

Weishen Yang

List of Publications by Year in descending order

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364
papers

22,879
citations

9264

74
h-index

11052

137
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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. <i>Science</i> , 2014, 346, 1356-1359.	12.6	1,432
2	Investigation of the permeation behavior and stability of a Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-λ} oxygen membrane. <i>Journal of Membrane Science</i> , 2000, 172, 177-188.	8.2	983
3	Large reversible capacity of high quality graphene sheets as an anode material for lithium-ion batteries. <i>Electrochimica Acta</i> , 2010, 55, 3909-3914.	5.2	983
4	Molecular Sieve Membrane: Supported Metal-Organic Framework with High Hydrogen Selectivity. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 548-551.	13.8	555
5	The roles of oxygen vacancies in electrocatalytic oxygen evolution reaction. <i>Nano Energy</i> , 2020, 73, 104761.	16.0	465
6	Application of In Situ Techniques for the Characterization of NiFe-Based Oxygen Evolution Reaction (OER) Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1252-1265.	13.8	443
7	Zeolitic imidazolate framework ZIF-7 based molecular sieve membrane for hydrogen separation. <i>Journal of Membrane Science</i> , 2010, 354, 48-54.	8.2	440
8	Enhanced cycling performance of Fe ₃ O ₄ /graphene nanocomposite as an anode material for lithium-ion batteries. <i>Electrochimica Acta</i> , 2010, 56, 834-840.	5.2	389
9	Controllable Synthesis of Metal-Organic Frameworks: From MOF Nanorods to Oriented MOF Membranes. <i>Advanced Materials</i> , 2010, 22, 3322-3326.	21.0	376
10	High reversible capacity of SnO ₂ /graphene nanocomposite as an anode material for lithium-ion batteries. <i>Electrochimica Acta</i> , 2011, 56, 4532-4539.	5.2	376
11	Two-Dimensional Metal-Organic Framework Nanosheets for Membrane-Based Gas Separation. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 9757-9761.	13.8	371
12	A study by in situ techniques of the thermal evolution of the structure of a Mg-Al-CO ₃ layered double hydroxide. <i>Chemical Engineering Science</i> , 2002, 57, 2945-2953.	3.8	342
13	An Organophilic Pervaporation Membrane Derived from Metal-Organic Framework Nanoparticles for Efficient Recovery of Bio-Alcohols. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 10636-10639.	13.8	310
14	Microwave synthesis of zeolite membranes: A review. <i>Journal of Membrane Science</i> , 2008, 316, 3-17.	8.2	304
15	Confinement of Ionic Liquids in Nanocages: Tailoring the Molecular Sieving Properties of ZIF-8 for Membrane-Based CO ₂ Capture. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15483-15487.	13.8	303
16	Two-Dimensional Metal-Organic Framework Nanosheets for Membrane-Based Gas Separation. <i>Angewandte Chemie</i> , 2017, 129, 9889-9893.	2.0	298
17	Ba effect in doped Sr(Co _{0.8} Fe _{0.2})O _{3-λ} on the phase structure and oxygen permeation properties of the dense ceramic membranes. <i>Separation and Purification Technology</i> , 2001, 25, 419-429.	7.9	267
18	Improvement of hydrothermal stability of zeolitic imidazolate frameworks. <i>Chemical Communications</i> , 2013, 49, 9140.	4.1	241

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19	Performance of a mixed-conducting ceramic membrane reactor with high oxygen permeability for methane conversion. <i>Journal of Membrane Science</i> , 2001, 183, 181-192.	8.2	237
20	Molecular Sieving MFI-Type Zeolite Membranes for Pervaporation Separation of Xylene Isomers. <i>Journal of the American Chemical Society</i> , 2004, 126, 4776-4777.	13.7	222
21	Synthesis of a High-Permeance NaA Zeolite Membrane by Microwave Heating. <i>Advanced Materials</i> , 2000, 12, 195-198.	21.0	217
22	Investigation of ideal zirconium-doped perovskite-type ceramic membrane materials for oxygen separation. <i>Journal of Membrane Science</i> , 2002, 203, 175-189.	8.2	212
23	Investigation of a Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} based cathode IT-SOFC. <i>Applied Catalysis B: Environmental</i> , 2006, 66, 64-71.	20.2	204
24	New Membrane Architecture with High Performance: ZIF-8 Membrane Supported on Vertically Aligned ZnO Nanorods for Gas Permeation and Separation. <i>Chemistry of Materials</i> , 2014, 26, 1975-1981.	6.7	199
25	Dense ceramic oxygen permeable membranes and catalytic membrane reactors. <i>Chemical Engineering Journal</i> , 2013, 220, 185-203.	12.7	177
26	Oxygen permeation study in a tubular Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} oxygen permeable membrane. <i>Journal of Membrane Science</i> , 2002, 210, 259-271.	8.2	174
27	Synthesis and properties of A-type zeolite membranes by secondary growth method with vacuum seeding. <i>Journal of Membrane Science</i> , 2004, 245, 41-51.	8.2	162
28	Synthesis, oxygen permeation study and membrane performance of a Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} oxygen-permeable dense ceramic reactor for partial oxidation of methane to syngas. <i>Separation and Purification Technology</i> , 2001, 25, 97-116.	7.9	160
29	Investigation on the partial oxidation of methane to syngas in a tubular Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} membrane reactor. <i>Catalysis Today</i> , 2003, 82, 157-166.	4.4	157
30	Structural stability and oxygen permeability of cerium lightly doped BaFeO _{3-δ} ceramic membranes. <i>Solid State Ionics</i> , 2006, 177, 2917-2921.	2.7	150
31	Microstructural Engineering and Architectural Design of Metal-Organic Framework Membranes. <i>Advanced Materials</i> , 2017, 29, 1606949.	21.0	150
32	Development and Application of Oxygen Permeable Membrane in Selective Oxidation of Light Alkanes. <i>Topics in Catalysis</i> , 2005, 35, 155-167.	2.8	148
33	Perovskites decorated with oxygen vacancies and Fe-Ni alloy nanoparticles as high-efficiency electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 19836-19845.	10.3	141
34	Mixed matrix membranes incorporated with amine-functionalized titanium-based metal-organic framework for CO ₂ /CH ₄ separation. <i>Journal of Membrane Science</i> , 2015, 478, 130-139.	8.2	140
35	Corrosion Resistant High-Silica-Zeolite MFI Coating. <i>Journal of the Electrochemical Society</i> , 2006, 153, B325.	2.9	139
36	Superior cycle performance of Sn@C/graphene nanocomposite as an anode material for lithium-ion batteries. <i>Journal of Solid State Chemistry</i> , 2011, 184, 1400-1404.	2.9	138

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37	Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} as a cathode for IT-SOFCs with a GDC interlayer. Journal of Power Sources, 2006, 160, 57-64.	7.8	136
38	Relationship between transport properties and phase transformations in mixed-conducting oxides. Journal of Solid State Chemistry, 2006, 179, 362-369.	2.9	136
39	Novel dual-phase membranes for CO ₂ capture via an oxyfuel route. Chemical Communications, 2012, 48, 251-253.	4.1	131
40	Metal-organic framework ZIF-8 nanocomposite membrane for efficient recovery of furfural via pervaporation and vapor permeation. Journal of Membrane Science, 2013, 428, 498-506.	8.2	130
41	Novel and Ideal Zirconium-Based Dense Membrane Reactors for Partial Oxidation of Methane to Syngas. Catalysis Letters, 2002, 78, 129-137.	2.6	121
42	Microwave synthesis of LTA zeolite membranes without seeding. Journal of Membrane Science, 2006, 277, 230-239.	8.2	121
43	Microwave-assisted hydrothermal synthesis of hydroxy-sodalite zeolite membrane. Microporous and Mesoporous Materials, 2004, 75, 173-181.	4.4	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.	5.2	114
45	Novel cobalt-free oxygen permeable membrane. Chemical Communications, 2004, , 1130.	4.1	110
46	Investigation on POM reaction in a new perovskite membrane reactor. Catalysis Today, 2001, 67, 3-13.	4.4	109
47	Single-Phase Covalent Organic Framework Staggered Stacking Nanosheet Membrane for CO ₂ -Selective Separation. Angewandte Chemie - International Edition, 2021, 60, 19047-19052.	13.8	109
48	Electrochemical reduction of CO ₂ in solid oxide electrolysis cells. Journal of Energy Chemistry, 2017, 26, 593-601.	12.9	108
49	Hierarchical Growth of Large-Scale Ordered Zeolite Silicalite-1 Membranes with High Permeability and Selectivity for Recycling CO ₂ . Angewandte Chemie - International Edition, 2006, 45, 7053-7056.	13.8	105
50	Preparation of titania-based catalysts for formaldehyde photocatalytic oxidation from TiCl ₄ by the sol-gel method. Catalysis Today, 2001, 68, 89-95.	4.4	104
51	Composite membrane based on ionic conductor and mixed conductor for oxygen permeation. AIChE Journal, 2008, 54, 665-672.	3.6	104
52	Fabrication of Highly <i>b</i> -Oriented MFI Film with Molecular Sieving Properties by Controlled In-Plane Secondary Growth. Journal of the American Chemical Society, 2010, 132, 1768-1769.	13.7	104
53	Oxygen permeation and partial oxidation of methane in dual-phase membrane reactors. Journal of Membrane Science, 2010, 360, 454-460.	8.2	102
54	Oxidative coupling of methane in Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} tubular membrane reactors. Catalysis Today, 2005, 104, 160-167.	4.4	100

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55	Direct ammonia solid oxide fuel cell based on thin proton-conducting electrolyte. <i>Journal of Power Sources</i> , 2008, 179, 92-95.	7.8	98
56	Synthesis and oxygen permeation study of novel perovskite-type $\text{Ba}_{0.8}\text{Bi}_{0.2}\text{Co}_{0.2}\text{Fe}_{0.8-x}\text{O}_{3-\delta}$ ceramic membranes. <i>Journal of Membrane Science</i> , 2000, 164, 167-176.	8.2	97
57	A modified electroless plating technique for thin dense palladium composite membranes with enhanced stability. <i>Journal of Membrane Science</i> , 2008, 314, 226-237.	8.2	96
58	High selectivity of oxidative dehydrogenation of ethane to ethylene in an oxygen permeable membrane reactor. Electronic supplementary information (ESI) available: experimental section. See http://www.rsc.org/suppdata/cc/b2/b203168j/ . <i>Chemical Communications</i> , 2002, , 1468-1469.	4.1	95
59	Synthesis of NaA zeolite membranes from clear solution. <i>Microporous and Mesoporous Materials</i> , 2001, 43, 299-311.	4.4	92
60	Experimental and modeling studies on $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ (BSCF) tubular membranes for air separation. <i>Journal of Membrane Science</i> , 2004, 243, 405-415.	8.2	92
61	Synthesis of NaA zeolite membrane by microwave heating. <i>Separation and Purification Technology</i> , 2001, 25, 241-249.	7.9	87
62	Hydrothermal stability of LTA zeolite membranes in pervaporation. <i>Journal of Membrane Science</i> , 2007, 297, 10-15.	8.2	86
63	Layer-by-layer assembly of TiO_2 colloids onto diatomite to build hierarchical porous materials. <i>Journal of Colloid and Interface Science</i> , 2008, 323, 326-331.	9.4	83
64	Capillary supported ultrathin homogeneous silicalite-poly(dimethylsiloxane) nanocomposite membrane for bio-butanol recovery. <i>Journal of Membrane Science</i> , 2011, 369, 228-232.	8.2	83
65	Unique role of Mössbauer spectroscopy in assessing structural features of heterogeneous catalysts. <i>Applied Catalysis B: Environmental</i> , 2018, 224, 518-532.	20.2	83
66	Stainless-Steel-Net-Supported Zeolite NaA Membrane with High Permeance and High Permselectivity of Oxygen over Nitrogen. <i>Advanced Materials</i> , 2005, 17, 2006-2010.	21.0	82
67	Metal-organic framework-based mixed matrix membranes: Synergetic effect of adsorption and diffusion for CO_2/CH_4 separation. <i>Journal of Membrane Science</i> , 2018, 562, 76-84.	8.2	81
68	Oxygen permeability and structural stability of $\text{BaCe}_{0.15}\text{Fe}_{0.85}\text{O}_{3-\delta}$ membranes. <i>Journal of Membrane Science</i> , 2006, 283, 38-44.	8.2	80
69	Atomic-scale topochemical preparation of crystalline Fe^{3+} -doped $\text{Ni}(\text{OH})_2$ for an ultrahigh-rate oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7753-7758.	10.3	80
70	2D Metal-Organic Framework Materials for Membrane-Based Separation. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901514.	3.7	80
71	High specific capacity of TiO_2 -graphene nanocomposite as an anode material for lithium-ion batteries in an enlarged potential window. <i>Electrochimica Acta</i> , 2012, 74, 65-72.	5.2	79
72	High rate capability of TiO_2 /nitrogen-doped graphene nanocomposite as an anode material for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2013, 561, 54-58.	5.5	79

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73	Deactivation studies over NiO/ γ -Al ₂ O ₃ catalysts for partial oxidation of methane to syngas. Catalysis Today, 2000, 63, 517-522.	4.4	78
74	Partial oxidation of methane in Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-λ} membrane reactor at high pressures. Catalysis Today, 2005, 104, 154-159.	4.4	76
75	Relationship between homogeneity and oxygen permeability of composite membranes. Journal of Membrane Science, 2008, 309, 120-127.	8.2	76
76	Solvothermal synthesis of mixed-ligand metal-organic framework ZIF-78 with controllable size and morphology. Microporous and Mesoporous Materials, 2013, 173, 29-36.	4.4	76
77	Metal-Substituted Zeolitic Imidazolate Framework ZIF-108: Gas Sorption and Membrane Separation Properties. Chemistry - A European Journal, 2014, 20, 11402-11409.	3.3	75
78	Preparation of novel uniform mesoporous alumina catalysts by the sol-gel method. Catalysis Today, 2001, 68, 97-109.	4.4	74
79	Mixed-matrix membranes containing functionalized porous metal-organic polyhedrons for the effective separation of CO ₂ /CH ₄ mixture. Chemical Communications, 2015, 51, 4249-4251.	4.1	72
80	Preparation of silicalite-1 membrane by solution-filling method and its alcohol extraction properties. Journal of Membrane Science, 2007, 296, 122-130.	8.2	71
81	A novel Fe ₃ O ₄ /SnO ₂ /graphene ternary nanocomposite as an anode material for lithium-ion batteries. Electrochimica Acta, 2011, 58, 81-88.	5.2	71
82	Synthesis of NaA zeolite membrane on a ceramic hollow fiber. Journal of Membrane Science, 2004, 229, 81-85.	8.2	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.	7.9	69
84	Ce _{0.85} Sm _{0.15} O _{1.925} /Sm _{0.6} Sr _{0.4} Al _{0.3} Fe _{0.7} O ₃ dual-phase membranes: One-pot synthesis and stability in a CO ₂ atmosphere. Solid State Ionics, 2013, 253, 57-63.	2.7	67
85	Oxygen evolution reaction over Fe site of BaZr _x Fe _{1-x} O _{3-λ} perovskite oxides. Electrochimica Acta, 2017, 241, 433-439.	5.2	67
86	Alkaline-earth elements (Ca, Sr and Ba) doped LaFeO _{3-λ} cathodes for CO ₂ electroreduction. Journal of Power Sources, 2019, 443, 227268.	7.8	67
87	Oxygen permeability and stability of Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-λ} as an oxygen-permeable membrane at high pressures. Solid State Ionics, 2006, 177, 595-600.	2.7	66
88	Syngas generation in a membrane reactor with a highly stable ceramic composite membrane. Catalysis Communications, 2008, 10, 309-312.	3.3	65
89	Operation of perovskite membrane under vacuum and elevated pressures for high-purity oxygen production. Journal of Membrane Science, 2009, 345, 47-52.	8.2	65
90	Synthesis, characterization and single gas permeation properties of NaA zeolite membrane. Journal of Membrane Science, 2005, 249, 51-64.	8.2	64

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91	Effect of carbon dioxide on the reaction performance of partial oxidation of methane over a LiLaNiO ₃ -Al ₂ O ₃ catalyst. Applied Catalysis A: General, 2000, 202, 141-146.	4.3	60
92	Permeation model and experimental investigation of mixed conducting membranes. AIChE Journal, 2012, 58, 1744-1754.	3.6	60
93	Formation mechanism of microwave synthesized LTA zeolite membranes. Journal of Membrane Science, 2006, 281, 646-657.	8.2	59
94	Stabilization of Low-Temperature Degradation in Mixed Ionic and Electronic Conducting Perovskite Oxygen Permeation Membranes. Angewandte Chemie - International Edition, 2013, 52, 3232-3236.	13.8	59
95	Recovery of HMF from aqueous solution by zeolitic imidazolate frameworks. Chemical Engineering Science, 2015, 124, 170-178.	3.8	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.	8.2	57
97	Performance of an anode-supported tubular solid oxide fuel cell (SOFC) under pressurized conditions. Electrochimica Acta, 2008, 53, 5195-5198.	5.2	57
98	Preparation and hydrogen permeation of SrCe _{0.95} Y _{0.05} O _{3-δ} asymmetrical membranes. Journal of Membrane Science, 2009, 340, 241-248.	8.2	56
99	The effect of co-existing nitrogen on hydrogen permeation through thin Pd composite membranes. Separation and Purification Technology, 2007, 54, 262-271.	7.9	55
100	Partial oxidation of methane in BaCe _{0.1} Co _{0.4} Fe _{0.5} O _{3-δ} membrane reactor. Catalysis Today, 2010, 149, 185-190.	4.4	53
101	Novel Mn _{1.5} Co _{1.5} O ₄ spinel cathodes for intermediate temperature solid oxide fuel cells. Chemical Communications, 2011, 47, 2378-2380.	4.1	53
102	A copolymer-co-morphology conception for shape-controlled synthesis of Prussian blue analogues and as-derived spinel oxides. Nanoscale, 2016, 8, 2333-2342.	5.6	53
103	H ₂ -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.	30.8	53
104	Microstructural and Interfacial Designs of Oxygen-Permeable Membranes for Oxygen Separation and Reaction Separation Coupling. Advanced Materials, 2019, 31, e1902547.	21.0	53
105	Synthesis and pervaporation properties of NaA zeolite membranes prepared with vacuum-assisted method. Separation and Purification Technology, 2007, 56, 158-167.	7.9	52
106	Hydrogen transport through thin palladium-copper alloy composite membranes at low temperatures. Thin Solid Films, 2008, 516, 1849-1856.	1.8	52
107	Nanocomposite MFI-alumina membranes via pore-plugging synthesis: Genesis of the zeolite material. Journal of Membrane Science, 2008, 325, 973-981.	8.2	52
108	Partial oxidation of methane to syngas in BaCe _{0.15} Fe _{0.85} O _{3-δ} membrane reactors. Catalysis Letters, 2006, 111, 179-185.	2.6	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.	7.1	51
110	Title is missing!. Catalysis Letters, 2002, 84, 101-106.	2.6	49
111	Li ₃ V ₂ (PO ₄) ₃ @C/graphene composite with improved cycling performance as cathode material for lithium-ion batteries. Electrochimica Acta, 2013, 91, 108-113.	5.2	49
112	The current status of high temperature electrochemistry-based CO ₂ transport membranes and reactors for direct CO ₂ capture and conversion. Progress in Energy and Combustion Science, 2021, 82, 100888.	31.2	49
113	Roadmap for Sustainable Mixed Ionic&Electronic Conducting Membranes. Advanced Functional Materials, 2022, 32, .	14.9	49
114	Surface structure and catalytic performance of supported PtSn catalysts. Catalysis Letters, 1992, 12, 267-275.	2.6	48
115	Structure and oxygen permeability of a dual-phase membrane. Journal of Membrane Science, 2003, 224, 107-115.	8.2	48
116	A Direct Ammonia Tubular Solid Oxide Fuel Cell. Chinese Journal of Catalysis, 2007, 28, 749-751.	14.0	48
117	Diatomite as high performance and environmental friendly catalysts for phenol hydroxylation with H ₂ O ₂ . Science and Technology of Advanced Materials, 2007, 8, 106-109.	6.1	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.	8.2	48
119	Synthesis and gas permeation properties of an NaA zeolite membrane. Chemical Communications, 2000, , 603-604.	4.1	47
120	Selective Oxidation of Methane to Syngas over NiO/Barium Hexaaluminate. Catalysis Letters, 2001, 74, 139-144.	2.6	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.	8.2	47
122	Investigation on the structure stability and oxygen permeability of titanium-doped perovskite-type oxides of BaTi _{0.2} CoxFe _{0.8-x} O _{3-δ} (x=0.2&0.6). Separation and Purification Technology, 2003, 32, 289-299.	7.9	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.	2.6	46
124	A novel CAU-10-H MOF membrane for hydrogen separation under hydrothermal conditions. Journal of Membrane Science, 2016, 513, 40-46.	8.2	46
125	Layered Fe-Substituted LiNiO ₂ Electro catalysts for High-Efficiency Oxygen Evolution Reaction. ACS Energy Letters, 2017, 2, 1654-1660.	17.4	46
126	Pervaporation and vapor permeation dehydration of Fischer&Tropsch mixed-alcohols by LTA zeolite membranes. Separation and Purification Technology, 2007, 57, 140-146.	7.9	44

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127	Single-step fabrication of asymmetric dual-phase composite membranes for oxygen separation. <i>Journal of Membrane Science</i> , 2008, 325, 11-15.	8.2	44
128	Comparative permeation studies on three supported membranes: Pure ZIF-8, pure polymethylphenylsiloxane, and mixed matrix membranes. <i>Microporous and Mesoporous Materials</i> , 2014, 189, 210-215.	4.4	44
129	Significantly Enhanced Separation using ZIF-8 Membranes by Partial Conversion of Calcined Layered Double Hydroxide Precursors. <i>ChemSusChem</i> , 2015, 8, 3582-3586.	6.8	44
130	Porous carbon layers wrapped CoFe alloy for ultrastable Zn-Air batteries exceeding 20,000 charging-discharging cycles. <i>Journal of Energy Chemistry</i> , 2021, 61, 327-335.	12.9	44
131	Fabrication of highly β -oriented MFI monolayers on various substrates. <i>Chemical Communications</i> , 2009, , 1520.	4.1	43
132	Surface structure and reaction performances of highly dispersed and supported bimetallic catalysts. <i>Science in China Series B: Chemistry</i> , 1999, 42, 571-580.	0.8	42
133	The partial oxidation of methane to syngas over the nickel-modified hexaaluminate catalysts Ba ₁₂ Al ₁₉ O ₁₉ . <i>Applied Catalysis A: General</i> , 2002, 235, 39-45.	4.3	42
134	Nanoparticles at Grain Boundaries Inhibit the Phase Transformation of Perovskite Membrane. <i>Nano Letters</i> , 2015, 15, 7678-7683.	9.1	42
135	Partial oxidation of ethane to syngas in an oxygen-permeable membrane reactor. <i>Journal of Membrane Science</i> , 2002, 209, 143-152.	8.2	41
136	Gas separation performance of supported carbon molecular sieve membranes based on soluble polybenzimidazole. <i>Journal of Membrane Science</i> , 2017, 533, 1-10.	8.2	41
137	Flexible Soft-Solid Metal-Organic Framework Composite Membranes for H ₂ /CO ₂ Separation. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	41
138	An in situ approach to synthesize pure phase FAU-type zeolite membranes: effect of aging and formation mechanism. <i>Journal of Materials Science</i> , 2008, 43, 3279-3288.	3.7	40
139	Electrochemical performances of spinel oxides as cathodes for intermediate temperature solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 1052-1057.	7.1	40
140	Enhancement of oxygen evolution performance through synergetic action between NiFe metal core and NiFeOx shell. <i>Chemical Communications</i> , 2016, 52, 11803-11806.	4.1	40
141	Suppression of twins in β -oriented MFI molecular sieve films under microwave irradiation. <i>Chemical Communications</i> , 2012, 48, 6782.	4.1	39
142	Conversion of xylose into furfural in a MOF-based mixed matrix membrane reactor. <i>Chemical Engineering Journal</i> , 2016, 305, 12-18.	12.7	39
143	FAU-type zeolite membranes synthesized by microwave assisted in situ crystallization. <i>Materials Letters</i> , 2008, 62, 4357-4359.	2.6	38
144	Detrimental phase evolution triggered by Ni in perovskite-type cathodes for CO ₂ electroreduction. <i>Journal of Energy Chemistry</i> , 2019, 36, 87-94.	12.9	38

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145	Effects of synthesis methods on oxygen permeability of BaCe _{0.15} Fe _{0.85} O _{3-δ} ceramic membranes. Journal of Membrane Science, 2006, 283, 158-163.	8.2	37
146	Design and experimental investigation of oxide ceramic dual-phase membranes. Journal of Membrane Science, 2012, 394-395, 120-130.	8.2	37
147	Nano-CeO ₂ -Modified Cathodes for Direct Electrochemical CO ₂ Reduction in Solid Oxide Electrolysis Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 9629-9636.	6.7	37
148	Thermal Evolution of the Structure of a Mg-Al-CO ₃ Layered Double Hydroxide: Sorption Reversibility Aspects. Industrial & Engineering Chemistry Research, 2004, 43, 4559-4570.	3.7	36
149	Highly efficient electrocatalysts for oxygen reduction reaction. Chemical Communications, 2007, , 4215.	4.1	36
150	Oxygen permeability and stability of BaCe _{0.1} Co _{0.4} Fe _{0.5} O _{3-δ} oxygen permeable membrane. Separation and Purification Technology, 2010, 73, 38-43.	7.9	36
151	Oxygen permeation through Ca-contained dual-phase membranes for oxyfuel CO ₂ capture. Separation and Purification Technology, 2013, 114, 31-37.	7.9	36
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