

Weishen Yang

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2210501/weishen-yang-publications-by-citations.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

365
papers

18,364
citations

68
h-index

123
g-index

378
ext. papers

20,360
ext. citations

7.4
avg, IF

6.99
L-index

#	Paper	IF	Citations
365	Membranes. Metal-organic framework nanosheets as building blocks for molecular sieving membranes. <i>Science</i> , 2014 , 346, 1356-9	33.3	1129
364	Large reversible capacity of high quality graphene sheets as an anode material for lithium-ion batteries. <i>Electrochimica Acta</i> , 2010 , 55, 3909-3914	6.7	894
363	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	9.6	862
362	Molecular sieve membrane: supported metal-organic framework with high hydrogen selectivity. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 548-51	16.4	497
361	Zeolitic imidazolate framework ZIF-7 based molecular sieve membrane for hydrogen separation. <i>Journal of Membrane Science</i> , 2010 , 354, 48-54	9.6	397
360	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	6.7	367
359	High reversible capacity of SnO ₂ /graphene nanocomposite as an anode material for lithium-ion batteries. <i>Electrochimica Acta</i> , 2011 , 56, 4532-4539	6.7	344
358	Controllable synthesis of metal-organic frameworks: From MOF nanorods to oriented MOF membranes. <i>Advanced Materials</i> , 2010 , 22, 3322-6	24	327
357	A study by in situ techniques of the thermal evolution of the structure of a MgAl ₂ O ₃ layered double hydroxide. <i>Chemical Engineering Science</i> , 2002 , 57, 2945-2953	4.4	279
356	An organophilic pervaporation membrane derived from metal-organic framework nanoparticles for efficient recovery of bio-alcohols. <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 10636-9	16.4	276
355	Two-Dimensional Metal-Organic Framework Nanosheets for Membrane-Based Gas Separation. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 9757-9761	16.4	270
354	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	16.4	239
353	Microwave synthesis of zeolite membranes: A review. <i>Journal of Membrane Science</i> , 2008 , 316, 3-17	9.6	239
352	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	8.3	238
351	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, 15483-7	16.4	213
350	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	9.6	209
349	Molecular sieving MFI-type zeolite membranes for pervaporation separation of xylene isomers. <i>Journal of the American Chemical Society</i> , 2004 , 126, 4776-7	16.4	205

348	Synthesis of a High-Permeance NaA Zeolite Membrane by Microwave Heating. <i>Advanced Materials</i> , 2000 , 12, 195-198	24	199
347	Investigation of ideal zirconium-doped perovskite-type ceramic membrane materials for oxygen separation. <i>Journal of Membrane Science</i> , 2002 , 203, 175-189	9.6	185
346	Improvement of hydrothermal stability of zeolitic imidazolate frameworks. <i>Chemical Communications</i> , 2013 , 49, 9140-2	5.8	184
345	Investigation of a Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ based cathode IT-SOFC. <i>Applied Catalysis B: Environmental</i> , 2006 , 66, 64-71	21.8	177
344	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	9.6	157
343	Oxygen permeation study in a tubular Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ oxygen permeable membrane. <i>Journal of Membrane Science</i> , 2002 , 210, 259-271	9.6	155
342	Dense ceramic oxygen permeable membranes and catalytic membrane reactors. <i>Chemical Engineering Journal</i> , 2013 , 220, 185-203	14.7	147
341	The roles of oxygen vacancies in electrocatalytic oxygen evolution reaction. <i>Nano Energy</i> , 2020 , 73, 104761	6.1	146
340	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 membrane reactor. <i>Catalysis Today</i> , 2003 , 82, 157-166	5.3	145
339	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	9.6	141
338	Development and Application of Oxygen Permeable Membrane in Selective Oxidation of Light Alkanes. <i>Topics in Catalysis</i> , 2005 , 35, 155-167	2.3	141
337	Synthesis, oxygen permeation study and membrane performance of a Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ oxygen-permeable dense ceramic reactor for partial oxidation of methane to syngas. <i>Separation and Purification Technology</i> , 2001 , 25, 97-116	8.3	141
336	Structural stability and oxygen permeability of cerium lightly doped BaFeO ₃ ceramic membranes. <i>Solid State Ionics</i> , 2006 , 177, 2917-2921	3.3	132
335	Corrosion Resistant High-Silica-Zeolite MFI Coating. <i>Journal of the Electrochemical Society</i> , 2006 , 153, B325	3.9	129
334	Novel dual-phase membranes for CO ₂ capture via an oxyfuel route. <i>Chemical Communications</i> , 2012 , 48, 251-3	5.8	124
333	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	3.3	123
332	Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ as a cathode for IT-SOFCs with a GDC interlayer. <i>Journal of Power Sources</i> , 2006 , 160, 57-64	8.9	120
331	Relationship between transport properties and phase transformations in mixed-conducting oxides. <i>Journal of Solid State Chemistry</i> , 2006 , 179, 362-369	3.3	116

330	Metal-organic framework ZIF-8 nanocomposite membrane for efficient recovery of furfural via pervaporation and vapor permeation. <i>Journal of Membrane Science</i> , 2013 , 428, 498-506	9.6	114
329	Microstructural Engineering and Architectural Design of Metal-Organic Framework Membranes. <i>Advanced Materials</i> , 2017 , 29, 1606949	24	106
328	Microwave-assisted hydrothermal synthesis of hydroxy-sodalite zeolite membrane. <i>Microporous and Mesoporous Materials</i> , 2004 , 75, 173-181	5.3	106
327	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	9.6	104
326	Novel cobalt-free oxygen permeable membrane. <i>Chemical Communications</i> , 2004 , 1130-1	5.8	103
325	Hierarchical growth of large-scale ordered zeolite silicalite-1 membranes with high permeability and selectivity for recycling CO ₂ . <i>Angewandte Chemie - International Edition</i> , 2006 , 45, 7053-6	16.4	101
324	Microwave synthesis of LTA zeolite membranes without seeding. <i>Journal of Membrane Science</i> , 2006 , 277, 230-239	9.6	101
323	Novel and Ideal Zirconium-Based Dense Membrane Reactors for Partial Oxidation of Methane to Syngas. <i>Catalysis Letters</i> , 2002 , 78, 129-137	2.8	99
322	Superhigh capacity and rate capability of high-level nitrogen-doped graphene sheets as anode materials for lithium-ion batteries. <i>Electrochimica Acta</i> , 2013 , 90, 492-497	6.7	95
321	Preparation of titania-based catalysts for formaldehyde photocatalytic oxidation from TiCl ₄ by the sol-gel method. <i>Catalysis Today</i> , 2001 , 68, 89-95	5.3	95
320	Oxygen permeation and partial oxidation of methane in dual-phase membrane reactors. <i>Journal of Membrane Science</i> , 2010 , 360, 454-460	9.6	94
319	Investigation on POM reaction in a new perovskite membrane reactor. <i>Catalysis Today</i> , 2001 , 67, 3-13	5.3	94
318	High selectivity of oxidative dehydrogenation of ethane to ethylene in an oxygen permeable membrane reactor. <i>Chemical Communications</i> , 2002 , 1468-9	5.8	94
317	Composite membrane based on ionic conductor and mixed conductor for oxygen permeation. <i>AIChE Journal</i> , 2008 , 54, 665-672	3.6	91
316	Oxidative coupling of methane in Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-λ} tubular membrane reactors. <i>Catalysis Today</i> , 2005 , 104, 160-167	5.3	89
315	Fabrication of highly b-oriented MFI film with molecular sieving properties by controlled in-plane secondary growth. <i>Journal of the American Chemical Society</i> , 2010 , 132, 1768-9	16.4	88
314	Experimental and modeling studies on Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-λ} (BSCF) tubular membranes for air separation. <i>Journal of Membrane Science</i> , 2004 , 243, 405-415	9.6	88
313	Perovskites decorated with oxygen vacancies and FeNi alloy nanoparticles as high-efficiency electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 19836-19843	13	87

312	Synthesis of NaA zeolite membrane by microwave heating. <i>Separation and Purification Technology</i> , 2001 , 25, 241-249	8.3	85
311	Synthesis and oxygen permeation study of novel perovskite-type BaBixCo0.2Fe0.8-xO3 ceramic membranes. <i>Journal of Membrane Science</i> , 2000 , 164, 167-176	9.6	85
310	A modified electroless plating technique for thin dense palladium composite membranes with enhanced stability. <i>Journal of Membrane Science</i> , 2008 , 314, 226-237	9.6	84
309	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, 326-31	9.3	79
308	High rate capability of TiO2/nitrogen-doped graphene nanocomposite as an anode material for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2013 , 561, 54-58	5.7	77
307	Synthesis of NaA zeolite membranes from clear solution. <i>Microporous and Mesoporous Materials</i> , 2001 , 43, 299-311	5.3	77
306	Electrochemical reduction of CO 2 in solid oxide electrolysis cells. <i>Journal of Energy Chemistry</i> , 2017 , 26, 593-601	12	75
305	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	24	75
304	Relationship between homogeneity and oxygen permeability of composite membranes. <i>Journal of Membrane Science</i> , 2008 , 309, 120-127	9.6	74
303	Direct ammonia solid oxide fuel cell based on thin proton-conducting electrolyte. <i>Journal of Power Sources</i> , 2008 , 179, 92-95	8.9	74
302	Capillary supported ultrathin homogeneous silicalite-poly(dimethylsiloxane) nanocomposite membrane for bio-butanol recovery. <i>Journal of Membrane Science</i> , 2011 , 369, 228-232	9.6	72
301	Deactivation studies over NiO/Al2O3 catalysts for partial oxidation of methane to syngas. <i>Catalysis Today</i> , 2000 , 63, 517-522	5.3	70
300	High specific capacity of TiO2-graphene nanocomposite as an anode material for lithium-ion batteries in an enlarged potential window. <i>Electrochimica Acta</i> , 2012 , 74, 65-72	6.7	68
299	A novel Fe3O4/graphene ternary nanocomposite as an anode material for lithium-ion batteries. <i>Electrochimica Acta</i> , 2011 , 58, 81-88	6.7	68
298	Oxygen permeability and structural stability of BaCe0.15Fe0.85O3 membranes. <i>Journal of Membrane Science</i> , 2006 , 283, 38-44	9.6	68
297	Hydrothermal stability of LTA zeolite membranes in pervaporation. <i>Journal of Membrane Science</i> , 2007 , 297, 10-15	9.6	67
296	Preparation of silicalite-1 membrane by solution-filling method and its alcohol extraction properties. <i>Journal of Membrane Science</i> , 2007 , 296, 122-130	9.6	64
295	Partial oxidation of methane in Ba0.5Sr0.5Co0.8Fe0.2O3 membrane reactor at high pressures. <i>Catalysis Today</i> , 2005 , 104, 154-159	5.3	64

- 294 Preparation of novel uniform mesoporous alumina catalysts by the sol-gel method. *Catalysis Today*, **2001**, 68, 97-109 5.3 64
- 293 Metal-substituted zeolitic imidazolate framework ZIF-108: gas-sorption and membrane-separation properties. *Chemistry - A European Journal*, **2014**, 20, 11402-9 4.8 62
- 292 Operation of perovskite membrane under vacuum and elevated pressures for high-purity oxygen production. *Journal of Membrane Science*, **2009**, 345, 47-52 9.6 61
- 291 Syngas generation in a membrane reactor with a highly stable ceramic composite membrane. *Catalysis Communications*, **2008**, 10, 309-312 3.2 61
- 290 Synthesis, characterization and single gas permeation properties of NaA zeolite membrane. *Journal of Membrane Science*, **2005**, 249, 51-64 9.6 61
- 289 Mixed-matrix membranes containing functionalized porous metal-organic polyhedrons for the effective separation of CO₂-CH₄ mixture. *Chemical Communications*, **2015**, 51, 4249-51 5.8 60
- 288 Solvothermal synthesis of mixed-ligand metal-organic framework ZIF-78 with controllable size and morphology. *Microporous and Mesoporous Materials*, **2013**, 173, 29-36 5.3 59
- 287 Oxygen permeability and stability of Ba_{0.5}Sr_{0.5}Co_{0.8}Fe_{0.2}O_{3-δ} as an oxygen-permeable membrane at high pressures. *Solid State Ionics*, **2006**, 177, 595-600 3.3 59
- 286 Unique role of Mössbauer spectroscopy in assessing structural features of heterogeneous catalysts. *Applied Catalysis B: Environmental*, **2018**, 224, 518-532 21.8 58
- 285 Atomic-scale topochemical preparation of crystalline Fe³⁺-doped Ni(OH)₂ for an ultrahigh-rate oxygen evolution reaction. *Journal of Materials Chemistry A*, **2017**, 5, 7753-7758 13 57
- 284 Ce_{0.85}Sm_{0.15}O_{1.925}Bm_{0.6}Sr_{0.4}Al_{0.3}Fe_{0.7}O₃ dual-phase membranes: One-pot synthesis and stability in a CO₂ atmosphere. *Solid State Ionics*, **2013**, 253, 57-63 3.3 57
- 283 Synthesis of NaA zeolite membrane on a ceramic hollow fiber. *Journal of Membrane Science*, **2004**, 229, 81-85 9.6 57
- 282 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 9.6 57
- 281 Microwave-assisted hydrothermal synthesis of a&b-oriented zeolite T membranes and their pervaporation properties. *Separation and Purification Technology*, **2009**, 65, 164-172 8.3 56
- 280 Stabilization of low-temperature degradation in mixed ionic and electronic conducting perovskite oxygen permeation membranes. *Angewandte Chemie - International Edition*, **2013**, 52, 3232-6 16.4 54
- 279 Performance of an anode-supported tubular solid oxide fuel cell (SOFC) under pressurized conditions. *Electrochimica Acta*, **2008**, 53, 5195-5198 6.7 53
- 278 Effect of carbon dioxide on the reaction performance of partial oxidation of methane over a LiLaNiO/Al₂O₃ catalyst. *Applied Catalysis A: General*, **2000**, 202, 141-146 5.1 53
- 277 Permeation model and experimental investigation of mixed conducting membranes. *AIChE Journal*, **2012**, 58, 1744-1754 3.6 51

276	Preparation and hydrogen permeation of SrCe _{0.95} Y _{0.05} O _{3-δ} asymmetrical membranes. <i>Journal of Membrane Science</i> , 2009 , 340, 241-248	9.6	50
275	Two-Dimensional Metal-Organic Framework Nanosheets for Membrane-Based Gas Separation. <i>Angewandte Chemie</i> , 2017 , 129, 9889-9893	3.6	49
274	Formation mechanism of microwave synthesized LTA zeolite membranes. <i>Journal of Membrane Science</i> , 2006 , 281, 646-657	9.6	49
273	Synthesis of zeolite NaA membranes with high permeance under microwave radiation on mesoporous-layer-modified macroporous substrates for gas separation. <i>Journal of Membrane Science</i> , 2005 , 255, 201-211	9.6	49
272	Recovery of HMF from aqueous solution by zeolitic imidazolate frameworks. <i>Chemical Engineering Science</i> , 2015 , 124, 170-178	4.4	48
271	Li ₃ V ₂ (PO ₄) ₃ @C/graphene composite with improved cycling performance as cathode material for lithium-ion batteries. <i>Electrochimica Acta</i> , 2013 , 91, 108-113	6.7	48
270	Partial oxidation of methane in BaCe _{0.1} Co _{0.4} Fe _{0.5} O _{3-δ} membrane reactor. <i>Catalysis Today</i> , 2010 , 149, 185-190	5.3	48
269	The effect of co-existing nitrogen on hydrogen permeation through thin Pd composite membranes. <i>Separation and Purification Technology</i> , 2007 , 54, 262-271	8.3	48
268	Nanocomposite MFI-alumina membranes via pore-plugging synthesis: Genesis of the zeolite material. <i>Journal of Membrane Science</i> , 2008 , 325, 973-981	9.6	48
267	A "copolymer-co-morphology" conception for shape-controlled synthesis of Prussian blue analogues and as-derived spinel oxides. <i>Nanoscale</i> , 2016 , 8, 2333-42	7.7	47
266	Confinement of Ionic Liquids in Nanocages: Tailoring the Molecular Sieving Properties of ZIF-8 for Membrane-Based CO ₂ Capture. <i>Angewandte Chemie</i> , 2015 , 127, 15703-15707	3.6	47
265	Hydrogen transport through thin palladium-copper alloy composite membranes at low temperatures. <i>Thin Solid Films</i> , 2008 , 516, 1849-1856	2.2	47
264	Synthesis and pervaporation properties of NaA zeolite membranes prepared with vacuum-assisted method. <i>Separation and Purification Technology</i> , 2007 , 56, 158-167	8.3	46
263	Partial oxidation of methane to syngas in BaCe _{0.15} Fe _{0.85} O _{3-δ} membrane reactors. <i>Catalysis Letters</i> , 2006 , 111, 179-185	2.8	46
262	Surface structure and catalytic performance of supported PtSn catalysts. <i>Catalysis Letters</i> , 1992 , 12, 267-275	2.8	45
261	Continuous Oxygen Ion Transfer Medium as a Catalyst for High Selective Oxidative Dehydrogenation of Ethane. <i>Catalysis Letters</i> , 2002 , 84, 101-106	2.8	44
260	Oxygen evolution reaction over Fe site of BaZr _x Fe _{1-x} O _{3-δ} perovskite oxides. <i>Electrochimica Acta</i> , 2017 , 241, 433-439	6.7	43
259	Single-step fabrication of asymmetric dual-phase composite membranes for oxygen separation. <i>Journal of Membrane Science</i> , 2008 , 325, 11-15	9.6	43

258	Structure and oxygen permeability of a dual-phase membrane. <i>Journal of Membrane Science</i> , 2003 , 224, 107-115	9.6	43
257	Synthesis and gas permeation properties of an NaA zeolite membrane. <i>Chemical Communications</i> , 2000 , 603-604	5.8	43
256	H ₂ S-tolerant oxygen-permeable ceramic membranes for hydrogen separation with a performance comparable to those of palladium-based membranes. <i>Energy and Environmental Science</i> , 2017 , 10, 101-108	35.4	42
255	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	5.3	42
254	Novel Mn _{1.5} Co _{1.5} O ₄ spinel cathodes for intermediate temperature solid oxide fuel cells. <i>Chemical Communications</i> , 2011 , 47, 2378-80	5.8	42
253	Microwave synthesis of high performance FAU-type zeolite membranes: Optimization, characterization and pervaporation dehydration of alcohols. <i>Journal of Membrane Science</i> , 2009 , 337, 47-54	9.6	41
252	In situ high temperature X-ray diffraction studies of mixed ionic and electronic conducting perovskite-type membranes. <i>Materials Letters</i> , 2005 , 59, 3750-3755	3.3	41
251	Surface structure and reaction performances of highly dispersed and supported bimetallic catalysts. <i>Science in China Series B: Chemistry</i> , 1999 , 42, 571-580		41
250	Diatomite as high performance and environmental friendly catalysts for phenol hydroxylation with H ₂ O ₂ . <i>Science and Technology of Advanced Materials</i> , 2007 , 8, 106-109	7.1	40
249	The partial oxidation of methane to syngas over the nickel-modified hexaaluminate catalysts Ba _{1-x} Ni _x Al ₁₂ O ₁₉ . <i>Applied Catalysis A: General</i> , 2002 , 235, 39-45	5.1	40
248	Investigation on the structure stability and oxygen permeability of titanium-doped perovskite-type oxides of BaTi _{0.2} CoxFe _{0.8-0.2x} O ₃ (x=0.2-0.6). <i>Separation and Purification Technology</i> , 2003 , 32, 289-299	8.3	40
247	Selective Oxidation of Methane to Syngas over NiO/Barium Hexaaluminate. <i>Catalysis Letters</i> , 2001 , 74, 139-144	2.8	40
246	Fabrication of highly b-oriented MFI monolayers on various substrates. <i>Chemical Communications</i> , 2009 , 1520-2	5.8	39
245	Improving oxygen permeation of MIEC membrane reactor by enhancing the electronic conductivity under intermediate-low oxygen partial pressures. <i>Journal of Membrane Science</i> , 2016 , 520, 607-615	9.6	39
244	2D Metal-Organic Framework Materials for Membrane-Based Separation. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1901514	4.6	38
243	Nanoparticles at Grain Boundaries Inhibit the Phase Transformation of Perovskite Membrane. <i>Nano Letters</i> , 2015 , 15, 7678-83	11.5	37
242	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	4.3	37
241	Design and experimental investigation of oxide ceramic dual-phase membranes. <i>Journal of Membrane Science</i> , 2012 , 394-395, 120-130	9.6	36

240	Pervaporation and vapor permeation dehydration of Fischer-Tropsch mixed-alcohols by LTA zeolite membranes. <i>Separation and Purification Technology</i> , 2007 , 57, 140-146	8.3	36
239	A Direct Ammonia Tubular Solid Oxide Fuel Cell. <i>Chinese Journal of Catalysis</i> , 2007 , 28, 749-751	11.3	36
238	Mixed ionic-electronic conducting (MIEC) membranes for hydrogen production from water splitting. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 3452-3461	6.7	35
237	FAU-type zeolite membranes synthesized by microwave assisted in situ crystallization. <i>Materials Letters</i> , 2008 , 62, 4357-4359	3.3	35
236	Enhancement of oxygen evolution performance through synergetic action between NiFe metal core and NiFeO shell. <i>Chemical Communications</i> , 2016 , 52, 11803-11806	5.8	34
235	Effects of synthesis methods on oxygen permeability of BaCe _{0.15} Fe _{0.85} O _{3-λ} ceramic membranes. <i>Journal of Membrane Science</i> , 2006 , 283, 158-163	9.6	34
234	Partial oxidation of ethane to syngas in an oxygen-permeable membrane reactor. <i>Journal of Membrane Science</i> , 2002 , 209, 143-152	9.6	34
233	Hierarchical Growth of Large-Scale Ordered Zeolite Silicalite-1 Membranes with High Permeability and Selectivity for Recycling CO ₂ . <i>Angewandte Chemie</i> , 2006 , 118, 7211-7214	3.6	33
232	Conversion of xylose into furfural in a MOF-based mixed matrix membrane reactor. <i>Chemical Engineering Journal</i> , 2016 , 305, 12-18	14.7	32
231	Alkaline-earth elements (Ca, Sr and Ba) doped LaFeO _{3-λ} cathodes for CO ₂ electroreduction. <i>Journal of Power Sources</i> , 2019 , 443, 227268	8.9	32
230	Mixed Conducting Ceramic Membranes. <i>Green Chemistry and Sustainable Technology</i> , 2017 ,	1.1	32
229	Asymmetric dual-phase membranes prepared via tape-casting and co-lamination for oxygen permeation. <i>Materials Letters</i> , 2015 , 147, 88-91	3.3	32
228	Highly efficient electrocatalysts for oxygen reduction reaction. <i>Chemical Communications</i> , 2007 , 4215-7	5.8	32
227	H ₂ /N ₂ gaseous mixture separation in dense Pd/Al ₂ O ₃ hollow fiber membranes: Experimental and simulation studies. <i>Separation and Purification Technology</i> , 2006 , 52, 177-185	8.3	32
226	A novel CAU-10-H MOF membrane for hydrogen separation under hydrothermal conditions. <i>Journal of Membrane Science</i> , 2016 , 513, 40-46	9.6	32
225	Layered Fe-Substituted LiNiO ₂ Electrocatalysts for High-Efficiency Oxygen Evolution Reaction. <i>ACS Energy Letters</i> , 2017 , 2, 1654-1660	20.1	31
224	Comparative investigation of dual-phase membranes containing cobalt and iron-based mixed conducting perovskite for oxygen permeation. <i>Journal of Membrane Science</i> , 2014 , 462, 170-177	9.6	31
223	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	6.7	31

222	Oxygen permeation through Ca-contained dual-phase membranes for oxyfuel CO ₂ capture. <i>Separation and Purification Technology</i> , 2013 , 114, 31-37	8.3	31
221	Mixed reforming of heptane to syngas in the Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ membrane reactor. <i>Catalysis Today</i> , 2005 , 104, 149-153	5.3	31
220	Gas separation performance of supported carbon molecular sieve membranes based on soluble polybenzimidazole. <i>Journal of Membrane Science</i> , 2017 , 533, 1-10	9.6	30
219	Microstructural and Interfacial Designs of Oxygen-Permeable Membranes for Oxygen Separation and Reaction-Separation Coupling. <i>Advanced Materials</i> , 2019 , 31, e1902547	24	30
218	Degradation mechanism analysis of Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O ₃ - λ membranes at intermediate-low temperatures. <i>AIChE Journal</i> , 2015 , 61, 3879-3888	3.6	30
217	Significantly Enhanced Separation using ZIF-8 Membranes by Partial Conversion of Calcined Layered Double Hydroxide Precursors. <i>ChemSusChem</i> , 2015 , 8, 3582-6	8.3	30
216	Suppression of twins in b-oriented MFI molecular sieve films under microwave irradiation. <i>Chemical Communications</i> , 2012 , 48, 6782-4	5.8	30
215	Effects of sintering temperature on properties of dual-phase oxygen permeable membranes. <i>Journal of Membrane Science</i> , 2011 , 367, 134-140	9.6	30
214	Oxygen permeability and stability of BaCe _{0.1} Co _{0.4} Fe _{0.5} O ₃ - λ oxygen permeable membrane. <i>Separation and Purification Technology</i> , 2010 , 73, 38-43	8.3	30
213	Effects of aging on the synthesis and performance of silicalite membranes on silica tubes without seeding. <i>Microporous and Mesoporous Materials</i> , 2007 , 102, 249-257	5.3	30
212	Thermal Evolution of the Structure of a Mg ₂ Al ₂ (OH) ₆ Layered Double Hydroxide: Sorption Reversibility Aspects. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 4559-4570	3.9	30
211	Partial oxidation of methane and ethane to synthesis gas over a LiLaNiO ₃ /Al ₂ O ₃ catalyst. <i>Applied Catalysis A: General</i> , 2000 , 198, 261-266	5.1	30
210	Single Crystal (Mn,Co) ₃ O ₄ Octahedra for Highly Efficient Oxygen Reduction Reactions. <i>Electrochimica Acta</i> , 2014 , 144, 31-41	6.7	29
209	Perovskite oxide absorbents for oxygen separation. <i>AIChE Journal</i> , 2009 , 55, 3125-3133	3.6	29
208	Crystal structure, oxygen permeability and stability of Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.1} M _{0.1} O ₃ - λ (M=Fe, Cr, Mn, Zr) oxygen-permeable membranes. <i>Materials Research Bulletin</i> , 2006 , 41, 683-689	5.1	29
207	Synthesis of LiFePO ₄ /C composite as a cathode material for lithium-ion battery by a novel two-step method. <i>Journal of Materials Science</i> , 2012 , 47, 3076-3081	4.3	28
206	Germanium and iron co-substituted SrCoO _{2.5} - λ s oxygen permeable membrane. <i>Solid State Ionics</i> , 2004 , 170, 187-190	3.3	28
205	Oxidative dehydrogenation of propane in a dense tubular membrane reactor. <i>Reaction Kinetics and Catalysis Letters</i> , 2003 , 79, 351-356		28

204	Oxygen permeability and structural stability of Zr-doped oxygen-permeable Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} membrane. <i>Materials Letters</i> , 2005 , 59, 2285-2288	3.3	28
203	A Novel Method To Synthesize Amorphous Silica/Alumina Materials with Mesoporous Distribution without Using Templates and Pore-Regulating Agents. <i>Chemistry of Materials</i> , 2002 , 14, 122-129	9.6	27
202	Unsteady-state permeation and surface exchange of dual-phase membranes. <i>Solid State Ionics</i> , 2011 , 185, 27-31	3.3	26
201	New concept on air separation. <i>Journal of Membrane Science</i> , 2008 , 323, 221-224	9.6	26
200	Integration of Nine Steps into One Membrane Reactor To Produce Synthesis Gases for Ammonia and Liquid Fuel. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 8566-70	16.4	26
199	Selection of oxygen permeation models for different mixed ionic-electronic conducting membranes. <i>AIChE Journal</i> , 2017 , 63, 4043-4053	3.6	25
198	Synthesis of hierarchical porous materials with ZSM-5 structures via template-free sol-gel method. <i>Science and Technology of Advanced Materials</i> , 2007 , 8, 101-105	7.1	25
197	Hydrothermal synthesis of NaA zeolite membrane together with microwave heating and conventional heating. <i>Materials Letters</i> , 2007 , 61, 5129-5132	3.3	25
196	Enhancement of NaA zeolite membrane properties through organic cation addition. <i>Separation and Purification Technology</i> , 2008 , 61, 175-181	8.3	25
195	Ultrasonic Synthesis of Silica/Alumina Nanomaterials with Controlled Mesopore Distribution without Using Surfactants. <i>Langmuir</i> , 2002 , 18, 4111-4117	4	25
194	Dual-phase membrane reactor for hydrogen separation with high tolerance to CO ₂ and H ₂ S impurities. <i>AIChE Journal</i> , 2019 , 65, 1088-1096	3.6	25
193	One-pot synthesis of NiAl ₂ O ₃ LDH anti-corrosion coatings from CO ₂ -saturated precursors. <i>RSC Advances</i> , 2015 , 5, 29552-29557	3.7	24
192	The role of A-site ion nonstoichiometry in the oxygen absorption properties of Sr _{1+x} Co _{0.8} Fe _{0.2} O ₃ oxides. <i>AIChE Journal</i> , 2011 , 57, 87-95	3.6	24
191	Investigation of Sm _{0.5} Sr _{0.5} CoO ₃ /Co ₃ O ₄ composite cathode for intermediate-temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2008 , 185, 129-135	8.9	24
190	Combustion synthesis, annealing, and oxygen permeation properties of SrFeCo _{0.5} O _y membranes. <i>Materials Research Bulletin</i> , 2004 , 39, 963-969	5.1	24
189	Characterization of the formation of NaA zeolite membrane under microwave radiation. <i>Journal of Materials Science</i> , 2004 , 39, 671-673	4.3	24
188	Synthesis and perfection evaluation of NaA zeolite membrane. <i>Separation and Purification Technology</i> , 2001 , 25, 475-485	8.3	24
187	Metal-organic framework nanosheets: a class of glamorous low-dimensional materials with distinct structural and chemical natures. <i>Science China Chemistry</i> , 2019 , 62, 1561-1575	7.9	23

- 186 Preparation of zeolite T membranes by microwave-assisted in situ nucleation and secondary growth. *Materials Letters*, **2009**, 63, 255-257 3.3 23
- 185 Oxygen Permeating Properties of the Mixed Conducting Membranes without Cobalt. *Materials Research Bulletin*, **1998**, 33, 183-188 5.1 23
- 184 Initiation of oxygen permeation and POM reaction in different mixed conducting ceramic membrane reactors. *Catalysis Today*, **2006**, 118, 144-150 5.3 23
- 183 Single-Phase Covalent Organic Framework Staggered Stacking Nanosheet Membrane for CO₂-Selective Separation. *Angewandte Chemie - International Edition*, **2021**, 60, 19047-19052 16.4 23
- 182 Low temperature synthesis of perovskite oxide using the adsorption properties of cellulose. *Journal of Materials Science*, **2000**, 35, 5639-5644 4.3 22
- 181 Interaction of NiO with γ -Al₂O₃ Supporter of NiO/ γ -Al₂O₃ Catalysts. *Wuli Huaxue Xuebao/Acta Physico-Chimica Sinica*, **1999**, 15, 735-741 3.8 22
- 180 High-performance low-temperature solid oxide fuel cells using thin proton-conducting electrolyte with novel cathode. *International Journal of Hydrogen Energy*, **2012**, 37, 8635-8640 6.7 21
- 179 High-rate hydrogen separation using an MIEC oxygen permeable membrane reactor. *AIChE Journal*, **2017**, 63, 1278-1286 3.6 21
- 178 Pd and PdNi alloy composite membranes fabricated by electroless plating method on capillary γ -Al₂O₃ substrates. *International Journal of Hydrogen Energy*, **2015**, 40, 3548-3556 6.7 21
- 177 Hydrothermal synthesis of uniform and dense NaA zeolite membrane in the electric field. *Microporous and Mesoporous Materials*, **2007**, 102, 58-69 5.3 21
- 176 Catalytic Partial Oxidation of n-Heptane for Hydrogen Production. *Catalysis Letters*, **2003**, 88, 55-59 2.8 21
- 175 Nano-CeO₂-Modified Cathodes for Direct Electrochemical CO₂ Reduction in Solid Oxide Electrolysis Cells. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 9629-9636 8.3 20
- 174 Remarkable dependence of electrochemical performance of SrCo_{0.8}Fe_{0.2}O_{3- δ} on A-site nonstoichiometry. *Physical Chemistry Chemical Physics*, **2012**, 14, 7234-9 3.6 19
- 173 Oxygen permeability and improved stability of a permeable Zr-substituted perovskite membrane for air separation. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2007**, 141, 55-60 3.1 19
- 172 Ultrasound as a Tool to Synthesize Nano-Sized Silica/Alumina Catalysts with Controlled Mesoporous Distribution by a Novel Sol-Gel Process. *Catalysis Letters*, **2002**, 78, 37-41 2.8 19
- 171 Synthesis of NaA zeolite membrane with high performance. *Journal of Materials Science Letters*, **2002**, 21, 1023-1025 19
- 170 Partial oxidation of ethane to syngas over nickel-based catalysts modified by alkali metal oxide and rare earth metal oxide. *Catalysis Letters*, **1999**, 63, 167-171 2.8 19
- 169 Molecular sieve membranes: From 3D zeolites to 2D MOFs. *Chinese Journal of Catalysis*, **2015**, 36, 692-697 11.3 18

168	In-situ interfacial assembly of ultra-H ₂ -permeable metal-organic framework membranes for H ₂ /CO ₂ separation. <i>Journal of Membrane Science</i> , 2020 , 611, 118419	9.6	18
167	Modified cellulose adsorption method for the synthesis of conducting perovskite powders for membrane application. <i>Powder Technology</i> , 2002 , 122, 26-33	5.2	18
166	An in-situ modified sol-gel process for monolith catalyst preparation used in the partial oxidation of methane. <i>Journal of Materials Chemistry</i> , 2002 , 12, 1854-1859		18
165	Metal-organic framework-based CO ₂ capture: From precise material design to high-efficiency membranes. <i>Frontiers of Chemical Science and Engineering</i> , 2020 , 14, 188-215	4.5	18
164	Micro-nanostructural designs of bifunctional electrocatalysts for metal-air batteries. <i>Chinese Journal of Catalysis</i> , 2020 , 41, 390-403	11.3	18
163	A poly(amidoamine) nanoparticle cross-linked two-dimensional metal-organic framework nanosheet membrane for water purification. <i>Chemical Communications</i> , 2019 , 55, 3935-3938	5.8	17
162	High performance carbon molecular sieving membranes derived from pyrolysis of metal-organic framework ZIF-108 doped polyimide matrices. <i>Chemical Communications</i> , 2016 , 52, 13779-13782	5.8	17
161	Phase-segregation-induced self-assembly of anisotropic MFI microbuilding blocks into compact and highly b-oriented monolayers. <i>Langmuir</i> , 2011 , 27, 2327-33	4	17
160	Effects of reaction conditions on the selective oxidation of propane to acrylic acid on MoVTeNb oxides. <i>Catalysis Today</i> , 2004 , 93-95, 229-234	5.3	17
159	The current status of high temperature electrochemistry-based CO ₂ transport membranes and reactors for direct CO ₂ capture and conversion. <i>Progress in Energy and Combustion Science</i> , 2021 , 82, 100888	33.6	17
158	Structure and electrochemical properties of cobalt-free perovskite cathode materials for intermediate-temperature solid oxide fuel cells. <i>Electrochimica Acta</i> , 2018 , 279, 224-230	6.7	17
157	Ce-Al Mixed Oxide with High Thermal Stability for Diesel Soot Combustion. <i>Chinese Journal of Catalysis</i> , 2009 , 30, 685-689	11.3	16
156	Electrophoretic technique for hydrothermal synthesis of NaA zeolite membranes on porous γ -Al ₂ O ₃ supports. <i>Materials Research Bulletin</i> , 2007 , 42, 657-665	5.1	16
155	Effects of Alkali and Rare Earth Metal Oxides on the Thermal Stability and the Carbon-deposition over Nickel Based Catalyst. <i>Studies in Surface Science and Catalysis</i> , 1998 , 119, 747-752	1.8	16
154	Stability of sulfate doped SrCoO ₃ MIEC membrane. <i>Journal of Membrane Science</i> , 2016 , 501, 53-59	9.6	15
153	Dual-ligand zeolitic imidazolate framework crystals and oriented films derived from metastable mono-ligand ZIF-108. <i>Microporous and Mesoporous Materials</i> , 2016 , 219, 190-198	5.3	15
152	The Effect of Preparation Procedure on the Performance of Pd-SiW ₁₂ /SiO ₂ Catalysts for the Direct Oxidation of Ethylene to Acetic Acid. <i>Chinese Journal of Catalysis</i> , 2010 , 31, 1342-1346	11.3	15
151	Microwave Synthesis of a&b-Oriented Zeolite T Membranes and Their Application in Pervaporation-Assisted Esterification. <i>Chinese Journal of Catalysis</i> , 2008 , 29, 592-594	11.3	15

150	AgBiVMo oxide catalytic membrane for selective oxidation of propane to acrolein. <i>Catalysis Today</i> , 2003 , 82, 91-98	5.3	15
149	Adsorption of Biomass-Derived Polyols onto Metal-Organic Frameworks from Aqueous Solutions. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 11963-11969	3.9	14
148	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	14
147	Effect of Pd loading and precursor on the catalytic performance of Pd/WO ₃ ZrO ₂ catalysts for selective oxidation of ethylene. <i>Catalysis Today</i> , 2010 , 149, 163-166	5.3	14
146	Mixed reforming of simulated gasoline to hydrogen in a BSCFO membrane reactor. <i>Catalysis Today</i> , 2006 , 118, 39-43	5.3	14
145	Oxygen transport kinetics of MIEC membranes coated with different catalysts. <i>AIChE Journal</i> , 2016 , 62, 2803-2812	3.6	14
144	High-performance oxygen transport membrane reactors integrated with IGCC for carbon capture. <i>AIChE Journal</i> , 2020 , 66, e16427	3.6	13
143	In Situ Electrochemical Synthesis of Oriented and Defect-Free AEL Molecular-Sieve Films Using Ionic Liquids. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 13032-5	16.4	13
142	Effect of Sr Substitution on Catalytic Activity of La _{1-x} Sr _x MnO ₃ (0 ≤ x ≤ 0.8) Perovskite-Type Oxides for Catalytic Decomposition of Hydrogen Peroxide. <i>Reaction Kinetics and Catalysis Letters</i> , 2001 , 73, 311-316		13
141	Titanium-based perovskite-type mixed conducting ceramic membranes for oxygen permeation. <i>Materials Letters</i> , 2002 , 56, 958-962	3.3	13
140	Asymmetric dual-phase MIEC membrane reactor for energy-efficient coproduction of two kinds of synthesis gases. <i>International Journal of Hydrogen Energy</i> , 2019 , 44, 4218-4227	6.7	13
139	Degradation and stabilization of perovskite membranes containing silicon impurity at low temperature. <i>Journal of Membrane Science</i> , 2015 , 492, 173-180	9.6	12
138	In-situ-Methoden zur Charakterisierung elektrochemischer NiFe-Sauerstoffentwicklungskatalysatoren. <i>Angewandte Chemie</i> , 2019 , 131, 1264-1277	3.6	12
137	Synthesis of zeolitic imidazolate framework nanocrystals. <i>Materials Letters</i> , 2014 , 136, 341-344	3.3	12
136	Effects of Synthesis Methods of BICUVOX.10 Membranes on Oxygen Permeation at Moderate Temperatures. <i>Chinese Journal of Catalysis</i> , 2009 , 30, 926-932	11.3	12
135	Synthesis and gas permeation properties of silicalite-1 zeolite membrane. <i>Science in China Series B: Chemistry</i> , 1998 , 41, 325-330		12
134	Catalytic partial oxidation of gasoline to syngas in a dense membrane reactor. <i>Catalysis Today</i> , 2004 , 93-95, 257-261	5.3	12
133	Sustainable Ni catalyst for partial oxidation of CH ₄ to syngas at high temperature. <i>Studies in Surface Science and Catalysis</i> , 2000 , 130, 3567-3572	1.8	12

132	Effects of membrane thickness and structural type on the hydrogen separation performance of oxygen-permeable membrane reactors. <i>Journal of Membrane Science</i> , 2019 , 573, 370-376	9.6	12
131	Non-noble metal catalysts coated on oxygen-permeable membrane reactors for hydrogen separation. <i>Journal of Membrane Science</i> , 2020 , 594, 117463	9.6	12
130	Catalytic oxidative dehydrogenation of n-butane over V ₂ O ₅ /MO-Al ₂ O ₃ (M = Mg, Ca, Sr, Ba) catalysts. <i>Chinese Journal of Catalysis</i> , 2015 , 36, 1060-1067	11.3	11
129	Phenol cogeneration with electricity by using in situ generated H ₂ O ₂ in a H ₂ O ₂ PEMFC reactor. <i>Catalysis Today</i> , 2005 , 104, 200-204	5.3	11
128	Partial oxidation of methane to syngas in a mixed-conducting oxygen permeable membrane reactor. <i>Science Bulletin</i> , 2000 , 45, 224-226		11
127	Effect of Ru and Ni nanocatalysts on water splitting and hydrogen oxidation reactions in oxygen-permeable membrane reactors. <i>Journal of Membrane Science</i> , 2020 , 599, 117702	9.6	11
126	Effect of V-containing precursors on the structure and catalytic performance of Cs-substituted phosphomolybdates for isobutane oxidation. <i>Applied Catalysis A: General</i> , 2018 , 556, 104-112	5.1	10
125	Stabilization of Low-Temperature Degradation in Mixed Ionic and Electronic Conducting Perovskite Oxygen Permeation Membranes. <i>Angewandte Chemie</i> , 2013 , 125, 3314-3318	3.6	10
124	Effective manipulation of the microstructure of zeolite film by hydrothermal pretreatment. <i>Journal of Materials Science</i> , 2011 , 46, 3942-3951	4.3	10
123	Investigation of structure and oxygen permeability of Ba _{1-x} Fe _x O _{3-δ} system. <i>Materials Research Bulletin</i> , 2010 , 45, 1112-1117	5.1	10
122	Mixed-conducting perovskite-type Sr _x Bi _{1-x} FeO _{3-δ} oxygen-permeating membranes. <i>Science in China Series B: Chemistry</i> , 2000 , 43, 421-427		10
121	Microwave-Assisted Hydrothermal Synthesis of [Al(OH)(1,4-NDC)] Membranes with Superior Separation Performances. <i>Chemistry - an Asian Journal</i> , 2019 , 14, 2072-2076	4.5	9
120	Effect of Bi doping on the performance of dual-phase oxygen-permeable membranes. <i>Journal of Membrane Science</i> , 2019 , 579, 342-350	9.6	9
119	Ammonia oxidation in Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} membrane reactor. <i>Catalysis Today</i> , 2010 , 149, 167-171	5.3	9
118	Fast formation of NaA zeolite membrane in the microwave field. <i>Science Bulletin</i> , 2000 , 45, 1179-1181		9
117	The effect of Li and La on NiO/Al ₂ O ₃ catalyst for CH ₄ /O ₂ to syngas reaction. <i>Reaction Kinetics and Catalysis Letters</i> , 1999 , 68, 243-247		9
116	Application of membrane reactor for dehydrogenation of ethylbenzene. <i>Catalysis Today</i> , 1995 , 25, 315-319	3.9	9
115	Oxygen transport kinetics affected by grain size [A permeation model study. <i>Journal of Membrane Science</i> , 2020 , 603, 118038	9.6	8

114	Stability and Transport Conductivity of Perovskite Type BaZrxCe0.8-xNd0.2O3- \square Advanced Materials Research, 2012 , 554-556, 404-407	0.5	8
113	Acrylic acid and electric power cogeneration in an SOFC reactor. <i>Chemical Communications</i> , 2009 , 2038-408	4.8	8
112	Synthesis and pervaporation performance of high-reproducibility silicalite-1 membranes. <i>Science Bulletin</i> , 2008 , 53, 3505-3510	10.6	8
111	Effect of CO ₂ Treatment on the Performance of Sm _{0.5} Sr _{0.5} CoO ₃ - \square Cathode Electrocatalyst. <i>Chinese Journal of Catalysis</i> , 2008 , 29, 7-9	11.3	8
110	Selective removal of CO from hydrocarbon-rich industrial off-gases over CeO ₂ -supported metal oxides. <i>Journal of Materials Science</i> , 2020 , 55, 2321-2332	4.3	8
109	Enhanced performance of solid oxide fuel cells by introducing a transition layer between nanostructured cathode and electrolyte. <i>International Journal of Hydrogen Energy</i> , 2015 , 40, 501-508	6.7	7
108	Critical Factors Affecting Oxygen Permeation Through Dual-phase Membranes. <i>Membrane Science and Technology</i> , 2011 , 275-293		7
107	A method for diatomite zeolitization through steam-assisted crystallization with in-situ seeding. <i>Materials Letters</i> , 2008 , 62, 2400-2403	3.3	7
106	Influence of the Reducing Atmosphere on the Structure and Activity of Mo-V-Te-Nb-O Catalysts for Propane Selective Oxidation. <i>Chinese Journal of Catalysis</i> , 2008 , 29, 1032-1036	11.3	7
105	Hydrogen separation from the mixtures in a thin Pd-Cu alloy membrane reactor. <i>Studies in Surface Science and Catalysis</i> , 2007 , 167, 219-224	1.8	7
104	Exploration of cinnamaldehyde hydrogenation in CoPt/ γ -Al ₂ O ₃ catalytic membrane reactors. <i>Catalysis Letters</i> , 2000 , 66, 125-128	2.8	7
103	Roadmap on Sustainable Mixed Ionic-Electronic Conducting Membranes. <i>Advanced Functional Materials</i> , 2105702	15.6	7
102	Integration of Nine Steps into One Membrane Reactor To Produce Synthesis Gases for Ammonia and Liquid Fuel. <i>Angewandte Chemie</i> , 2016 , 128, 8708-8712	3.6	7
101	Modification strategies for metal-organic frameworks targeting at membrane-based gas separations. <i>Green Chemical Engineering</i> , 2021 , 2, 17-26	3	7
100	Oxygen activation on Ba-containing perovskite materials.. <i>Science Advances</i> , 2022 , 8, eabn4072	14.3	7
99	A high-efficiency novel IGCC-OTM carbon capture power plant design. <i>Journal of Advanced Manufacturing and Processing</i> , 2020 , 2,	2.7	6
98	One-step ionothermal synthesis of oriented molecular sieve corrosion-resistant coatings. <i>Microporous and Mesoporous Materials</i> , 2018 , 265, 70-76	5.3	6
97	Carbon molecular sieving membranes for butane isomer separation. <i>AIChE Journal</i> , 2019 , 65, e16749	3.6	6

96	Oxidative dehydrogenation of n-butane to butenes on Mo-doped VMgO catalysts. <i>RSC Advances</i> , 2017 , 7, 34131-34137	3.7	6
95	Synthesis and separation performance of silicalite-1 membranes on silica tubes. <i>Science in China Series B: Chemistry</i> , 2009 , 52, 579-583		6
94	Effect of Structure of Pd/WO ₃ -ZrO ₂ Catalyst on Its Activity for Direct Oxidation of Ethylene to Acetic Acid. <i>Chinese Journal of Catalysis</i> , 2009 , 30, 864-872	11.3	6
93	Influence of Pd precursors on the catalytic performance of Pd ₄ SiW ₁₂ O ₄₀ /SiO ₂ in the direct oxidation of ethylene to acetic acid. <i>Journal of Molecular Catalysis A</i> , 2009 , 310, 138-143		6
92	Bi ₄ Cu _{0.2} V _{1.8} O ₁₁ -based electrolyte membrane reactor for selective oxidation of propane to acrylic acid. <i>Catalysis Today</i> , 2010 , 149, 157-162	5.3	6
91	Growth of oriented zeolite crystal membranes. <i>Studies in Surface Science and Catalysis</i> , 1997 , 2233-2240	1.8	6
90	Preparation and pervaporation performance of high-quality silicalite-1 membranes. <i>Science in China Series B: Chemistry</i> , 2007 , 50, 70-74		6
89	Novel porous metal/ceramic membrane materials. <i>Current Opinion in Solid State and Materials Science</i> , 1999 , 4, 103-107	12	6
88	Flexible Soft-Solid Metal-Organic Framework Composite Membranes for H ₂ /CO ₂ Separation.. <i>Angewandte Chemie - International Edition</i> , 2022 ,	16.4	6
87	Metal-Organic Framework Membranes and Membrane Reactors: Versatile Separations and Intensified Processes. <i>Research</i> , 2020 , 2020, 1583451	7.8	6
86	Preparation of MxOy-TiO ₂ Photocatalysts by Sol-gel Method?. <i>Wuli Huaxue Xuebao/Acta Physico-Chimica Sinica</i> , 2001 , 17, 273-277	3.8	6
85	Molecular sieving mixed matrix membranes embodying nano-fillers with extremely narrow pore-openings. <i>Journal of Membrane Science</i> , 2020 , 601, 117880	9.6	6
84	Tuning of Delicate Host-Guest Interactions in Hydrated MIL-53 and Functional Variants for Furfural Capture from Aqueous Solution. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 1629-1634	16.4	6
83	Cathode activation process and CO ₂ electroreduction mechanism on LnFeO ₃ -[(Ln=La, Pr and Gd) perovskite cathodes. <i>Journal of Power Sources</i> , 2021 , 485, 229343	8.9	6
82	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	6
81	CO ₂ electroreduction enhanced by transitional layer at cathode/electrolyte interface. <i>Journal of Power Sources</i> , 2020 , 451, 227743	8.9	5
80	Phase transitions in Sr _{1+x} Co _{0.8} Fe _{0.2} O ₃ oxides. <i>Materials Letters</i> , 2010 , 64, 1618-1621	3.3	5
79	A novel template-free sol-gel synthesis of silica materials with mesoporous structures and zeolitic walls. <i>Journal of Sol-Gel Science and Technology</i> , 2007 , 43, 205-211	2.3	5

78	Performance study of heptane reforming in the dense ceramic membrane reactors. <i>AIChE Journal</i> , 2008 , 54, 242-248	3.6	5
77	Partial oxidation of methane to syngas in tubular oxygen-permeable reactor. <i>Science Bulletin</i> , 2002 , 47, 534		5
76	Iron stabilized 1/3 A-site deficient La _{0.67} Ti _{0.33} O ₃ perovskite cathodes for efficient CO ₂ electroreduction. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 21053-21061	13	5
75	Charge Transfer Reactions in CO ₂ Electroreduction on Manganese Doped Ceria. <i>ChemElectroChem</i> , 2019 , 6, 1668-1672	4.3	5
74	Highly Efficient Removal of CO in Effluent Streams from Real-Life Propane Oxidation Process over CuO/CeO ₂ -Based Catalysts. <i>ChemCatChem</i> , 2018 , 10, 4292-4299	5.2	4
73	Hydrothermal Stability of Meso-microporous Composites and Their Catalytic Cracking Performance. <i>Chinese Journal of Catalysis</i> , 2011 , 32, 418-427	11.3	4
72	Preparation of A-type zeolite membranes on nonporous metal supports by using electrophoretic technique. <i>Science Bulletin</i> , 2004 , 49, 1226		4
71	Benzene electro-oxidation in a PEMFC for phenol and electricity cogeneration. <i>Applied Catalysis B: Environmental</i> , 2005 , 61, 184-191	21.8	4
70	Influence of the Sol-Gel Method on a NiO/Al ₂ O ₃ Catalyst for CH ₄ /O ₂ to Syngas Reaction. <i>Reaction Kinetics and Catalysis Letters</i> , 2000 , 69, 325-329		4
69	Partial Oxidation of Ethane to Syngas over Supported Metal Catalysts. <i>Reaction Kinetics and Catalysis Letters</i> , 2000 , 70, 311-317		4
68	Polyoxometalate catalysts with co-substituted VO ₂ ⁺ and transition metals and their catalytic performance for the oxidation of isobutane. <i>Catalysis Science and Technology</i> , 2018 , 8, 5774-5781	5.5	4
67	A permeation model study of oxygen transport kinetics of Ba _x Sr _{1-x} Co _{0.8} Fe _{0.2} O _{3-λ} . <i>AIChE Journal</i> , 2020 , 66, e16291	3.6	3
66	Preparation of high selectivity silicalite-1 membranes by two-step in situ hydrothermal synthesis. <i>Science Bulletin</i> , 2011 , 56, 3578-3582		3
65	Catalytic oxidation of ethylene to acetic acid on Pd/HPA/SiO ₂ catalysts with different heteropoly acids. <i>Reaction Kinetics and Catalysis Letters</i> , 2009 , 98, 107-115		3
64	Lateral growth of silicalite-1 crystal membrane on glass slabs. <i>Science Bulletin</i> , 1997 , 42, 37-40		3
63	Bi ₄ Cu _{0.2} V _{1.8} O ₁₁ -based membrane electrochemical reactors for propane oxidation at moderate temperatures. <i>Ionics</i> , 2005 , 11, 184-188	2.7	3
62	Sol-gel derived oxides and mixed oxides catalysts with narrow mesoporous distribution. <i>Science in China Series B: Chemistry</i> , 2001 , 44, 387-398		3
61	Effects of operation modes on the oxidation of propane to acrolein in a membrane reactor. <i>Studies in Surface Science and Catalysis</i> , 2000 , 130, 2705-2710	1.8	3

60	Partial Oxidation of Methane to Syngas over NiO/ γ -Al ₂ O ₃ Catalysts Prepared by the Sol-Gel Method. <i>Studies in Surface Science and Catalysis</i> , 2001 , 136, 21-26	1.8	3
59	Universally applicable kinetic model for mixed ionic-electronic conducting membranes. <i>Chemical Engineering Science</i> , 2020 , 215, 115455	4.4	3
58	Synergistic effects of phases in the selective oxidation of isobutane over supported (NH ₄) ₃ HPMo ₁₁ VO ₄₀ catalysts. <i>Reaction Kinetics, Mechanisms and Catalysis</i> , 2021 , 133, 293-308	1.6	3
57	Tuning of Delicate Host-Guest Interactions in Hydrated MIL-53 and Functional Variants for Furfural Capture from Aqueous Solution. <i>Angewandte Chemie</i> , 2021 , 133, 1653-1658	3.6	3
56	A Highly Selective Supramolecule Array Membrane Made of Zero-Dimensional Molecules for Gas Separation. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 20977-20983	16.4	3
55	In Situ Electrochemical Synthesis of Oriented and Defect-Free AEL Molecular-Sieve Films Using Ionic Liquids. <i>Angewandte Chemie</i> , 2015 , 127, 13224-13227	3.6	2
54	Highly active Mo-V-Te-Nb-O catalysts obtained by eliminating surface TeO for selective oxidation of propane to acrylic acid. <i>Reaction Kinetics and Catalysis Letters</i> , 2009 , 97, 225-232		2
53	Influence of Noble Metals on the Direct Oxidation of Ethylene to Acetic Acid over NM/WO ₃ -ZrO ₂ (NM = Ru, Rh, and Pd) Catalysts. <i>Chinese Journal of Catalysis</i> , 2009 , 30, 1281-1286	11.3	2
52	Preface: Recent Advances in Catalysis for Ultra Clean Fuels. <i>Catalysis Today</i> , 2010 , 149, 1	5.3	2
51	Separation of butane isomer by tubular silicalite-1 zeolite membrane. <i>Science Bulletin</i> , 1998 , 43, 2074-2078		2
50	Low-temperature partial oxidation of n-heptane to CO+H ₂ over Rh-based/ γ -Al ₂ O ₃ catalysts. <i>Reaction Kinetics and Catalysis Letters</i> , 2004 , 81, 27-32		2
49	Boosting the oxygen evolution reaction through migrating active sites from the bulk to surface of perovskite oxides. <i>Journal of Energy Chemistry</i> , 2022 ,	12	2
48	Dual-Phase MIEC Membranes. <i>Green Chemistry and Sustainable Technology</i> , 2017 , 227-269	1.1	2
47	Hydrogen Permeation in a Thin Pd-Cu Alloy Membrane Reactor for Steam Re-forming of Ethanol. <i>Chinese Journal of Catalysis</i> , 2010 , 31, 1049-1053	11.3	2
46	Gel-type shell contributing to the high proton conductivity of pyrophosphates. <i>Ceramics International</i> , 2016 , 42, 9913-9920	5.1	2
45	Improved hydrogen separation performance of asymmetric oxygen transport membranes by grooving in the porous support layer. <i>Green Chemical Engineering</i> , 2021 , 2, 96-103	3	2
44	ZIF-L membrane with a membrane-interlocked-support composite architecture for H ₂ /CO ₂ separation. <i>Science Bulletin</i> , 2021 , 66, 1869-1876	10.6	2
43	Layered MOF membranes modified with ionic liquid/AgBF ₄ composite for olefin/paraffin separation. <i>Journal of Membrane Science</i> , 2021 , 639, 119771	9.6	2

42	Rational design and fabrication of a novel acid-resistant UZM-5 zeolite membrane for pervaporation dehydration processes. <i>Chemical Communications</i> , 2021 , 57, 9574-9577	5.8	2
41	Assembly of ionic liquid molecule layers on metal-organic framework-808 for CO ₂ capture. <i>Chemical Engineering Journal</i> , 2022 , 439, 135650	14.7	2
40	Insights into the interplay between electric fields and microstructures of AEL films under ionothermal conditions. <i>Chemical Communications</i> , 2017 , 53, 1836-1839	5.8	1
39	Preparation of Silicalite-1 Membranes with Seeding Method and its Separation Performance for Low Ethanol/Water Mixture. <i>Advanced Materials Research</i> , 2013 , 807-809, 591-595	0.5	1
38	A new approach to achieving a pure M1 phase catalyst for the selective oxidation of propane. <i>Reaction Kinetics and Catalysis Letters</i> , 2009 , 97, 233-241		1
37	A New Series of Co-Free Oxides with High Oxygen Permeability. <i>Journal of Solid State Chemistry</i> , 1997 , 130, 316-318	3.3	1
36	Template-free sol-gel synthesis of mesoporous materials with ZSM-5 structure walls. <i>Studies in Surface Science and Catalysis</i> , 2007 , 165, 515-518	1.8	1
35	Synthesis and characterization of gallium-based perovskite-type dense membrane with oxygen semipermeability. <i>Science in China Series B: Chemistry</i> , 2001 , 44, 294-303		1
34	Propane aromatization in a silicalite-1 membrane reactor. <i>Studies in Surface Science and Catalysis</i> , 2000 , 2699-2704	1.8	1
33	Selective Oxidation of Isobutane to Methacrylic Acid by Metal-Substituted Ammonium Salts of Molybdovanadophosphoric Acid. <i>Catalysis Letters</i> , 1	2.8	1
32	Defects and Diffusion. <i>Green Chemistry and Sustainable Technology</i> , 2017 , 11-48	1.1	1
31	Fabrication and Characterization of MIEC Membranes. <i>Green Chemistry and Sustainable Technology</i> , 2017 , 95-143	1.1	1
30	Single-Phase Covalent Organic Framework Staggered Stacking Nanosheet Membrane for CO ₂ -Selective Separation. <i>Angewandte Chemie</i> , 2021 , 133, 19195-19200	3.6	1
29	A Highly Selective Supramolecule Array Membrane Made of Zero-Dimensional Molecules for Gas Separation. <i>Angewandte Chemie</i> , 2021 , 133, 21145-21151	3.6	1
28	Synthesis optimization of phase-singularized UZM-5 zeolite under hydrothermal conditions: The critical control points of its crystalline phase and crystallinity. <i>Microporous and Mesoporous Materials</i> , 2022 , 334, 111776	5.3	1
27	Effect of inner strain on the performance of dual-phase oxygen permeable membranes. <i>Journal of Membrane Science</i> , 2022 , 644, 120142	9.6	0
26	Pyrazine-interior-embodied MOF-74 for selective CO ₂ adsorption. <i>AIChE Journal</i> , e17528	3.6	0
25	Single- and dual-phase capillary membranes prepared through plastic extrusion method for oxygen permeation. <i>Ceramics International</i> , 2021 , 47, 18510-18516	5.1	0

24	Dispersed Nano-Au on Zr-Suboxides as Active Cathode for Direct CO Electroreduction in Solid Oxide Electrolysis Cells. <i>Nano Letters</i> , 2021 , 21, 6952-6959	11.5	o
23	Effects of catalysts on water decomposition and hydrogen oxidation reactions in oxygen transport membrane reactors. <i>Journal of Membrane Science</i> , 2021 , 634, 119394	9.6	o
22	Enhancing activity and stability of Co-MOF-74 for oxygen evolution reaction by wrapping polydopamine. <i>Electrochimica Acta</i> , 2022 , 416, 140293	6.7	o
21	Repeatable preparation of defect-free electrolyte membranes for proton-conducting fuel cells. <i>Journal of Membrane Science</i> , 2022 , 656, 120642	9.6	o
20	Perovskite-Type MIEC Membranes. <i>Green Chemistry and Sustainable Technology</i> , 2017 , 179-226	1.1	
19	In Situ Monitoring of the Oxygen Activity on a Mg ₂ V ₂ O ₇ Catalyst during the Oxidative Dehydrogenation of Propane. <i>Chinese Journal of Catalysis</i> , 2009 , 30, 375-377	11.3	
18	Interfacial Phenomena in Mixed Conducting Membranes: Surface Oxygen Exchange- and Microstructure-Related Factors 2011 , 501-539		
17	Permeation Properties and Stability of Ni-BaCe _{0.4} Zr _{0.4} Nd _{0.2} O ₃ -Membrane for Hydrogen Separation. <i>Advanced Materials Research</i> , 2012 , 512-515, 1422-1425	0.5	
16	Preparation of Silicalite-1 Membranes on γ -Al ₂ O ₃ Tubes and its Concentration Performance of Low Ethanol/water Mixtures. <i>Advanced Materials Research</i> , 2012 , 608-609, 1337-1341	0.5	
15	Oxygen-Ion Transport Membrane and Its Applications in Selective Oxidation of Light Alkanes 2009 , 53-65		
14	Assembly of mesocellular silica foams from colloidal zeolite nanocrystals through template free process. <i>Studies in Surface Science and Catalysis</i> , 2007 , 165, 507-510	1.8	
13	Investigation of novel zirconium based perovskite-type mixed conducting membranes for oxygen separation. <i>Science Bulletin</i> , 2001 , 46, 473-477		
12	Perovskite-type B-site Bi-doped ceramic membranes for oxygen separation. <i>Science Bulletin</i> , 2000 , 45, 889-893		
11	Effect of molten carbonate composition on CO ₂ permeation mechanism. <i>Journal of Membrane Science</i> , 2022 , 645, 120210	9.6	
10	Introduction to Mixed Ionic/Electronic Conducting Membranes. <i>Green Chemistry and Sustainable Technology</i> , 2017 , 1-10	1.1	
9	Progress on the Commercialization of MIEC Membrane Technology. <i>Green Chemistry and Sustainable Technology</i> , 2017 , 351-367	1.1	
8	Ionic Conductors and Aspects Related to High Temperature. <i>Green Chemistry and Sustainable Technology</i> , 2017 , 49-93	1.1	
7	Oxygen Permeation at Intermediate/Low Temperatures. <i>Green Chemistry and Sustainable Technology</i> , 2017 , 271-305	1.1	

- 6 Catalytic Reactions in MIEC Membrane Reactors. *Green Chemistry and Sustainable Technology*, **2017**, 307-350
- 5 Permeation Principle and Models. *Green Chemistry and Sustainable Technology*, **2017**, 145-178 1.1
- 4 Zeolite Membranes **2009**, 275-286
- 3 Selective Removal of CO in Hydrocarbons-Rich Industrial Off-gases over CuO λ exZr1 λ O₂ Catalysts. *Catalysis Surveys From Asia*, **2021**, 25, 68-75 2.8
- 2 Recent Progress on Mixed Conducting Oxygen Transport Membrane Reactors for Water Splitting Reaction. *Acta Chimica Sinica*, **2021**, 79, 588 3.3
- 1 Effect of Phase Ratio on Hydrogen Separation of Dual-phase Membrane Reactors. *Chemie-Ingenieur-Technik*, **2022**, 94, 145-151 0.8