

Joao Carlos Diniz da Costa

List of Publications by Year in descending order

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199
papers

10,780
citations

26630

56
h-index

36028

97
g-index

203
all docs

203
docs citations

203
times ranked

8292
citing authors

#	ARTICLE	IF	CITATIONS
1	Mixed ionic–electronic conducting (MIEC) ceramic-based membranes for oxygen separation. <i>Journal of Membrane Science</i> , 2008, 320, 13-41.	8.2	1,006
2	Inorganic membranes for hydrogen production and purification: A critical review and perspective. <i>Journal of Colloid and Interface Science</i> , 2007, 314, 589-603.	9.4	522
3	Structural and functional investigation of graphene oxide–Fe ₃ O ₄ nanocomposites for the heterogeneous Fenton-like reaction. <i>Scientific Reports</i> , 2014, 4, 4594.	3.3	407
4	Solid acid membranes for high temperature (140°C) proton exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2005, 142, 223-237.	7.8	282
5	Layered Double Hydroxides for CO ₂ Capture: Structure Evolution and Regeneration. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 7504-7509.	3.7	264
6	Calcium Precursors for the Production of CaO Sorbents for Multicycle CO ₂ Capture. <i>Environmental Science & Technology</i> , 2010, 44, 841-847.	10.0	234
7	Synthesis of Sintering-Resistant Sorbents for CO ₂ Capture. <i>Environmental Science & Technology</i> , 2010, 44, 3093-3097.	10.0	213
8	The sacrificial role of graphene oxide in stabilising a Fenton-like catalyst GO–Fe ₃ O ₄ . <i>Chemical Communications</i> , 2015, 51, 9291-9293.	4.1	179
9	Hydrothermally Robust Molecular Sieve Silica for Wet Gas Separation. <i>Advanced Functional Materials</i> , 2006, 16, 1215-1220.	14.9	177
10	Ceramic membranes for gas processing in coal gasification. <i>Energy and Environmental Science</i> , 2010, 3, 268.	30.8	171
11	Development of mixed conducting membranes for clean coal energy delivery. <i>International Journal of Greenhouse Gas Control</i> , 2009, 3, 357-367.	4.6	159
12	Review of perovskite ceramic synthesis and membrane preparation methods. <i>Ceramics International</i> , 2016, 42, 6555-6571.	4.8	153
13	Seawater desalination performance of MFI type membranes made by secondary growth. <i>Separation and Purification Technology</i> , 2009, 68, 343-350.	7.9	145
14	Hydrogen from coal: Production and utilisation technologies. <i>International Journal of Coal Geology</i> , 2006, 65, 213-222.	5.0	140
15	Influence of Water on High-Temperature CO ₂ Capture Using Layered Double Hydroxide Derivatives. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 2630-2635.	3.7	138
16	Novel molecular sieve silica (MSS) membranes: characterisation and permeation of single-step and two-step sol–gel membranes. <i>Journal of Membrane Science</i> , 2002, 198, 9-21.	8.2	134
17	Carbonised template molecular sieve silica membranes in fuel processing systems: permeation, hydrostability and regeneration. <i>Journal of Membrane Science</i> , 2004, 241, 325-333.	8.2	130
18	High performance perovskite hollow fibres for oxygen separation. <i>Journal of Membrane Science</i> , 2011, 368, 64-68.	8.2	129

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19	Significant effects of sintering temperature on the performance of La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O _{3-δ} oxygen selective membranes. <i>Journal of Membrane Science</i> , 2007, 302, 171-179.	8.2	120
20	Long term pervaporation desalination of tubular MFI zeolite membranes. <i>Journal of Membrane Science</i> , 2012, 415-416, 816-823.	8.2	119
21	Performance of hydrophobic and hydrophilic silica membrane reactors for the water gas shift reaction. <i>Separation and Purification Technology</i> , 2003, 32, 255-264.	7.9	117
22	Nafion/polyaniline/silica composite membranes for direct methanol fuel cell application. <i>Journal of Power Sources</i> , 2007, 166, 324-330.	7.8	115
23	Hydrothermal stability of cobalt silica membranes in a water gas shift membrane reactor. <i>Separation and Purification Technology</i> , 2009, 66, 299-305.	7.9	115
24	Fabrication of nanostructured TiO ₂ hollow fiber photocatalytic membrane and application for wastewater treatment. <i>Chemical Engineering Journal</i> , 2014, 236, 314-322.	12.7	111
25	Enhanced hydrogen production from thermochemical processes. <i>Energy and Environmental Science</i> , 2018, 11, 2647-2672.	30.8	111
26	Hydrolytically Stable Phosphorylated Hybrid Silicas for Proton Conduction. <i>Advanced Functional Materials</i> , 2007, 17, 3304-3311.	14.9	109
27	Novel Nafion composite membranes with mesoporous silica nanospheres as inorganic fillers. <i>Journal of Power Sources</i> , 2008, 185, 664-669.	7.8	106
28	Performance of porous inorganic membranes in non-osmotic desalination. <i>Water Research</i> , 2007, 41, 3998-4004.	11.3	103
29	Processing municipal wastewaters by forward osmosis using CTA membrane. <i>Journal of Membrane Science</i> , 2014, 468, 269-275.	8.2	103
30	Metal doped silica membrane reactor: Operational effects of reaction and permeation for the water gas shift reaction. <i>Journal of Membrane Science</i> , 2008, 316, 46-52.	8.2	98
31	Cobalt-doped silica membranes for gas separation. <i>Journal of Membrane Science</i> , 2009, 326, 316-321.	8.2	98
32	Fuel cells development and hydrogen production from renewable resources in Brazil. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 4915-4935.	7.1	97
33	Physical and Electrochemical Characterization of Nanocomposite Membranes of Nafion and Functionalized Silicon Oxide. <i>Chemistry of Materials</i> , 2007, 19, 2372-2381.	6.7	95
34	Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} ceramic hollow-fiber membranes for oxygen permeation. <i>AIChE Journal</i> , 2006, 52, 3452-3461.	3.6	93
35	The enhancement of oxygen flux on Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} (BSCF) hollow fibers using silver surface modification. <i>Journal of Membrane Science</i> , 2009, 340, 148-153.	8.2	91
36	Microporous Silica Based Membranes for Desalination. <i>Water (Switzerland)</i> , 2012, 4, 629-649.	2.7	91

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37	Long term performance cobalt oxide silica membrane module for high temperature H2 separation. <i>Energy and Environmental Science</i> , 2012, 5, 5820.	30.8	91
38	Interlayer-free P123 carbonised template silica membranes for desalination with reduced salt concentration polarisation. <i>Journal of Membrane Science</i> , 2015, 475, 376-383.	8.2	90
39	Silicon carbide filters and porous membranes: A review of processing, properties, performance and application. <i>Journal of Membrane Science</i> , 2020, 610, 118193.	8.2	87
40	Proton conductivity of mesoporous sol-gel zirconium phosphates for fuel cell applications. <i>Journal of Materials Chemistry</i> , 2005, 15, 754-758.	6.7	83
41	Performance and Long Term Stability of Mesoporous Silica Membranes for Desalination. <i>Membranes</i> , 2013, 3, 136-150.	3.0	83
42	Recent progresses on fabrication of photocatalytic membranes for water treatment. <i>Catalysis Today</i> , 2014, 230, 47-54.	4.4	82
43	Cobalt oxide silica membranes for desalination. <i>Journal of Colloid and Interface Science</i> , 2012, 368, 70-76.	9.4	80
44	High performance BaBiScCo hollow fibre membranes for oxygen transport. <i>Energy and Environmental Science</i> , 2011, 4, 2516.	30.8	77
45	Carbonised template silica membranes for desalination. <i>Desalination</i> , 2009, 236, 291-298.	8.2	76
46	High temperature materials for CO2 capture. <i>Energy Procedia</i> , 2009, 1, 623-630.	1.8	76
47	Degradation of azo dye Orange II under dark ambient conditions by calcium strontium copper perovskite. <i>Applied Catalysis B: Environmental</i> , 2018, 221, 691-700.	20.2	73
48	Hydrothermal seeded synthesis of mesoporous titania for application in dye-sensitised solar cells (DSSCs). <i>Journal of Materials Chemistry</i> , 2004, 14, 2917.	6.7	72
49	Hydrogen gas mixture separation by CVD silica membrane. <i>Journal of Membrane Science</i> , 2008, 323, 144-147.	8.2	72
50	Performance of cobalt silica membranes in gas mixture separation. <i>Journal of Membrane Science</i> , 2009, 329, 91-98.	8.2	72
51	High performance interlayer-free mesoporous cobalt oxide silica membranes for desalination applications. <i>Desalination</i> , 2015, 365, 308-315.	8.2	72
52	Hydrogen production and utilisation opportunities for Australia. <i>International Journal of Hydrogen Energy</i> , 2005, 30, 669-679.	7.1	70
53	Exposing the Molecular Sieving Architecture of Amorphous Silica Using Positron Annihilation Spectroscopy. <i>Advanced Functional Materials</i> , 2008, 18, 3818-3826.	14.9	69
54	An analysis of the Peclet and Damkohler numbers for dehydrogenation reactions using molecular sieve silica (MSS) membrane reactors. <i>Catalysis Today</i> , 2006, 116, 12-17.	4.4	66

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55	Optimisation of graphene oxide-iron oxide nanocomposite in heterogeneous Fenton-like oxidation of Acid Orange 7. <i>Journal of Environmental Chemical Engineering</i> , 2014, 2, 1881-1888.	6.7	62
56	Palladium surface modified $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ hollow fibres for oxygen separation. <i>Journal of Membrane Science</i> , 2011, 380, 223-231.	8.2	59
57	Interlayer-free hybrid carbon-silica membranes for processing brackish to brine salt solutions by pervaporation. <i>Journal of Membrane Science</i> , 2017, 523, 197-204.	8.2	59
58	Palladium cobalt binary doping of molecular sieving silica membranes. <i>Journal of Membrane Science</i> , 2014, 451, 185-191.	8.2	53
59	Yttrium doped BSCF membranes for oxygen separation. <i>Separation and Purification Technology</i> , 2011, 81, 88-93.	7.9	52
60	High temperature H_2/CO_2 separation using cobalt oxide silica membranes. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 12700-12707.	7.1	51
61	Phosphonic acid functionalized silicas for intermediate temperature proton conduction. <i>Journal of Materials Chemistry</i> , 2009, 19, 2363.	6.7	50
62	Binary iron cobalt oxide silica membrane for gas separation. <i>Journal of Membrane Science</i> , 2015, 474, 32-38.	8.2	50
63	Assessment of postcombustion carbon capture technologies for power generation. <i>Frontiers of Chemical Engineering in China</i> , 2010, 4, 184-195.	0.6	48
64	High temperature steam investigation of cobalt oxide silica membranes for gas separation. <i>Separation and Purification Technology</i> , 2010, 76, 171-178.	7.9	45
65	Porous Silica Nanospheres Functionalized with Phosphonic Acid as Intermediate-Temperature Proton Conductors. <i>Journal of Physical Chemistry C</i> , 2009, 113, 3157-3163.	3.1	44
66	Further performance improvement of $\text{Ba}_{0.5}\text{Sr}_{0.5}\text{Co}_{0.8}\text{Fe}_{0.2}\text{O}_{3-\delta}$ perovskite membranes for air separation. <i>Ceramics International</i> , 2009, 35, 2455-2461.	4.8	43
67	A Pervaporation Study of Ammonia Solutions Using Molecular Sieve Silica Membranes. <i>Membranes</i> , 2014, 4, 40-54.	3.0	42
68	Oxygen permeation through perovskite membranes and the improvement of oxygen flux by surface modification. <i>Science and Technology of Advanced Materials</i> , 2006, 7, 819-825.	6.1	41
69	Proton conductive composite membrane of phosphosilicate and polyvinyl alcohol. <i>Solid State Ionics</i> , 2007, 178, 937-942.	2.7	41
70	Flowfields on feed and permeate sides of tubular molecular sieving silica (MSS) membranes. <i>Journal of Membrane Science</i> , 2007, 299, 229-235.	8.2	41
71	Effect of SO_2 Adsorption on Layered Double Hydroxides for CO_2 Capture. <i>Industrial & Engineering Chemistry Research</i> , 2008, 47, 7357-7360.	3.7	41
72	H_2S stability and separation performance of cobalt oxide silica membranes. <i>Journal of Membrane Science</i> , 2011, 380, 48-54.	8.2	40

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73	Preparation, Characterization and Performance of Templated Silica Membranes in Non-Osmotic Desalination. <i>Materials</i> , 2011, 4, 845-856.	2.9	40
74	Structural evolution of nickel oxide silica sol-gel for the preparation of interlayer-free membranes. <i>Journal of Non-Crystalline Solids</i> , 2016, 447, 9-15.	3.1	40
75	Copper oxide - perovskite mixed matrix membranes delivering very high oxygen fluxes. <i>Journal of Membrane Science</i> , 2017, 526, 323-333.	8.2	40
76	Bi-doping effects on the structure and oxygen permeation properties of BaSc _{0.1} Co _{0.9} O _{3-δ} perovskite membranes. <i>Journal of Membrane Science</i> , 2010, 361, 120-125.	8.2	38
77	Mesoporous TiO ₂ based membranes for water desalination and brine processing. <i>Separation and Purification Technology</i> , 2015, 147, 166-171.	7.9	38
78	Vacuum-assisted tailoring of pore structures of phenolic resin derived carbon membranes. <i>Journal of Membrane Science</i> , 2017, 525, 240-248.	8.2	37
79	Combined investigation of bulk diffusion and surface exchange parameters of silver catalyst coated yttrium-doped BSCF membranes. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 9104.	2.8	36
80	Development of rapid thermal processing of tubular cobalt oxide silica membranes for gas separations. <i>Journal of Membrane Science</i> , 2014, 456, 192-201.	8.2	36
81	Understanding the diffusional tortuosity of porous materials: An effective medium theory perspective. <i>Chemical Engineering Science</i> , 2014, 110, 55-71.	3.8	36
82	A novel ethanol dehydration process by forward osmosis. <i>Chemical Engineering Journal</i> , 2013, 232, 397-404.	12.7	35
83	Nafion-MPMDMS nanocomposite membranes with low methanol permeability. <i>Electrochemistry Communications</i> , 2007, 9, 781-786.	4.7	34
84	Fuel cells, hydrogen and energy supply in Australia. <i>Journal of Power Sources</i> , 2004, 131, 1-12.	7.8	33
85	Production of pure oxygen from BSCF hollow fiber membranes using steam sweep. <i>Separation and Purification Technology</i> , 2011, 78, 220-227.	7.9	33
86	Iron Oxide Silica Derived from Sol-Gel Synthesis. <i>Materials</i> , 2011, 4, 448-456.	2.9	33
87	Reversible Redox Effect on Gas Permeation of Cobalt Doped Ethoxy Polysiloxane (ES40) Membranes. <i>Scientific Reports</i> , 2013, 3, 1648.	3.3	33
88	Simulation of binary gas separation through multi-tube molecular sieving membranes at high temperatures. <i>Chemical Engineering Journal</i> , 2013, 218, 394-404.	12.7	31
89	Mixed Matrix Carbon Molecular Sieve and Alumina (CMS-Al ₂ O ₃) Membranes. <i>Scientific Reports</i> , 2016, 6, 30703.	3.3	30
90	Long-term flue gas exposure effects of silica membranes on porous steel substrate. <i>Journal of Membrane Science</i> , 2010, 359, 110-114.	8.2	28

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91	Robust ion-transporting ceramic membrane with an internal short circuit for oxygen production. <i>Journal of Materials Chemistry A</i> , 2013, 1, 9150.	10.3	28
92	Ternary Phase-Separation Investigation of Sol-Gel Derived Silica from Ethyl Silicate 40. <i>Scientific Reports</i> , 2015, 5, 14560.	3.3	27
93	Binary gas mixture and hydrothermal stability investigation of cobalt silica membranes. <i>Journal of Membrane Science</i> , 2015, 493, 470-477.	8.2	27
94	Gas permeation redox effect on binary lanthanum cobalt silica membranes with enhanced silicate formation. <i>Journal of Membrane Science</i> , 2015, 489, 220-226.	8.2	27
95	Influence of sol-gel conditioning on the cobalt phase and the hydrothermal stability of cobalt oxide silica membranes. <i>Journal of Membrane Science</i> , 2015, 475, 425-432.	8.2	27
96	Novel solid oxide cells with SrCo _{0.8} Fe _{0.1} Ga _{0.1} O ₃ oxygen electrode for flexible power generation and hydrogen production. <i>Journal of Power Sources</i> , 2016, 306, 226-232.	7.8	27
97	Hydrophobicity of Templated Silica Xerogels for Molecular Sieving Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2001, 1, 331-336.	0.9	26
98	Evaluation of mixed-conducting lanthanum-strontium-cobaltite ceramic membrane for oxygen separation. <i>AIChE Journal</i> , 2009, 55, 2603-2613.	3.6	26
99	2D/3D amine functionalised sorbents containing graphene silica aerogel and mesoporous silica with improved CO ₂ sorption. <i>Separation and Purification Technology</i> , 2019, 222, 381-389.	7.9	26
100	Numerical study of a metal hydride heat transformer for low-grade heat recovery. <i>Applied Thermal Engineering</i> , 2011, 31, 2749-2756.	6.0	25
101	Degradation of orange II dye under dark ambient conditions by MeSrCuO (Me = Mg and Ce) metal oxides. <i>Separation and Purification Technology</i> , 2018, 205, 293-301.	7.9	25
102	Preparation and oxygen permeation properties of SrCo _{0.9} Nb _{0.1} O ₃ hollow fibre membranes. <i>Separation and Purification Technology</i> , 2011, 78, 175-180.	7.9	24
103	Computational fluid dynamics applied to high temperature hydrogen separation membranes. <i>Frontiers of Chemical Science and Engineering</i> , 2012, 6, 3-12.	4.4	24
104	Rapid thermal treatment of interlayer-free ethyl silicate 40 derived membranes for desalination. <i>Journal of Membrane Science</i> , 2016, 516, 94-103.	8.2	24
105	Novel inorganic membrane for the percrystallization of mineral, food and pharmaceutical compounds. <i>Journal of Membrane Science</i> , 2018, 550, 407-415.	8.2	24
106	High Temperature Gas Separation Membranes in Coal Gasification. <i>Energy Procedia</i> , 2009, 1, 295-302.	1.8	23
107	The transport of gases in a supported mesoporous silica membrane. <i>Journal of Membrane Science</i> , 2013, 438, 90-104.	8.2	23
108	Effect of titania addition on the properties of freeze-cast alumina samples. <i>Ceramics International</i> , 2015, 41, 10467-10475.	4.8	23

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109	Influence of porous structures on O ₂ flux of BSCF asymmetric membranes. Separation and Purification Technology, 2017, 175, 164-169.	7.9	23
110	Improved stability of ethyl silicate interlayer-free membranes by the rapid thermal processing (RTP) for desalination. Desalination, 2017, 402, 25-32.	8.2	23
111	Physicochemical characterisation and hydrothermal stability investigation of cobalt-incorporated silica xerogels. RSC Advances, 2014, 4, 18862-18870.	3.6	22
112	The fluid dynamic effect on the driving force for a cobalt oxide silica membrane module at high temperatures. Chemical Engineering Science, 2014, 111, 142-152.	3.8	22
113	Ceramic metal oxides with Ni ²⁺ active phase for the fast degradation of Orange II dye under dark ambiance. Ceramics International, 2018, 44, 6634-6640.	4.8	22
114	Adsorption and transport of gases in a supported microporous silica membrane. Journal of Membrane Science, 2014, 460, 46-61.	8.2	21
115	Interlayer-free microporous cobalt oxide silica membranes via silica seeding sol-gel technique. Journal of Membrane Science, 2015, 492, 1-8.	8.2	20
116	Pervaporation of ammonia solution with γ -alumina supported organosilica membranes. Separation and Purification Technology, 2016, 168, 141-151.	7.9	20
117	A novel route for manufacturing asymmetric BSCF-based perovskite structures by a combined tape and freeze casting method. Journal of the European Ceramic Society, 2017, 37, 5249-5257.	5.7	20
118	Membrane reactor modelling, validation and simulation for the WGS reaction using metal doped silica membranes. Asia-Pacific Journal of Chemical Engineering, 2010, 5, 83-92.	1.5	19
119	Rapid thermal processing of tubular cobalt oxide silica membranes. International Journal of Hydrogen Energy, 2013, 38, 7394-7399.	7.1	19
120	Claisen-type degradation mechanism of cellulose triacetate membranes in ethanol-water mixtures. Journal of Membrane Science, 2014, 454, 119-125.	8.2	19
121	Surface and catalytic properties of stable Me(Ba, Ca and Mg)SrCoO for the degradation of orange II dye under dark conditions. Applied Surface Science, 2018, 450, 292-300.	6.1	19
122	2D/3D Assemblies of Amine-Functionalized Graphene Silica (Templated) Aerogel for Enhanced CO ₂ Sorption. ACS Applied Materials & Interfaces, 2019, 11, 30391-30400.	8.0	19
123	Stainless steel hollow fibres – Sintering, morphology and mechanical properties. Separation and Purification Technology, 2015, 147, 379-387.	7.9	18
124	Gas permeation redox effect of binary iron oxide/cobalt oxide silica membranes. Separation and Purification Technology, 2016, 171, 248-255.	7.9	18
125	Fenton-Like Degradation of Acid Orange 7 Using Graphene Oxide-Iron Oxide Nanocomposite. Science of Advanced Materials, 2014, 6, 1382-1388.	0.7	18
126	Fine ultra-micropore control using the intrinsic viscosity of precursors for high performance carbon molecular sieve membranes. Separation and Purification Technology, 2017, 177, 129-134.	7.9	17

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127	Zinc-doped BSCF perovskite membranes for oxygen separation. Separation and Purification Technology, 2017, 189, 399-404.	7.9	17
128	Improved CO ₂ Sorption in Freeze-Dried Amine Functionalized Mesoporous Silica Sorbent. Industrial & Engineering Chemistry Research, 2018, 57, 5653-5660.	3.7	17
129	Fine control of NaCl crystal size and particle size in percrystallisation by tuning the morphology of carbonised sucrose membranes. Journal of Membrane Science, 2018, 567, 157-165.	8.2	17
130	The influence of Fe ₂ O ₃ doping on the pore structure and mechanical strength of TiO ₂ -containing alumina obtained by freeze-casting. Ceramics International, 2015, 41, 14049-14056.	4.8	16
131	Scale-up of molecular sieve silica membranes for reformat purification. AIChE Journal, 2004, 50, 2630-2634.	3.6	15
132	Silica membrane reactors for hydrogen processing. Advances in Applied Ceramics, 2007, 106, 29-34.	1.1	15
133	The transport of gases in macroporous γ -alumina supports. Journal of Membrane Science, 2012, 409-410, 24-33.	8.2	15
134	Tailoring the oxidation state of cobalt through halide functionality in sol-gel silica. Scientific Reports, 2013, 3, 2449.	3.3	15
135	Hybrid vinyl silane and P123 template sol-gel derived carbon silica membrane for desalination. Journal of Sol-Gel Science and Technology, 2018, 85, 280-289.	2.4	15
136	Novel membrane percrystallisation process for nickel sulphate production. Hydrometallurgy, 2019, 185, 210-217.	4.3	15
137	Structure effect on the oxygen permeation properties of barium bismuth iron oxide membranes. Journal of Membrane Science, 2010, 351, 44-49.	8.2	14
138	Study on composite membranes with high selective permeance properties. Journal of Membrane Science, 2010, 346, 318-326.	8.2	14
139	Current developments of mixed conducting membranes on porous substrates. Materials Research, 2014, 17, 242-249.	1.3	14
140	Enhanced CO ₂ sorption efficiency in amine-functionalised 2D/3D graphene/silica hybrid sorbents. Chemical Communications, 2018, 54, 10586-10589.	4.1	14
141	Modeling hydrogen separation in high temperature silica membrane systems. AIChE Journal, 2006, 52, 1729-1735.	3.6	13
142	The effect of non-ionic porous domains on supported Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} membranes for O ₂ separation. Journal of Membrane Science, 2014, 454, 382-389.	8.2	13
143	Nanoscale assembly of lanthanum silica with dense and porous interfacial structures. Scientific Reports, 2015, 5, 8210.	3.3	13
144	Improved hydrothermal stability of silica materials prepared from ethyl silicate 40. RSC Advances, 2015, 5, 6092-6099.	3.6	13

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145	Highly compact and robust hollow fiber solid oxide cells for flexible power generation and gas production. <i>Applied Energy</i> , 2017, 205, 741-748.	10.1	13
146	Vacuum film etching effect of carbon alumina mixed matrix membranes. <i>Journal of Membrane Science</i> , 2017, 541, 53-61.	8.2	13
147	Mixed matrix carbon stainless steel (MMCSS) hollow fibres for gas separation. <i>Separation and Purification Technology</i> , 2017, 174, 150-158.	7.9	13
148	Mixed Fuel Strategy for Carbon Deposition Mitigation in Solid Oxide Fuel Cells at Intermediate Temperatures. <i>Environmental Science & Technology</i> , 2014, 48, 7122-7127.	10.0	12
149	Hydrothermal stability investigation of micro- and mesoporous silica containing long-range ordered cobalt oxide clusters by XAS. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 19500-19506.	2.8	12
150	Inter-layer free cobalt-doped silica membranes for pervaporation of ammonia solutions. <i>Journal of Membrane Science</i> , 2018, 553, 111-116.	8.2	12
151	A Two-Step Sol-Gel Method for Synthesis of Nanoporous TiO ₂ . <i>Journal of Nanoscience and Nanotechnology</i> , 2004, 4, 270-274.	0.9	11
152	Improved dark ambient degradation of organic pollutants by cerium strontium cobalt perovskite. <i>Journal of Environmental Sciences</i> , 2020, 90, 110-118.	6.1	11
153	Improved pore connectivity by the reduction of cobalt oxide silica membranes. <i>Separation and Purification Technology</i> , 2015, 154, 338-344.	7.9	10
154	Copper aided exchange in high performance oxygen production by CuCo binary oxides for clean energy delivery. <i>Journal of Materials Chemistry A</i> , 2015, 3, 17344-17350.	10.3	10
155	Environmental mineralization of caffeine micro-pollutant by Fe-MFI zeolites. <i>Environmental Science and Pollution Research</i> , 2018, 25, 3628-3635.	5.3	10
156	From Chelating Precursor to Perovskite Oxides and Hollow Fiber Membranes. <i>Journal of the American Ceramic Society</i> , 2007, 90, 84-91.	3.8	9
157	Effect of Nano-Al ₂ O ₃ Addition on the Densification of YSZ Electrolytes. <i>Journal of Nano Research</i> , 2009, 6, 115-122.	0.8	9
158	Modelling gas purification systems employing molecular sieve silica membranes. <i>Separation and Purification Technology</i> , 2009, 66, 559-564.	7.9	9
159	Graphene oxide with zinc partially substituted magnetite (GO-Fe _{1-x} Zn _x O _y) for the UV-assisted heterogeneous Fenton-like reaction. <i>RSC Advances</i> , 2016, 6, 44749-44757.	3.6	9
160	Manufacture of Highly Porous Tubular Alumina Substrates with Anisotropic Pore Structure by Freeze-Casting. <i>Advanced Engineering Materials</i> , 2020, 22, 1901432.	3.5	9
161	Structural Characterization and Corrosion Behavior of Stainless Steel Coated With Sol-Gel Titania. <i>Journal of Materials Engineering and Performance</i> , 2012, 21, 411-417.	2.5	8
162	Novel microwave assisted approach to large scale nickel nanoparticle fabrication. <i>Chemical Engineering Journal</i> , 2014, 240, 155-160.	12.7	8

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163	Temperature dependent transition point of purity versus flux for gas separation in Fe/Co-silica membranes. Separation and Purification Technology, 2015, 151, 284-291.	7.9	8
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