Weishen Yang

List of Publications by Year
in descending order

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364 papers	22,879 citations	9254 74 h-index	11047 137 g-index
378 all docs	378 docs citations	378 times ranked	16443 citing authors

#	Article	IF	Citations
1	Metal-organic framework nanosheets as building blocks for molecular sieving membranes. Science, 2014, 346, 1356-1359.	6.0	1,432
2	Investigation of the permeation behavior and stability of a Ba0.5Sr0.5Co0.8Fe0.2O3â˜Î´ oxygen membrane. Journal of Membrane Science, 2000, 172, 177-188.	4.1	983
3	Large reversible capacity of high quality graphene sheets as an anode material for lithium-ion batteries. Electrochimica Acta, 2010, 55, 3909-3914.	2.6	983
4	Molecular Sieve Membrane: Supported Metalâ€“Organic Framework with High Hydrogen Selectivity. Angewandte Chemie - International Edition, 2010, 49, 548-551.	7.2	555
5	The roles of oxygen vacancies in electrocatalytic oxygen evolution reaction. Nano Energy, 2020, 73, 104761.	8.2	465
6	Application of In Situ Techniques for the Characterization of NiFeâ€Based Oxygen Evolution Reaction (OER) Electrocatalysts. Angewandte Chemie - International Edition, 2019, 58, 1252-1265.	7.2	443
7	Zeolitic imidazolate framework ZIF-7 based molecular sieve membrane for hydrogen separation. Journal of Membrane Science, 2010, 354, 48-54.	4.1	440
8	Enhanced cycling performance of Fe3O4â€“graphene nanocomposite as an anode material for lithium-ion batteries. Electrochimica Acta, 2010, 56, 834-840.	2.6	389
9	Controllable Synthesis of Metalâ€“Organic Frameworks: From MOF Nanorods to Oriented MOF Membranes. Advanced Materials, 2010, 22, 3322-3326.	11.1	376
10	High reversible capacity of SnO2/graphene nanocomposite as an anode material for lithium-ion batteries. Electrochimica Acta, 2011, 56, 4532-4539.	2.6	376
11	Twoâ€Dimensional Metalâ€“Organic Framework Nanosheets for Membraneâ€Based Gas Separation. Angewandte Chemie - International Edition, 2017, 56, 9757-9761.	7.2	371
12	A study by in situ techniques of the thermal evolution of the structure of a Mgâ€“Alâ€“CO3 layered double hydroxide. Chemical Engineering Science, 2002, 57, 2945-2953.	1.9	342
13	An Organophilic Pervaporation Membrane Derived from Metalâ€“Organic Framework Nanoparticles for Efficient Recovery of Bioâ€Alcohols. Angewandte Chemie - International Edition, 2011, 50, 10636-10639.	7.2	310
14	Microwave synthesis of zeolite membranes: A review. Journal of Membrane Science, 2008, 316, 3-17.	4.1	304
15	Confinement of Ionic Liquids in Nanocages: Tailoring the Molecular Sieving Properties of ZIFâ€8 for Membraneâ€Based CO₂ Capture. Angewandte Chemie - International Edition, 2015, 54, 15483-15487.	7.2	303
16	Twoâ€Dimensional Metalâ€“Organic Framework Nanosheets for Membraneâ€Based Gas Separation. Angewandte Chemie, 2017, 129, 9889-9893.	1.6	298
17	Ba effect in doped Sr(Co0.8Fe0.2)O3-Î´ on the phase structure and oxygen permeation properties of the dense ceramic membranes. Separation and Purification Technology, 2001, 25, 419-429.	3.9	267
18	Improvement of hydrothermal stability of zeolitic imidazolate frameworks. Chemical Communications, 2013, 49, 9140.	2.2	241

#	Article	IF	Citations
19	Performance of a mixed-conducting ceramic membrane reactor with high oxygen permeability for methane conversion. Journal of Membrane Science, 2001, 183, 181-192.	4.1	237
20	Molecular Sieving MFI-Type Zeolite Membranes for Pervaporation Separation of Xylene Isomers. Journal of the American Chemical Society, 2004, 126, 4776-4777.	6.6	222
21	Synthesis of a High-Permeance NaA Zeolite Membrane by Microwave Heating. Advanced Materials, 2000, 12, 195-198.	11.1	217
22	Investigation of ideal zirconium-doped perovskite-type ceramic membrane materials for oxygen separation. Journal of Membrane Science, 2002, 203, 175-189.	4.1	212
23	Investigation of a Ba0.5Sr0.5Co0.8Fe0.2O3â˜Î´ based cathode IT-SOFC. Applied Catalysis B: Environmental, 2006, 66, 64-71.	10.8	204
24	New Membrane Architecture with High Performance: ZIF-8 Membrane Supported on Vertically Aligned ZnO Nanorods for Gas Permeation and Separation. Chemistry of Materials, 2014, 26, 1975-1981.	3.2	199
25	Dense ceramic oxygen permeable membranes and catalytic membrane reactors. Chemical Engineering Journal, 2013, 220, 185-203.	6.6	177
26	Oxygen permeation study in a tubular Ba0.5Sr0.5Co0.8Fe0.2O3-Î´ oxygen permeable membrane. Journal of Membrane Science, 2002, 210, 259-271.	4.1	174
27	Synthesis and properties of A-type zeolite membranes by secondary growth method with vacuum seeding. Journal of Membrane Science, 2004, 245, 41-51.	4.1	162
28	Synthesis, oxygen permeation study and membrane performance of a Ba0.5Sr0.5Co0.8Fe0.2O3â˜Î´ oxygen-permeable dense ceramic reactor for partial oxidation of methane to syngas. Separation and Purification Technology, 2001, 25, 97-116.	3.9	160
29	Investigation on the partial oxidation of methane to syngas in a tubular Ba0.5Sr0.5Co0.8Fe0.2O3â˜Î´ membrane reactor. Catalysis Today, 2003, 82, 157-166.	2.2	157
30	Structural stability and oxygen permeability of cerium lightly doped BaFeO3â˜Î´ ceramic membranes. Solid State Ionics, 2006, 177, 2917-2921.	1.3	150
31	Microstructural Engineering and Architectural Design of Metalâ€“Organic Framework Membranes. Advanced Materials, 2017, 29, 1606949.	11.1	150
32	Development and Application of Oxygen Permeable Membrane in Selective Oxidation of Light Alkanes. Topics in Catalysis, 2005, 35, 155-167.	1.3	148
33	Perovskites decorated with oxygen vacancies and Feâ€“Ni alloy nanoparticles as high-efficiency electrocatalysts for the oxygen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 19836-19845.	5.2	141
34	Mixed matrix membranes incorporated with amine-functionalized titanium-based metal-organic framework for CO2/CH4 separation. Journal of Membrane Science, 2015, 478, 130-139.	4.1	140
35	Corrosion Resistant High-Silica-Zeolite MFI Coating. Journal of the Electrochemical Society, 2006, 153, B325.	1.3	139
36	Superior cycle performance of Sn@C/graphene nanocomposite as an anode material for lithium-ion batteries. Journal of Solid State Chemistry, 2011, 184, 1400-1404.	1.4	138

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37	Ba0.5Sr0.5Co0.8Fe0.2O3â˜Î´ as a cathode for IT-SOFCs with a GDC interlayer. Journal of Power Sources, 2006, 160, 57-64.	4.0	136
38	Relationship between transport properties and phase transformations in mixed-conducting oxides. Journal of Solid State Chemistry, 2006, 179, 362-369.	1.4	136
39	Novel dual-phase membranes for CO₂capture via an oxyfuel route. Chemical Communications, 2012, 48, 251-253.	2.2	131
40	Metalâ€“organic framework ZIF-8 nanocomposite membrane for efficient recovery of furfural via pervaporation and vapor permeation. Journal of Membrane Science, 2013, 428, 498-506.	4.1	130
41	Novel and Ideal Zirconium-Based Dense Membrane Reactors for Partial Oxidation of Methane to Syngas. Catalysis Letters, 2002, 78, 129-137.	1.4	121
42	Microwave synthesis of LTA zeolite membranes without seeding. Journal of Membrane Science, 2006, 277, 230-239.	4.1	121
43	Microwave-assisted hydrothermal synthesis of hydroxy-sodalite zeolite membrane. Microporous and Mesoporous Materials, 2004, 75, 173-181.	2.2	119
44	Superhigh capacity and rate capability of high-level nitrogen-doped graphene sheets as anode materials for lithium-ion batteries. Electrochimica Acta, 2013, 90, 492-497.	2.6	114
45	Novel cobalt-free oxygen permeable membrane. Chemical Communications, 2004, , 1130.	2.2	110
46	Investigation on POM reaction in a new perovskite membrane reactor. Catalysis Today, 2001, 67, 3-13.	2.2	109
47	Singleâ€Phase Covalent Organic Framework Staggered Stacking Nanosheet Membrane for CO₂â€Selective Separation. Angewandte Chemie - International Edition, 2021, 60, 19047-19052.	7.2	109
48	Electrochemical reduction of CO 2 in solid oxide electrolysis cells. Journal of Energy Chemistry, 2017, 26, 593-601.	7.1	108
49	Hierarchical Growth of Large-Scale Ordered Zeolite Silicalite-1 Membranes with High Permeability and Selectivity for Recycling CO2. Angewandte Chemie - International Edition, 2006, 45, 7053-7056.	7.2	105
50	Preparation of titania-based catalysts for formaldehyde photocatalytic oxidation from TiCl4 by the solâ€“gel method. Catalysis Today, 2001, 68, 89-95.	2.2	104
51	Composite membrane based on ionic conductor and mixed conductor for oxygen permeation. AICHE Journal, 2008, 54, 665-672.	1.8	104
52	Fabrication of Highly b-Oriented MFI Film with Molecular Sieving Properties by Controlled In-Plane Secondary Growth. Journal of the American Chemical Society, 2010, 132, 1768-1769.	6.6	104
53	Oxygen permeation and partial oxidation of methane in dual-phase membrane reactors. Journal of Membrane Science, 2010, 360, 454-460.	4.1	102
54	Oxidative coupling of methane in Ba0.5Sr0.5Co0.8Fe0.2O3â˜Î´ tubular membrane reactors. Catalysis Today, 2005, 104, 160-167.	2.2	100

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55	Direct ammonia solid oxide fuel cell based on thin proton-conducting electrolyte. Journal of Power Sources, 2008, 179, 92-95.	4.0	98
56	Synthesis and oxygen permeation study of novel perovskite-type BaBixCo0.2Fe0.8â^'xO3â^'Î´ ceramic membranes. Journal of Membrane Science, 2000, 164, 167-176.	4.1	97
57	A modified electroless plating technique for thin dense palladium composite membranes with enhanced stability. Journal of Membrane Science, 2008, 314, 226-237.	4.1	96
58	High selectivity of oxidative dehydrogenation of ethane to ethylene in an oxygen permeable membrane reactorElectronic supplementary information (ESI) available: experimental section. See http://www.rsc.org/suppdata/cc/b2/b203168j/. Chemical Communications, 2002, , 1468-1469.	2.2	95
59	Synthesis of NaA zeolite membranes from clear solution. Microporous and Mesoporous Materials, 2001, 43, 299-311.	2.2	92
60	Experimental and modeling studies on Ba0.5Sr0.5Co0.8Fe0.2O3â^'Î´ (BSCF) tubular membranes for air separation. Journal of Membrane Science, 2004, 243, 405-415.	4.1	92
61	Synthesis of NaA zeolite membrane by microwave heating. Separation and Purification Technology, 2001, 25, 241-249.	3.9	87
62	Hydrothermal stability of LTA zeolite membranes in pervaporation. Journal of Membrane Science, 2007, 297, 10-15.	4.1	86
63	Layer-by-layer assembly of TiO2 colloids onto diatomite to build hierarchical porous materials. Journal of Colloid and Interface Science, 2008, 323, 326-331.	5.0	83
64	Capillary supported ultrathin homogeneous silicalite-poly(dimethylsiloxane) nanocomposite membrane for bio-butanol recovery. Journal of Membrane Science, 2011, 369, 228-232.	4.1	83
65	Unique role of MÃ¶ssbauer spectroscopy in assessing structural features of heterogeneous catalysts. Applied Catalysis B: Environmental, 2018, 224, 518-532.	10.8	83
66	Stainless-Steel-Net-Supported Zeolite NaA Membrane with High Permeance and High Permselectivity of Oxygen over Nitrogen. Advanced Materials, 2005, 17, 2006-2010.	11.1	82
67	Metal-organic framework-based mixed matrix membranes: Synergetic effect of adsorption and diffusion for CO2/CH4 separation. Journal of Membrane Science, 2018, 562, 76-84.	4.1	81
68	Oxygen permeability and structural stability of BaCe0.15Fe0.85O3â^'Î´ membranes. Journal of Membrane Science, 2006, 283, 38-44.	4.1	80
69	Atomic-scale topochemical preparation of crystalline Fe³⁺-doped Î²-Ni(OH)₂ for an ultrahigh-rate oxygen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 7753-7758.	5.2	80
70	2D Metalâ€Organic Framework Materials for Membraneâ€Based Separation. Advanced Materials Interfaces, 2020, 7, 1901514.	1.9	80
71	High specific capacity of TiO2-graphene nanocomposite as an anode material for lithium-ion batteries in an enlarged potential window. Electrochimica Acta, 2012, 74, 65-72.	2.6	79
72	High rate capability of TiO2/nitrogen-doped graphene nanocomposite as an anode material for lithiumâ€“ion batteries. Journal of Alloys and Compounds, 2013, 561, 54-58.	2.8	79

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73	Deactivation studies over NiO/Î³-Al2O3 catalysts for partial oxidation of methane to syngas. Catalysis Today, 2000, 63, 517-522.	2.2	78
74	Partial oxidation of methane in Ba0.5Sr0.5Co0.8Fe0.2O3â˜Î´ membrane reactor at high pressures. Catalysis Today, 2005, 104, 154-159.	2.2	76
75	Relationship between homogeneity and oxygen permeability of composite membranes. Journal of Membrane Science, 2008, 309, 120-127.	4.1	76
76	Solvothermal synthesis of mixed-ligand metalâ€“organic framework ZIF-78 with controllable size and morphology. Microporous and Mesoporous Materials, 2013, 173, 29-36.	2.2	76
77	Metalâ€Substituted Zeolitic Imidazolate Framework ZIFâ€108: Gasâ€Sorption and Membraneâ€Separation Properties. Chemistry - A European Journal, 2014, 20, 11402-11409.	1.7	75
78	Preparation of novel uniform mesoporous alumina catalysts by the solâ€“gel method. Catalysis Today, 2001, 68, 97-109.	2.2	74
79	Mixed-matrix membranes containing functionalized porous metalâ€“organic polyhedrons for the effective separation of CO₂â€“CH₄ mixture. Chemical Communications, 2015, 51, 4249-4251.	2.2	72
80	Preparation of silicalite-1 membrane by solution-filling method and its alcohol extraction properties. Journal of Membrane Science, 2007, 296, 122-130.	4.1	71
81	A novel Fe3O4â€“SnO2â€“graphene ternary nanocomposite as an anode material for lithium-ion batteries. Electrochimica Acta, 2011, 58, 81-88.	2.6	71
82	Synthesis of NaA zeolite membrane on a ceramic hollow fiber. Journal of Membrane Science, 2004, 229, 81-85.	4.1	69
83	Microwave-assisted hydrothermal synthesis of a&b-oriented zeolite T membranes and their pervaporation properties. Separation and Purification Technology, 2009, 65, 164-172.	3.9	69
84	Ce0.85Sm0.15O1.925â€“Sm0.6Sr0.4Al0.3Fe0.7O3 dual-phase membranes: One-pot synthesis and stability in a CO2 atmosphere. Solid State Ionics, 2013, 253, 57-63.	1.3	67
85	Oxygen evolution reaction over Fe site of BaZr x Fe 1-x O 3-Î´ perovskite oxides. Electrochimica Acta, 2017, 241, 433-439.	2.6	67
86	Alkaline-earth elements (Ca, Sr and Ba) doped LaFeO3-Î´ cathodes for CO2 electroreduction. Journal of Power Sources, 2019, 443, 227268.	4.0	67
87	Oxygen permeability and stability of Ba0.5Sr0.5Co0.8Fe0.2O3â˜Î´ as an oxygen-permeable membrane at high pressures. Solid State Ionics, 2006, 177, 595-600.	1.3	66
88	Syngas generation in a membrane reactor with a highly stable ceramic composite membrane. Catalysis Communications, 2008, 10, 309-312.	1.6	65
89	Operation of perovskite membrane under vacuum and elevated pressures for high-purity oxygen production. Journal of Membrane Science, 2009, 345, 47-52.	4.1	65
90	Synthesis, characterization and single gas permeation properties of NaA zeolite membrane. Journal of Membrane Science, 2005, 249, 51-64.	4.1	64

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91	Effect of carbon dioxide on the reaction performance of partial oxidation of methane over a LiLaNiO/Î³-Al2O3 catalyst. Applied Catalysis A: General, 2000, 202, 141-146.	2.2	60
92	Permeation model and experimental investigation of mixed conducting membranes. AICHE Journal, 2012, 58, 1744-1754.	1.8	60
93	Formation mechanism of microwave synthesized LTA zeolite membranes. Journal of Membrane Science, 2006, 281, 646-657.	4.1	59
94	Stabilization of Lowâ€Temperature Degradation in Mixed Ionic and Electronic Conducting Perovskite Oxygen Permeation Membranes. Angewandte Chemie - International Edition, 2013, 52, 3232-3236.	7.2	59
95	Recovery of HMF from aqueous solution by zeolitic imidazolate frameworks. Chemical Engineering Science, 2015, 124, 170-178.	1.9	58
96	Synthesis of zeolite NaA membranes with high permeance under microwave radiation on mesoporous-layer-modified macroporous substrates for gas separation. Journal of Membrane Science, 2005, 255, 201-211.	4.1	57
97	Performance of an anode-supported tubular solid oxide fuel cell (SOFC) under pressurized conditions. Electrochimica Acta, 2008, 53, 5195-5198.	2.6	57
98	Preparation and hydrogen permeation of SrCe0.95Y0.05O3â˜Î´ asymmetrical membranes. Journal of Membrane Science, 2009, 340, 241-248.	4.1	56
99	The effect of co-existing nitrogen on hydrogen permeation through thin Pd composite membranes. Separation and Purification Technology, 2007, 54, 262-271.	3.9	55
100	Partial oxidation of methane in BaCe0.1Co0.4Fe0.5O3â˜Î´ membrane reactor. Catalysis Today, 2010, 149, 185-190.	2.2	53
101	Novel Mn_{1.5}Co_{1.5}O₄spinel cathodes for intermediate temperature solid oxidefuel cells. Chemical Communications, 2011, 47, 2378-2380.	2.2	53
102	A â€œcopolymer-co-morphologyâ€•conception for shape-controlled synthesis of Prussian blue analogues and as-derived spinel oxides. Nanoscale, 2016, 8, 2333-2342.	2.8	53
103	H₂S-tolerant oxygen-permeable ceramic membranes for hydrogen separation with a performance comparable to those of palladium-based membranes. Energy and Environmental Science, 2017, 10, 101-106.	15.6	53
104	Microstructural and Interfacial Designs of Oxygenâ€Permeable Membranes for Oxygen Separation and Reactionâ€“Separation Coupling. Advanced Materials, 2019, 31, e1902547.	11.1	53
105	Synthesis and pervaporation properties of NaA zeolite membranes prepared with vacuum-assisted method. Separation and Purification Technology, 2007, 56, 158-167.	3.9	52
106	Hydrogen transport through thin palladiumâ€“copper alloy composite membranes at low temperatures. Thin Solid Films, 2008, 516, 1849-1856.	0.8	52
107	Nanocomposite MFI-alumina membranes via pore-plugging synthesis: Genesis of the zeolite material. Journal of Membrane Science, 2008, 325, 973-981.	4.1	52
108	Partial oxidation of methane to syngas in BaCe0.15Fe0.85O3â˜Î´ membrane reactors. Catalysis Letters, 2006, 111, 179-185.	1.4	51

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109	Mixed ionic-electronic conducting (MIEC) membranes for hydrogen production from water splitting. International Journal of Hydrogen Energy, 2015, 40, 3452-3461.	3.8	51
110	Title is missing!. Catalysis Letters, 2002, 84, 101-106.	1.4	49
111	Li3V2(PO4)3@C/graphene composite with improved cycling performance as cathode material for lithium-ion batteries. Electrochimica Acta, 2013, 91, 108-113.	2.6	49
112	The current status of high temperature electrochemistry-based CO2 transport membranes and reactors for direct CO2 capture and conversion. Progress in Energy and Combustion Science, 2021, 82, 100888.	15.8	49
113	Roadmap for Sustainable Mixed Ionicâ€Electronic Conducting Membranes. Advanced Functional Materials, 2022, 32, .	7.8	49
114	Surface structure and catalytic performance of supported PtSn catalysts. Catalysis Letters, 1992, 12, 267-275.	1.4	48
115	Structure and oxygen permeability of a dual-phase membrane. Journal of Membrane Science, 2003, 224, 107-115.	4.1	48
116	A Direct Ammonia Tubular Solid Oxide Fuel Cell. Chinese Journal of Catalysis, 2007, 28, 749-751.	6.9	48
117	Diatomite as high performance and environmental friendly catalysts for phenol hydroxylation with H2O2. Science and Technology of Advanced Materials, 2007, 8, 106-109.	2.8	48
118	Microwave synthesis of high performance FAU-type zeolite membranes: Optimization, characterization and pervaporation dehydration of alcohols. Journal of Membrane Science, 2009, 337, 47-54.	4.1	48
119	Synthesis and gas permeation properties of an NaA zeolite membrane. Chemical Communications, 2000, , 603-604.	2.2	47
120	Selective Oxidation of Methane to Syngas over NiO/Barium Hexaaluminate. Catalysis Letters, 2001, 74, 139-144.	1.4	47
121	Improving oxygen permeation of MIEC membrane reactor by enhancing the electronic conductivity under intermediate-low oxygen partial pressures. Journal of Membrane Science, 2016, 520, 607-615.	4.1	47
122	Investigation on the structure stability and oxygen permeability of titanium-doped perovskite-type oxides of BaTi0.2CoxFe0.8â^'xO3â^'Î´ (x=0.2â€“0.6). Separation and Purification Technology, 2003, 32, 289-299.	3.9	46
123	In situ high temperature X-ray diffraction studies of mixed ionic and electronic conducting perovskite-type membranes. Materials Letters, 2005, 59, 3750-3755.	1.3	46
124	A novel CAU-10-H MOF membrane for hydrogen separation under hydrothermal conditions. Journal of Membrane Science, 2016, 513, 40-46.	4.1	46
125	Layered Fe-Substituted LiNiO₂ Electrocatalysts for High-Efficiency Oxygen Evolution Reaction. ACS Energy Letters, 2017, 2, 1654-1660.	8.8	46
126	Pervaporation and vapor permeation dehydration of Fischerâ€“Tropsch mixed-alcohols by LTA zeolite membranes. Separation and Purification Technology, 2007, 57, 140-146.	3.9	44

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127	Single-step fabrication of asymmetric dual-phase composite membranes for oxygen separation. Journal of Membrane Science, 2008, 325, 11-15.	4.1	44
128	Comparative permeation studies on three supported membranes: Pure ZIF-8, pure polymethylphenylsiloxane, and mixed matrix membranes. Microporous and Mesoporous Materials, 2014, 189, 210-215.	2.2	44
129	Significantly Enhanced Separation using ZIFâ€8 Membranes by Partial Conversion of Calcined Layered Double Hydroxide Precursors. ChemSusChem, 2015, 8, 3582-3586.	3.6	44
130	Porous carbon layers wrapped CoFe alloy for ultrastable Zn-Air batteries exceeding 20,000 charging-discharging cycles. Journal of Energy Chemistry, 2021, 61, 327-335.	7.1	44
131	Fabrication of highly b-oriented MFI monolayers on various substrates. Chemical Communications, 2009, , 1520.	2.2	43
132	Surface structure and reaction performances of highly dispersed and supported bimetallic catalysts. Science in China Series B: Chemistry, 1999, 42, 571-580.	0.8	42
133	The partial oxidation of methane to syngas over the nickel-modified hexaaluminate catalysts BaNiyAl12â^'yO19â^'Î´. Applied Catalysis A: General, 2002, 235, 39-45.	2.2	42
134	Nanoparticles at Grain Boundaries Inhibit the Phase Transformation of Perovskite Membrane. Nano Letters, 2015, 15, 7678-7683.	4.5	42
135	Partial oxidation of ethane to syngas in an oxygen-permeable membrane reactor. Journal of Membrane Science, 2002, 209, 143-152.	4.1	41
136	Gas separation performance of supported carbon molecular sieve membranes based on soluble polybenzimidazole. Journal of Membrane Science, 2017, 533, 1-10.	4.1	41
137	Flexible Softâ€Solid Metalâ€“Organic Framework Composite Membranes for H₂/CO₂ Separation. Angewandte Chemie - International Edition, 2022, 61, .	7.2	41
138	An in situ approach to synthesize pure phase FAU-type zeolite membranes: effect of aging and formation mechanism. Journal of Materials Science, 2008, 43, 3279-3288.	1.7	40
139	Electrochemical performances of spinel oxides as cathodes for intermediate temperature solid oxide fuel cells. International Journal of Hydrogen Energy, 2013, 38, 1052-1057.	3.8	40
140	Enhancement of oxygen evolution performance through synergetic action between NiFe metal core and NiFeOx shell. Chemical Communications, 2016, 52, 11803-11806.	2.2	40
141	Suppression of twins in b-oriented MFI molecular sieve films under microwave irradiation. Chemical Communications, 2012, 48, 6782.	2.2	39
142	Conversion of xylose into furfural in a MOF-based mixed matrix membrane reactor. Chemical Engineering Journal, 2016, 305, 12-18.	6.6	39
143	FAU-type zeolite membranes synthesized by microwave assisted in situ crystallization. Materials Letters, 2008, 62, 4357-4359.	1.3	38
144	Detrimental phase evolution triggered by Ni in perovskite-type cathodes for CO2 electroreduction. Journal of Energy Chemistry, 2019, 36, 87-94.	7.1	38

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145	Effects of synthesis methods on oxygen permeability of BaCe0.15Fe0.85O3â^'Î´ ceramic membranes. Journal of Membrane Science, 2006, 283, 158-163.	4.1	37
146	Design and experimental investigation of oxide ceramic dual-phase membranes. Journal of Membrane Science, 2012, 394-395, 120-130.	4.1	37
147	Nano-CeO₂-Modified Cathodes for Direct Electrochemical CO₂ Reduction in Solid Oxide Electrolysis Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 9629-9636.	3.2	37
148	Thermal Evolution of the Structure of a Mgâ^'Alâ^'CO3Layered Double Hydroxide:Â Sorption Reversibility Aspects. Industrial & Engineering Chemistry Research, 2004, 43, 4559-4570.	1.8	36
149	Highly efficient electrocatalysts for oxygen reduction reaction. Chemical Communications, 2007, , 4215.	2.2	36
150	Oxygen permeability and stability of BaCe0.1Co0.4Fe0.5O3â^'Î´ oxygen permeable membrane. Separation and Purification Technology, 2010, 73, 38-43.	3.9	36
151	Oxygen permeation through Ca-contained dual-phase membranes for oxyfuel CO2 capture. Separation and Purification Technology, 2013, 114, 31-37.	3.9	36
152	One-pot synthesis of NiAlâ€“CO₃LDH anti-corrosion coatings from CO₂-saturated precursors. RSC Advances, 2015, 5, 29552-29557.	1.7	36
153	Micro-nanostructural designs of bifunctional electrocatalysts for metal-air batteries. Chinese Journal of Catalysis, 2020, 41, 390-403.	6.9	36
154	In-situ interfacial assembly of ultra-H2-permeable metal-organic framework membranes for H2/CO2 separation. Journal of Membrane Science, 2020, 611, 118419.	4.1	36
155	Perovskite oxide absorbents for oxygen separation. AICHE Journal, 2009, 55, 3125-3133.	1.8	35
156	Single Crystal (Mn,Co)3O4 Octahedra for Highly Efficient Oxygen Reduction Reactions. Electrochimica Acta, 2014, 144, 31-41.	2.6	35
157	Mixed Conducting Ceramic Membranes. Green Chemistry and Sustainable Technology, 2017, , .	0.4	35
158	H2/N2 gaseous mixture separation in dense Pd/Î±-Al2O3 hollow fiber membranes: Experimental and simulation studies. Separation and Purification Technology, 2006, 52, 177-185.	3.9	34
159	Asymmetric dual-phase membranes prepared via tape-casting and co-lamination for oxygen permeation. Materials Letters, 2015, 147, 88-91.	1.3	34
160	Mixed reforming of heptane to syngas in the Ba0.5Sr0.5Co0.8Fe0.2O3 membrane reactor. Catalysis Today, 2005, 104, 149-153.	2.2	33
161	Crystal structure, oxygen permeability and stability of Ba0.5Sr0.5Co0.8Fe0.1M0.1O3â^'Î´ (M=Fe, Cr, Mn, Zr) oxygen-permeable membranes. Materials Research Bulletin, 2006, 41, 683-689.	2.7	33
162	Integration of Nine Steps into One Membrane Reactor To Produce Synthesis Gases for Ammonia and Liquid Fuel. Angewandte Chemie - International Edition, 2016, 55, 8566-8570.	7.2	33

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