental, 2016, 194, 7-15.	20.2	390
11	Phosphate removal from wastewater using red mud. Journal of Hazardous Materials, 2008, 158, 35-42.	12.4	380
12	Metal organic framework based mixed matrix membranes: an overview on filler/polymer interfaces. Journal of Materials Chemistry A, 2018, 6, 293-312.	10.3	377
13	Advanced synthesis of materials for intermediate-temperature solid oxide fuel cells. Progress in Materials Science, 2012, 57, 804-874.	32.8	372
14	Non precious metal catalysts for the PEM fuel cell cathode. International Journal of Hydrogen Energy, 2012, 37, 357-372.	7.1	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.	12.4	329
16	Graphdiyne: a versatile nanomaterial for electronics and hydrogen purification. Chemical Communications, 2011, 47, 11843.	4.1	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.	9.4	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.	13.7	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.	4.1	294
20	Uncommon Pyrazoyl-Carboxyl Bifunctional Ligand-Based Microporous Lanthanide Systems: Sorption and Luminescent Sensing Properties. Inorganic Chemistry, 2016, 55, 3952-3959.	4.0	276
21	Recent Progress on Advanced Materials for Solidâ€Oxide Fuel Cells Operating Below 500 Â°C. Advanced Materials, 2017, 29, 1700132.	21.0	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.	4.6	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.	20.2	243
24	Effects of acidic treatment of activated carbons on dye adsorption. Dyes and Pigments, 2007, 75, 306-314.	3.7	238
25	Geopolymeric adsorbents from fly ash for dye removal from aqueous solution. Journal of Colloid and Interface Science, 2006, 300, 52-59.	9.4	228
26	Highly defective CeO₂ as a promoter for efficient and stable water oxidation. Journal of Materials Chemistry A, 2015, 3, 634-640.	10.3	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.	13.8	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.	12.4	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.	9.4	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.	4.3	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.	14.9	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.	12.8	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.	13.8	178
34	Defectiveâ€Activatedâ€Carbonâ€Supported Mnâ€“Co Nanoparticles as a Highly Efficient Electrocatalyst for Oxygen Reduction. Advanced Materials, 2016, 28, 8771-8778.	21.0	175
35	Dots versus Antidots: Computational Exploration of Structure, Magnetism, and Half-Metallicity in Boronâˆ’Nitride Nanostructures. Journal of the American Chemical Society, 2009, 131, 17354-17359.	13.7	174
36	Porous MOF with Highly Efficient Selectivity and Chemical Conversion for CO₂. ACS Applied Materials & Interfaces, 2017, 9, 17969-17976.	8.0	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.	21.0	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.	10.4	167
39	Mixed Matrix Membranes with Strengthened MOFs/Polymer Interfacial Interaction and Improved Membrane Performance. ACS Applied Materials & Interfaces, 2014, 6, 5609-5618.	8.0	163
40	Ionic Liquids as the MOFs/Polymer Interfacial Binder for Efficient Membrane Separation. ACS Applied Materials & Interfaces, 2016, 8, 32041-32049.	8.0	157
41	Lithiumâ€Catalyzed Dehydrogenation of Ammonia Borane within Mesoporous Carbon Framework for Chemical Hydrogen Storage. Advanced Functional Materials, 2009, 19, 265-271.	14.9	156
42	Activated carbon becomes active for oxygen reduction and hydrogen evolution reactions. Chemical Communications, 2016, 52, 8156-8159.	4.1	145
43	Double-layer capacitance of waste coffee ground activated carbons in an organic electrolyte. Electrochemistry Communications, 2009, 11, 974-977.	4.7	144
44	Calcium-doped lanthanum nickelate layered perovskite and nickel oxide nano-hybrid for highly efficient water oxidation. Nano Energy, 2015, 12, 115-122.	16.0	144
45	An ab initio study on gas sensing properties of graphene and Si-doped graphene. European Physical Journal B, 2011, 81, 475-479.	1.5	143
46	Amphiphobic PVDF composite membranes for anti-fouling direct contact membrane distillation. Journal of Membrane Science, 2016, 505, 61-69.	8.2	141
47	Mixed matrix membranes incorporated with size-reduced Cu-BTC for improved gas separation. Journal of Materials Chemistry A, 2013, 1, 6350.	10.3	140
48	High activity electrocatalysts from metalâ€“organic framework-carbon nanotube templates for the oxygen reduction reaction. Carbon, 2015, 82, 417-424.	10.3	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.	8.0	138
50	Î±-MnO2 activation of peroxymonosulfate for catalytic phenol degradation in aqueous solutions. Catalysis Communications, 2012, 26, 144-148.	3.3	136
51	Surface modification of carbon fuels for direct carbon fuel cells. Journal of Power Sources, 2009, 186, 1-9.	7.8	135
52	Evaluation of raw coals as fuels for direct carbon fuel cells. Journal of Power Sources, 2010, 195, 4051-4058.	7.8	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.	13.7	131

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55	High activity and durability of novel perovskite electrocatalysts for water oxidation. Materials Horizons, 2015, 2, 495-501.	12.2	128
56	Mixed-Matrix Membranes with Metalâ€“Organic Framework-Decorated CNT Fillers for Efficient CO₂ Separation. ACS Applied Materials & Interfaces, 2015, 7, 14750-14757.	8.0	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.	4.1	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.	13.8	120
59	Characteristics of coal fly ash and adsorption application. Fuel, 2008, 87, 3469-3473.	6.4	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.	10.3	116
61	Novel B-site ordered double perovskite Ba₂Bi_{0.1}Sc_{0.2}Co_{1.7}O_{6â”x}for highly efficient oxygen reduction reaction. Energy and Environmental Science, 2011, 4, 872-875.	30.8	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.	3.3	112
63	Enhanced gas permeability by fabricating functionalized multi-walled carbon nanotubes and polyethersulfone nanocomposite membrane. Separation and Purification Technology, 2011, 78, 76-82.	7.9	109
64	Cobalt Oxide and Cobaltâ€Graphitic Carbon Coreâ€“Shell Based Catalysts with Remarkably High Oxygen Reduction Reaction Activity. Advanced Science, 2016, 3, 1600060.	11.2	109
65	In situ synthesis of zeolitic imidazolate frameworks/carbon nanotube composites with enhanced CO2 adsorption. Dalton Transactions, 2014, 43, 7028.	3.3	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.	2.8	107
67	Factors That Determine the Performance of Carbon Fuels in the Direct Carbon Fuel Cell. Industrial & Engineering Chemistry Research, 2008, 47, 9670-9677.	3.7	106
68	C-BN Single-Walled Nanotubes from Hybrid Connection of BN/C Nanoribbons: Prediction by ab initio Density Functional Calculations. Journal of the American Chemical Society, 2009, 131, 1682-1683.	13.7	106
69	Effects of acid treatments of carbon on N2O and NO reduction by carbon-supported copper catalysts. Carbon, 2000, 38, 451-464.	10.3	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.	6.0	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.	21.0	97
72	Porous Polyethersulfone-Supported Zeolitic Imidazolate Framework Membranes for Hydrogen Separation. Journal of Physical Chemistry C, 2012, 116, 13264-13270.	3.1	96

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73	Nanosheets Co₃O₄ Interleaved with Graphene for Highly Efficient Oxygen Reduction. ACS Applied Materials & Interfaces, 2015, 7, 21373-21380.	8.0	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.	12.7	95
75	Humic acid adsorption on fly ash and its derived unburned carbon. Journal of Colloid and Interface Science, 2007, 315, 41-46.	9.4	93
76	Synthesis and Structure Characterization of Chromium Oxide Prepared by Solid Thermal Decomposition Reaction. Journal of Physical Chemistry B, 2006, 110, 178-183.	2.6	92
77	A Comparative Study of Oxygen Reduction Reaction on Bi- and La-Doped SrFeO[sub 3â^'Î´] Perovskite Cathodes. Journal of the Electrochemical Society, 2011, 158, B132.	2.9	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.	2.0	89
79	Halloysite-Nanotube-Supported Ru Nanoparticles for Ammonia Catalytic Decomposition to Produce CO_x-Free Hydrogen. Energy & Fuels, 2011, 25, 3408-3416.	5.1	88
80	Significant improvement of surface area and CO2 adsorption of Cuâ€“BTC via solvent exchange activation. RSC Advances, 2013, 3, 17065.	3.6	88
81	First principle studies of zigzag AlN nanoribbon. Chemical Physics Letters, 2009, 469, 183-185.	2.6	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.	4.0	86
83	Metalâ€“support interface of a novel Niâ€“CeO2 catalyst for dry reforming of methane. Catalysis Communications, 2013, 31, 25-31.	3.3	86
84	Investigation of Gas Permeability in Carbon Nanotube (CNT)â^'Polymer Matrix Membranes via Modifying CNTs with Functional Groups/Metals and Controlling Modification Location. Journal of Physical Chemistry C, 2011, 115, 6661-6670.	3.1	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.	6.7	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.	4.4	80
88	Structural, electrical and electrochemical characterizations of SrNb0.1Co0.9O3â^'Î´ as a cathode of solid oxide fuel cells operating below 600Â°C. International Journal of Hydrogen Energy, 2010, 35, 1356-1366.	7.1	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.	2.6	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.	20.2	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.	2.6	76
92	Nano-Biocatalysts of Cyt c@ZIF-8/GO Composites with High Recyclability via a de Novo Approach. ACS Applied Materials & Interfaces, 2018, 10, 16066-16076.	8.0	74
93	Effect of ionic liquids (ILs) on MOFs/polymer interfacial enhancement in mixed matrix membranes. Journal of Membrane Science, 2019, 587, 117157.	8.2	74
94	Hydrogen diffusion and effect of grain size on hydrogenation kinetics in magnesium hydrides. Journal of Materials Research, 2008, 23, 336-340.	2.6	72
95	Modification of Coal as a Fuel for the Direct Carbon Fuel Cell. Journal of Physical Chemistry A, 2010, 114, 3855-3862.	2.5	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.	3.3	72
97	Synthesis and characterization of three amino-functionalized metalâ€“organic frameworks based on the 2-aminoterephthalic ligand. Dalton Transactions, 2015, 44, 8190-8197.	3.3	72
98	Electric Power and Synthesis Gas Coâ€generation From Methane with Zero Waste Gas Emission. Angewandte Chemie - International Edition, 2011, 50, 1792-1797.	13.8	71
99	A New Porous MOF with Two Uncommon Metalâ€“Carboxylateâ€“Pyrazolate Clusters and High CO₂/N₂ Selectivity. Inorganic Chemistry, 2015, 54, 1841-1846.	4.0	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.	12.9	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.	3.1	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.	7.1	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.	8.0	69
104	Electronic structure methods applied to gasâ€“carbon reactions. Carbon, 2003, 41, 635-658.	10.3	68
105	H₂ purification by functionalized graphdiyne â€“ role of nitrogen doping. Journal of Materials Chemistry A, 2015, 3, 6767-6771.	10.3	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.	10.3	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.	8.0	67
108	Catalytic ammonia decomposition over CMK-3 supported Ru catalysts: Effects of surface treatments of supports. Carbon, 2007, 45, 11-20.	10.3	66

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109	Hierarchical CO2-protective shell for highly efficient oxygen reduction reaction. Scientific Reports, 2012, 2, 327.	3.3	66
110	Propylene/propane selective mixed matrix membranes with grape-branched MOF/CNT filler. Journal of Materials Chemistry A, 2016, 4, 6084-6090.	10.3	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.	2.0	64
112	Efficient C₂H_n 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.	8.0	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.	6.8	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.	6.2	61
116	Comparative Study of Li, Na, and K Adsorptions on Graphite by Using ab Initio Method. Langmuir, 2004, 20, 10751-10755.	3.5	60
117	Defect engineering and characterization of active sites for efficient electrocatalysis. Nanoscale, 2021, 13, 3327-3345.	5.6	60
118	Composite cathodes for protonic ceramic fuel cells: Rationales and materials. Composites Part B: Engineering, 2022, 238, 109881.	12.0	59
119	Catalytic Ammonia Decomposition over Industrial-Waste-Supported Ru Catalysts. Environmental Science & Technology, 2007, 41, 3758-3762.	10.0	58
120	Ordered Mesoporous Carbons Enriched with Nitrogen: Application to Hydrogen Storage. Journal of Physical Chemistry C, 2010, 114, 8639-8645.	3.1	58
121	One-pot synthesis of carbon nanotubeâ€“graphene hybrids via syngas production. Journal of Materials Chemistry A, 2014, 2, 1418-1428.	10.3	58
122	A novel CO2-resistant ceramic dual-phase hollow fiber membrane for oxygen separation. Journal of Membrane Science, 2017, 522, 91-99.	8.2	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, .	13.8	57
124	Catalytic reduction of NO by CO over copper-oxide supported mesoporous silica. Applied Catalysis A: General, 2011, 409-410, 55-65.	4.3	56
125	A comparative study of different carbon fuels in an electrolyte-supported hybrid direct carbon fuel cell. Applied Energy, 2013, 108, 402-409.	10.1	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.	3.1	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.	8.0	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.	5.1	52
129	Fluorination-induced magnetism in boron nitride nanotubes from ab initio calculations. Applied Physics Letters, 2008, 92, 102515.	3.3	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.	6.8	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.	10.3	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.	5.1	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.	5.6	52
134	A Comparative Study of Carbon Gasification with O2and CO2by Density Functional Theory Calculations. Energy & Fuels, 2002, 16, 1359-1368.	5.1	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.	3.6	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.	4.1	51
138	Comparative study of hydrogen storage in Li- and K-doped carbon materialsâ€“â€“theoretically revisited. Carbon, 2004, 42, 2509-2514.	10.3	50
139	Comparative Studies of SrCo_{1â^'x}Ta_xO_{3â^'Î´} (x=0.05â€“0.4) Oxides as Cathodes for Lowâ€Temperature Solidâ€Oxide Fuel Cells. ChemElectroChem, 2015, 2, 1331-1338.	3.4	50
140	Surface-etched halloysite nanotubes in mixed matrix membranes for efficient gas separation. Separation and Purification Technology, 2017, 173, 63-71.	7.9	50
141	Deactivation and Regeneration of Oxygen Reduction Reactivity on Double Perovskite Ba₂Bi_{0.1}Sc_{0.2}Co_{1.7}O_{6â^'x}Cathode for Intermediate-Temperature Solid Oxide Fuel Cells. Chemistry of Materials, 2011, 23, 1618-1624.	6.7	49
142	Molecular Orbital Theory Calculations of the H2Oâ^'Carbon Reaction. Energy & Fuels, 2002, 16, 847-854.	5.1	48
143	Pore channel surface modification for enhancing anti-fouling membrane distillation. Applied Surface Science, 2018, 443, 217-226.	6.1	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.	13.7	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.	4.3	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.	4.4	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.	10.3	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.	3.1	46
149	Hexagonal Sphericon Hematite with High Performance for Water Oxidation. Advanced Materials, 2017, 29, 1703792.	21.0	46
150	Diluted Magnetic Semiconductor Nanowires Prepared by the Solutionâ€“Liquidâ€“Solid Method. Angewandte Chemie - International Edition, 2010, 49, 2777-2781.	13.8	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.	7.8	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.	4.4	45
153	Hydrogen adsorption in nitrogen enriched ordered mesoporous carbons doped with nickel nanoparticles. Carbon, 2011, 49, 398-405.	10.3	44
154	Selective catalytic reduction of NO with CO using different metal-oxides incorporated in MCM-41. Chemical Engineering Journal, 2014, 255, 437-444.	12.7	43
155	Structural Diversity of Cadmium(II) Coordination Polymers Induced by Tuning the Coordination Sites of Isomeric Ligands. Inorganic Chemistry, 2016, 55, 8871-8880.	4.0	43
156	Interfacial engineering of a polymerâ€“MOF composite by in situ vitrification. Chemical Communications, 2020, 56, 3609-3612.	4.1	43
157	Mass transfer in coal seams for CO2 sequestration. AICHE Journal, 2007, 53, 1028-1049.	3.6	41
158	KOH catalysed preparation of activated carbon aerogels for dye adsorption. Journal of Colloid and Interface Science, 2011, 357, 157-162.	9.4	41
159	Catalytic ammonia decomposition for CO-free hydrogen generation over Ru/Cr2O3 catalysts. Applied Catalysis A: General, 2013, 467, 246-252.	4.3	41
160	Mechanochemically Synthesised Flexible Electrodes Based on Bimetallic Metalâ€“Organic Framework Glasses for the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2022, 61, .	13.8	41
161	New Insights into the Interaction of Hydrogen Atoms with Boron-Substituted Carbon. Journal of Physical Chemistry B, 2006, 110, 1249-1255.	2.6	40
162	Sc and Ta-doped SrCoO3-Î´ perovskite as a high-performance cathode for solid oxide fuel cells. Composites Part B: Engineering, 2019, 178, 107491.	12.0	40

#	Article	IF	Citations
163	Porous Structure Engineering of Iridium Oxide Nanoclusters on Atomic Scale for Efficient pHâ€Universal Overall Water Splitting. Small, 2021, 17, e2100121.	10.0	40
164	A highly stable MOF with F and N accessible sites for efficient capture and separation of acetylene from ternary mixtures. Journal of Materials Chemistry A, 2021, 9, 24495-24502.	10.3	40
165	Grafting Cobalt Diselenide on Defective Graphene for Enhanced Oxygen Evolution Reaction. IScience, 2018, 7, 145-153.	4.1	39
166	A new honeycomb metalâ€“carboxylate-tetrazolate framework with multiple functions for CO₂ conversion and selective capture of C₂H₂, CO₂ and benzene. Inorganic Chemistry Frontiers, 2020, 7, 1957-1964.	6.0	39
167	A comparison study of catalytic oxidation and acid oxidation to prepare carbon nanotubes for filling with Ru nanoparticles. Carbon, 2011, 49, 2022-2032.	10.3	38
168	A Multi-Functional In(III)-Organic Framework for Acetylene Separation, Carbon Dioxide Utilization, and Antibiotic Detection in Water. Inorganic Chemistry, 2020, 59, 15302-15311.	4.0	38
169	Theoretical Insight into Faceted ZnS Nanowires and Nanotubes from Interatomic Potential and First-Principles Calculations. Journal of Physical Chemistry C, 2008, 112, 3509-3514.	3.1	37
170	Characteristics of unburned carbons and their application for humic acid removal from water. Fuel Processing Technology, 2009, 90, 375-380.	7.2	37
171	Highly Stable Dualâ€Phase Membrane Based on Ce_{0.9}Gd_{0.1}O_{2â€“Î´}â€”La₂NiO_{4+Î´} for Oxygen Permeation under Pure CO₂ Atmosphere. Energy Technology, 2019, 7, 1800701.	3.8	37
172	Opposite Roles of O2 in NOâ^' and N2Oâ^'Carbon Reactions:â€‰ An Ab Initio Study. Journal of Physical Chemistry B, 2001, 105, 821-830.	2.6	36
173	Orientated growth of copper-based MOF for acetylene storage. Chemical Engineering Journal, 2019, 357, 320-327.	12.7	36
174	Efficient gas and alcohol uptake and separation driven by two types of channels in a porous MOF: an experimental and theoretical investigation. Journal of Materials Chemistry A, 2020, 8, 5227-5233.	10.3	36
175	Effects of pre-treatment in air microwave plasma on the structure of CNTs and the activity of Ru/CNTs catalysts for ammonia decomposition. Catalysis Today, 2009, 148, 97-102.	4.4	35
176	Synthesis and Characterization of Colloidal Coreâ€“Shell Semiconductor Nanowires. European Journal of Inorganic Chemistry, 2010, 2010, 4325-4331.	2.0	35
177	Optimization of a direct carbon fuel cell for operation belowÂ700ÂÂ°C. International Journal of Hydrogen Energy, 2013, 38, 5367-5374.	7.1	35
178	In Situ Tetraethoxysilaneâ€Templated Porous Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3â^'Î´} Perovskite for the Oxygen Evolution Reaction. ChemElectroChem, 2015, 2, 200-203.	3.4	35
179	Activated carbon derived from bio-waste hemp hurd and retted hemp hurd for CO2 adsorption. Composites Communications, 2017, 5, 27-30.	6.3	35
180	Enhancing Oxygen Reduction Reaction Activity and CO₂ Tolerance of Cathode for Low-Temperature Solid Oxide Fuel Cells by in Situ Formation of Carbonates. ACS Applied Materials & Interfaces, 2019, 11, 26909-26919.	8.0	35

#	Article	IF	Citations
181	Perovskite Cathode Materials for Low-Temperature Solid Oxide Fuel Cells: Fundamentals to Optimization. Electrochemical Energy Reviews, 2022, 5, 263-311.	25.5	35
182	Stand-alone asymmetric hollow fiber gas-diffusion electrodes with distinguished bronze phases for high-efficiency CO2 electrochemical reduction. Applied Catalysis B: Environmental, 2021, 298, 120538.	20.2	35
183	Chromium oxide catalysts for COx-free hydrogen generation via catalytic ammonia decomposition. Journal of Molecular Catalysis A, 2009, 304, 71-76.	4.8	34
184	Direct Evidence: Enhanced C₂H₆ and C₂H₄ Adsorption and Separation Performances by Introducing Open Nitrogen-Donor Sites in a MOF. Inorganic Chemistry, 2018, 57, 12417-12423.	4.0	34
185	Enhancing O2-permeability and CO2-tolerance of La2NiO4+Î´ membrane via internal ionic-path. Materials Letters, 2018, 230, 161-165.	2.6	34
186	Defective Graphene on the Transition-Metal Surface: Formation of Efficient Bifunctional Catalysts for Oxygen Evolution/Reduction Reactions in Alkaline Media. ACS Applied Materials & Interfaces, 2019, 11, 17410-17415.	8.0	34
187	Vertically-aligned carbon nanotube membranes for hydrogen separation. RSC Advances, 2012, 2, 5329.	3.6	33
188	Highly CO₂-Tolerant Cathode for Intermediate-Temperature Solid Oxide Fuel Cells: Samarium-Doped Ceria-Protected SrCo_{0.85}Ta_{0.15}O_{3â^'Î´} Hybrid. ACS Applied Materials & Interfaces, 2017, 9, 2326-2333.	8.0	33
189	A porous yttria-stabilized zirconia layer to eliminate the delamination of air electrode in solid oxide electrolysis cells. Journal of Power Sources, 2017, 359, 104-110.	7.8	33
190	The role of carbon surface chemistry in N2O conversion to N2 over Ni catalyst supported on activated carbon. Catalysis Today, 1999, 53, 669-681.	4.4	32
191	Catalytic Conversion of N2O to N2 over Potassium Catalyst Supported on Activated Carbon. Journal of Catalysis, 1999, 187, 262-274.	6.2	32
192	Carbon Nanofibers Synthesized by Catalytic Decomposition of Methane and Their Electrochemical Performance in a Direct Carbon Fuel Cell. Energy & Fuels, 2009, 23, 3721-3731.	5.1	32
193	Recent development on perovskiteâ€type cathode materials based on SrCoO_{3â€‰â^'}â€‰_{Î´} parent oxide for intermediateâ€temperature solid oxide fuel cells. Asia-Pacific Journal of Chemical Engineering, 2016, 11, 370-381.	1.5	32
194	Influences of doping Cr/Fe/Ta on the performance of Ni/CeO2 catalyst under microwave irradiation in dry reforming of CH4. Journal of Solid State Chemistry, 2016, 233, 166-177.	2.9	32
195	Beyond Platinum: Defects Abundant CoP₃/Ni₂P Heterostructure for Hydrogen Evolution Electrocatalysis. Small Science, 2021, 1, 2000027.	9.9	32
196	Diffusion through ordered force fields in nanopores represented by Smoluchowski equation. AICHE Journal, 2009, 55, 1325-1337.	3.6	31
197	Production of hydrogen from methane decomposition using nanosized carbon black as catalyst in a fluidized-bed reactor. International Journal of Hydrogen Energy, 2009, 34, 9730-9736.	7.1	31
198	Sc and Nb dopants in SrCoO3 modulate electronic and vacancy structures for improved water splitting and SOFC cathodes. Energy Storage Materials, 2017, 9, 229-234.	18.0	31

#	Article	IF	Citations
199	Plasmaâ€Triggered Synergy of Exfoliation, Phase Transformation, and Surface Engineering in Cobalt Diselenide for Enhanced Water Oxidation. Angewandte Chemie, 2018, 130, 16659-16663.	2.0	31
200	Synthesis and characterization of chromium oxide nanocrystals via solid thermal decomposition at low temperature. Microporous and Mesoporous Materials, 2008, 112, 621-626.	4.4	30
201	A Highly Stable and Active Hybrid Cathode for Lowâ€Temperature Solid Oxide Fuel Cells. ChemElectroChem, 2014, 1, 1627-1631.	3.4	30
202	Preparation and Characterization of Copper Catalysts Supported on Mesoporous Al₂O₃Nanofibers for N₂O Reduction to N₂. Catalysis Letters, 2003, 91, 73-81.	2.6	29
203	Catalytic performance of Ru nanoparticles supported on different mesoporous silicas for preferential oxidation of CO in H2-rich atmosphere. Applied Catalysis A: General, 2012, 447-448, 200-209.	4.3	29
204	Synthesis of Supported Nickel Nanoparticles via a Nonthermal Plasma Approach and Its Application in CO2 Reforming of Methane. Journal of Physical Chemistry C, 2013, 117, 21288-21302.	3.1	29
205	Proton-Conducting La-Doped Ceria-Based Internal Reforming Layer for Direct Methane Solid Oxide Fuel Cells. ACS Applied Materials & Interfaces, 2017, 9, 33758-33765.	8.0	29
206	Enhancement of oxygen permeation fluxes of La0.6Sr0.4CoO3â^' hollow fiber membrane via macrostructure modification and (La0.5Sr0.5)2CoO4+ decoration. Chemical Engineering Research and Design, 2018, 134, 487-496.	5.6	29
207	A chiral metalâ€“organic framework with polar channels: unique interweaving six-fold helices and high CO₂/CH₄ separation. Inorganic Chemistry Frontiers, 2016, 3, 1326-1331.	6.0	28
208	A Dy₆-cluster-basedfcu-MOF with efficient separation of C₂H₂/C₂H₄and selective adsorption of benzene. Inorganic Chemistry Frontiers, 2021, 8, 376-382.	6.0	28
209	Catalytic decomposition of ammonia over fly ash supported Ru catalysts. Fuel Processing Technology, 2008, 89, 1106-1112.	7.2	27
210	Heterostructured electrode with concentration gradient shell for highly efficient oxygen reduction at low temperature. Scientific Reports, 2011, 1, 155.	3.3	27
211	The creep behaviour of poly(vinylidene fluoride)/â€œbud-branchedâ€•nanotubes nanocomposites. Composites Science and Technology, 2012, 72, 1656-1664.	7.8	27
212	Efficient water oxidation with amorphous transition metal boride catalysts synthesized by chemical reduction of metal nitrate salts at room temperature. RSC Advances, 2017, 7, 32923-32930.	3.6	27
213	Single Transition Metal Atom-Doped Graphene Supported on a Nickel Substrate: Enhanced Oxygen Reduction Reactions Modulated by Electron Coupling. Journal of Physical Chemistry C, 2019, 123, 3703-3710.	3.1	27
214	Activity of mesoporous-MnOx (m-MnOx) and CuO/m-MnOx for catalytic reduction of NO with CO. Catalysis Today, 2013, 212, 38-44.	4.4	26
215	Acetylene Separation by a Ca-MOF Containing Accessible Sites of Open Metal Centers and Organic Groups. ACS Applied Materials & Interfaces, 2021, 13, 58862-58870.	8.0	26
216	Layered perovskite Y1â^'Ca BaCo4O7+ as ceramic membranes for oxygen separation. Journal of Alloys and Compounds, 2010, 492, 552-558.	5.5	25

#	Article	IF	Citations
217	Boosting oxygen reduction and hydrogen evolution at the edge sites of a web-like carbon nanotube-graphene hybrid. Carbon, 2016, 107, 739-746.	10.3	25
218	An Interpenetrated Pillar-Layered Metal-Organic Framework with Novel Clusters: Reversible Structural Transformation and Selective Gate-Opening Adsorption. Crystal Growth and Design, 2018, 18, 3044-3050.	3.0	25
219	Microcrystalline cellulose-derived porous carbons with defective sites for electrochemical applications. Journal of Materials Chemistry A, 2019, 7, 22579-22587.	10.3	25
220	Nanotubules-supported Ru nanoparticles for preferential CO oxidation in H2-rich stream. Advanced Powder Technology, 2012, 23, 465-471.	4.1	24
221	Theoretical study of two states reactivity of methane activation on iron atom and iron dimer. Fuel, 2012, 96, 291-297.	6.4	24
222	Structural sensitivity of mesoporous alumina for copper catalyst loading used for NO reduction in presence of CO. Chemical Engineering Research and Design, 2015, 101, 27-43.	5.6	24
223	Effect of sonication and hydrogen peroxide oxidation of carbon nanotube modifiers on the microstructure of pitch-derived activated carbon foam discs. Carbon, 2017, 124, 142-151.	10.3	24
224	Ab Initio Calculations on the Magnetic Properties of Hydrogenated Boron Nitride Nanotubes. Journal of Physical Chemistry C, 2008, 112, 16231-16235.	3.1	23
225	Chemical treatment of CNTs in acidic KMnO4 solution and promoting effects on the corresponding Pdâ€“Pt/CNTs catalyst. Journal of Molecular Catalysis A, 2012, 356, 114-120.	4.8	23
226	A new approach to nanoporous graphene sheets via rapid microwave-induced plasma for energy applications. Nanotechnology, 2014, 25, 495604.	2.6	23
227	A-Site Excess (La_{0.8}Ca_{0.2})_{1.01}FeO_{3â^Î´} (LCF) Perovskite Hollow Fiber Membrane for Oxygen Permeation in CO₂-Containing Atmosphere. Energy & Fuels, 2017, 31, 4531-4538.	5.1	23
228	Enhancing Oxygen Permeation via the Incorporation of Silver Inside Perovskite Oxide Membranes. Processes, 2019, 7, 199.	2.8	23
229	Efficient Gas and VOC Separation and Pesticide Detection in a Highly Stable Interpenetrated Indiumâ€“Organic Framework. Inorganic Chemistry, 2021, 60, 10698-10706.	4.0	23
230	One stone two birds: Simultaneous realization of partial oxidation of methane to syngas and N2 purification via robust ceramic oxygen-permeable membrane reactors. Chemical Engineering Journal, 2021, 419, 129462.	12.7	23
231	The effect of Fe doping on adsorption of CO₂/N₂within carbon nanotubes: a density functional theory study with dispersion corrections. Nanotechnology, 2009, 20, 375701.	2.6	22
232	A single-step synthesized cobalt-free barium ferrites-based composite cathode for intermediate temperature solid oxide fuel cells. Electrochemistry Communications, 2011, 13, 1340-1343.	4.7	21
233	Electrochemical performance and thermal cyclicability of industrial-sized anode supported planar solid oxide fuel cells. Journal of Power Sources, 2013, 224, 37-41.	7.8	21
234	Enhanced oxygen permeability and electronic conductivity of Ce0.8Gd0.2O2â^Î´ membrane via the addition of sintering aids. Solid State Ionics, 2017, 310, 121-128.	2.7	21

#	Article	IF	Citations
235	A microwave powered polymeric artificial muscle. Applied Materials Today, 2021, 23, 101021.	4.3	21
236	Regulating the reaction zone of electrochemical CO2 reduction on gas-diffusion electrodes by distinctive hydrophilic-hydrophobic catalyst layers. Applied Catalysis B: Environmental, 2022, 310, 121362.	20.2	21
237	Why H Atom Prefers the On-Top Site and Alkali Metals Favor the Middle Hollow Site on the Basal Plane of Graphite. Journal of Physical Chemistry B, 2005, 109, 7923-7927.	2.6	20
238	Effects of preparation methods on the oxygen nonstoichiometry, B-site cation valences and catalytic efficiency of perovskite La0.6Sr0.4Co0.2Fe0.8O3â^'Î´. Ceramics International, 2009, 35, 3201-3206.	4.8	20
239	An in situ formed MnOâ€“Co composite catalyst layer over Niâ€“Ce_{0.8}Sm_{0.2}O_{2â^'x} anodes for direct methane solid oxide fuel cells. Journal of Materials Chemistry A, 2017, 5, 6494-6503.	10.3	20
240	Influence of copper loading on mesoporous alumina for catalytic NO reduction in the presence of CO. Journal of Environmental Chemical Engineering, 2017, 5, 2350-2361.	6.7	20
241	A new layer-stacked porous framework showing sorption selectivity for CO₂ and luminescence. Dalton Transactions, 2017, 46, 11722-11727.	3.3	20
242	One-step In-situ Synthesis of Vacancy-rich CoFe2O4@Defective Graphene Hybrids as Bifunctional Oxygen Electrocatalysts for Rechargeable Zn-Air Batteries. Chemical Research in Chinese Universities, 2020, 36, 479-487.	2.6	20
243	Unveiling the effects of dimensionality of tin oxide-derived catalysts on CO₂ reduction by using gas-diffusion electrodes. Reaction Chemistry and Engineering, 2021, 6, 345-352.	3.7	20
244	The preparation, structures, and properties of poly(vinylidene fluoride)/multiwall carbon nanotubes nanocomposites. Journal of Applied Polymer Science, 2012, 125, E592.	2.6	19
245	Effect of rheological properties of mesophase pitch and coal mixtures on pore development in activated carbon discs with high compressive strength. Fuel Processing Technology, 2018, 177, 219-227.	7.2	19
246	A robust ethane-selective metal-organic framework with nonpolar pore surface for efficient C2H6/C2H4 separation. Chemical Engineering Journal, 2022, 433, 133786.	12.7	19
247	Controlled Doping of Transition Metal Cations in Alumina Pillared Clays. Journal of Physical Chemistry B, 2000, 104, 5674-5680.	2.6	18
248	New Insights into NOâ^'Carbon and N2Oâ^'Carbon Reactions from Quantum Mechanical Calculations. Energy & Fuels, 2003, 17, 1057-1061.	5.1	18
249	A multi-scale approach to the physical adsorption in slit pores. Chemical Engineering Science, 2011, 66, 5447-5458.	3.8	18
250	Difference in the cooperative interaction between carbon nanotubes and Ru particles loaded on their internal/external surface. RSC Advances, 2013, 3, 12641.	3.6	18
251	Porous Scandia-Stabilized Zirconia Layer for Enhanced Performance of Reversible Solid Oxide Cells. ACS Applied Materials & Interfaces, 2018, 10, 25295-25302.	8.0	18
252	Strontium-doped lanthanum iron nickelate oxide as highly efficient electrocatalysts for oxygen evolution reaction. Journal of Colloid and Interface Science, 2019, 553, 813-819.	9.4	18

#	Article	IF	Citations
253	Toughening and reinforcement of poly(vinylidene fluoride) nanocomposites with â€œbud-branchedâ€• nanotubes. Composites Science and Technology, 2012, 72, 263-268.	7.8	17
254	Metalâ€free graphene/boron nitride heterointerface for CO₂ reduction: Surface curvature controls catalytic activity and selectivity. EcoMat, 2020, 2, e12013.	11.9	17
255	C₂H₂capture and separation in a MOF based on Ni₆trigonal-prismatic units. Chemical Communications, 2022, 58, 6208-6211.	4.1	17
256	A Threeâ€Dimensional Highly Interconnected Composite Oxygen Reduction Reaction Electrocatalyst prepared from a Coreâ€“shell Precursor. ChemSusChem, 2011, 4, 1582-1586.	6.8	16
257	A nitrogen-doped electrocatalyst from metalâ€“organic framework-carbon nanotube composite. Journal of Materials Research, 2018, 33, 538-545.	2.6	16
258	Crystal Facet Engineering of Copper-Based Metalâ€“Organic Frameworks with Inorganic Modulators. Crystal Growth and Design, 2021, 21, 926-934.	3.0	16
259	Efficient One-Step Purification of C₁and C₂Hydrocarbons over CO₂in a New CO₂-Selective MOF with a Gate-Opening Effect. ACS Applied Materials & Interfaces, 2022, 14, 26858-26865.	8.0	16
260	A Comparative Study of N2O Conversion to N2 over Co/AC and Cu/AC Catalysts. Energy & Fuels, 1999, 13, 763-772.	5.1	15
261	A simplified dynamic model for accelerated methane residual recovery from coals. Chemical Engineering Science, 2007, 62, 3268-3275.	3.8	15
262	Cobalt-doped cadmium selenide colloidal nanowires. Chemical Communications, 2011, 47, 11894.	4.1	15
263	Enhanced hydrogen separation by vertically-aligned carbon nanotube membranes with zeolite imidazolate frameworks as a selective layer. RSC Advances, 2012, 2, 11793.	3.6	15
264	Field-effect transistors fabricated from diluted magnetic semiconductor colloidal nanowires. Nanoscale, 2012, 4, 1263.	5.6	15
265	Oneâ€Step C₂H₄Purification from Ternary C₂H₆/C₂H₄/C₂H₂Mixtures by a Robust Metalâ€“Organic Framework with Customized Pore Environment. Angewandte Chemie, 2022, 134, .	2.0	15
266	Synthesis and characterization of turbostratic carbons prepared by catalytic chemical vapour decomposition of acetylene. Applied Catalysis A: General, 2006, 309, 201-209.	4.3	14
267	Coking-resistant Ce0.8Ni0.2O2-Î´ internal reforming layer for direct methane solid oxide fuel cells. Electrochimica Acta, 2018, 282, 402-408.	5.2	14
268	Carbon Monoliths by Assembling Carbon Spheres for Gas Adsorption. Industrial & Engineering Chemistry Research, 2019, 58, 4957-4969.	3.7	14
269	New Supercage Metalâ€“Organic Framework Based on Allopurinol Ligands Showing Acetylene Storage and Separation. Chemistry - A European Journal, 2020, 26, 16402-16407.	3.3	14
270	Phase and morphology engineering of porous cobaltâ€“copper sulfide as a bifunctional oxygen electrode for rechargeable Znâ€“air batteries. Journal of Materials Chemistry A, 2021, 9, 18329-18337.	10.3	14

#	Article	IF	Citations
271	Low-temperature synthesis of La0.6Sr0.4Co0.2Fe0.8O3â^Î´ perovskite powder via asymmetric solâ€“gel process and catalytic auto-combustion. Ceramics International, 2009, 35, 2809-2815.	4.8	13
272	Microwave-plasma induced reconstruction of silver catalysts for highly efficient oxygen reduction. Journal of Materials Chemistry A, 2013, 1, 13746.	10.3	13
273	Stability of YSZ and SDC in molten carbonate eutectics for hybrid direct carbon fuel cells. RSC Advances, 2013, 4, 2398-2403.	3.6	13
274	Gravimetric adsorption measurements of helium on natural clinoptilolite and synthetic molecular sieves at pressures up to 3500ÂkPa. Microporous and Mesoporous Materials, 2017, 244, 218-225.	4.4	13
275	Samaria-Doped Ceria Electrolyte Supported Direct Carbon Fuel Cell with Molten Antimony as the Anode. Industrial & Engineering Chemistry Research, 2013, 52, 17927-17933.	3.7	12
276	Flower-like perovskite LaCr0.9Ni0.1O3â^Îâ€“NiO nanostructures: a new candidate for CO2 reforming of methane. RSC Advances, 2014, 4, 21306.	3.6	12
277	MnO-Co composite modified Ni-SDC anode for intermediate temperature solid oxide fuel cells. Fuel Processing Technology, 2017, 161, 241-247.	7.2	12
278	Ideal and mixture permeation selectivity of flexible prototypical zeolitic imidazolate framework â€“ 8 Membranes. Chemical Engineering Science, 2014, 108, 23-32.	3.8	11
279	Lowâ€Temperature Synthesis of Hierarchical Amorphous Basic Nickel Carbonate Particles for Water Oxidation Catalysis. ChemSusChem, 2015, 8, 2193-2197.	6.8	11
280	A novel heterogeneous <scp>La_{0.8}Sr_{0.2}CoO_{3â^Îˊ}/(La_{0.5}Sr_{0.5})₂CoO<sub>4+Îˊ</ dualâ€phase membrane for oxygen separation. Asia-Pacific Journal of Chemical Engineering, 2018, 13, e2239.	1.5	11
281	Methane internal steam reforming in solid oxide fuel cells at intermediate temperatures. International Journal of Hydrogen Energy, 2022, 47, 13969-13979.	7.1	11
282	First-Principles Design of Well-Ordered Silica Nanotubes from Silica Monolayers and Nanorings. Journal of Physical Chemistry C, 2007, 111, 9652-9657.	3.1	10
283	Evaluation of SrCo0.8Nb0.2O3-Îˊ, SrCo0.8Ta0.2O3-Îˊ and SrCo0.8Nb0.1Ta0.1O3-Îˊ as air electrode materials for solid oxide electrolysis and reversible solid oxide cells. Electrochimica Acta, 2019, 321, 134654.	5.2	10
284	The controllable synthesis of urchin-shaped hierarchical superstructure MOFs with high catalytic activity and stability. Chemical Communications, 2021, 57, 8758-8761.	4.1	10
285	A new metalâ€“organic framework based on rare [Zn₄F₄] cores for efficient separation of C₂H₂. Chemical Communications, 2021, 57, 12788-12791.	4.1	10
286	Synthesis of Highly Porous Metalâ€Free Oxygen Reduction Electrocatalysts in a Selfâ€Sacrificial Bacterial Cellulose Microreactor. Advanced Sustainable Systems, 2017, 1, 1700045.	5.3	9
287	CO₂â€resistant SDCâ€SSAF oxygen selective dualâ€phase hollow fiber membranes. Asia-Pacific Journal of Chemical Engineering, 2020, 15, e2528.	1.5	9
288	The instability of solid oxide fuel cells in an intermediate temperature region. Asia-Pacific Journal of Chemical Engineering, 2011, 6, 199-203.	1.5	8

#	Article	IF	Citations
289	Crâ€Doped Laâ€Niâ€O Catalysts Derived fromÂPerovskite Precursors for CH 4 â€CO 2 Reforming under Microwave Irradiation. Chemical Engineering and Technology, 2016, 39, 1551-1560.	1.5	8
290	Unveiling Lithium Roles in Cobaltâ€Free Cathodes for Efficient Oxygen Reduction Reaction below 600â€‰Â°C. ChemElectroChem, 2019, 6, 5340-5348.	3.4	8
291	Mechanochemically Synthesised Flexible Electrodes based on Bimetallic Metalâ€organic Framework Glasses for the Oxygen Evolution Reaction. Angewandte Chemie, 0, , .	2.0	7
292	Effects of niobium doping site and concentration on the phase structure and oxygen permeability of Nb-substituted SrCoOx oxides. Ceramics International, 2010, 36, 635-641.	4.8	6
293	An experimental and simulation study of binary adsorption in metalâ€“organic frameworks. Separation and Purification Technology, 2015, 146, 136-142.	7.9	6
294	New Insights into the Degradation Behavior of Air Electrodes during Solid Oxide Electrolysis and Reversible Solid Oxide Cell Operation. Energy Technology, 2020, 8, 2000241.	3.8	6
295	Crowding-out effect strategy using AgCl for realizing a super low lattice thermal conductivity of SnTe. Sustainable Materials and Technologies, 2020, 25, e00183.	3.3	6
296	Highly Effective Catalysts for N₂O Conversion to N₂â€”A Preliminary Study. Asia-Pacific Journal of Chemical Engineering, 1999, 7, 563-575.	0.0	5
297	Molecular transport in nanopores with broad poreâ€size distribution. AICHE Journal, 2008, 54, 2009-2023.	3.6	5
298	Multi-component adsorption in heterogeneous carbonaceous porous media through the integration of small-scale, homogenous models. Chemical Engineering Science, 2013, 95, 267-282.	3.8	4
299	Microwave plasma rapid heating towards robust cathode/electrolyte interface for solid oxide fuel cells. Journal of Colloid and Interface Science, 2022, 607, 53-60.	9.4	4
300	Half metallicity in a zigzag double-walled nanotube nanodot: An ab initio prediction. Chemical Physics Letters, 2009, 468, 257-259.	2.6	3
301	Rheological Behaviors of Poly(Vinylidene Fluoride)/â€œBud-Branchedâ€•Nanotubes Nanocomposites. Journal of Macromolecular Science - Physics, 2012, 51, 1498-1508.	1.0	3
302	Study on the Controllable Scale-Up Growth of Vertically-Aligned Carbon Nanotube Arrays. Journal of Nanoscience and Nanotechnology, 2012, 12, 2722-2732.	0.9	3
303	Kinetic mobility and connectivity in nanopore networks. AICHE Journal, 2012, 58, 364-376.	3.6	3
304	Cracking Behavior and Mechanism of Gibbsite Crystallites during Calcination. Crystal Research and Technology, 2019, 54, 1800201.	1.3	3
305	Reversible Torsional Actuation of Hydrogel Filled Multifilament Fibre Actuator. Actuators, 2021, 10, 244.	2.3	3
306	Hydrogen adsorption on NiNaY composites at room and cryogenic temperatures. Catalysis Today, 2010, 158, 317-323.	4.4	2

#	Article	IF	Citations
307	Cracking behaviour and mechanism at grain boundary of gibbsite during calcination. Ceramics International, 2020, 46, 12067-12072.	4.8	2
308	Hydrogen adsorption properties of single-walled carbon nanotubes treated with nitric acid. , 2006, , .		1
309	Electrocatalytically Switchable CO2Capture: First Principle Computational Exploration of Carbon Nanotubes with Pyridinic Nitrogen. ChemSusChem, 2014, 7, 317-317.	6.8	1
310	Revealing cracking and breakage behaviours of gibbsite particles. Ceramics International, 2021, 47, 4625-4632.	4.8	1
311	Effect Of Pore Structure Of Activated Carbon Fibers On Hydrogen Adsorption. NATO Science for Peace and Security Series C: Environmental Security, 2008, , 233-240.	0.2	1
312	Characterization of turbostratic carbons synthesized by catalytic decomposition of acetylene. , 2006, , .		0
313	Synthesis of Highly Ordered Large-Pore Periodic Mesoporous Organosilica Rods. Solid State Phenomena, 2007, 121-123, 381-384.	0.3	0
314	A Novel Method to Purposely Modify the Anode/Electrolyte Interface in Solid Oxide Fuel Cells. ChemistrySelect, 2019, 4, 13835-13840.	1.5	0