

State-of-the-art membrane based CO₂ separation using overview on current status and future directions

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Application of Polymeric Membranes in Biohydrogen Purification and Storage. <i>Current Biochemical Engineering</i> , 2014, 1, 99-105.	1.3	6
2	Chemical Vapor Deposition on Chabazite (CHA) Zeolite Membranes for Effective Post-Combustion CO ₂ Capture. <i>Environmental Science & Technology</i> , 2014, 48, 14828-14836.	4.6	36
3	An overview: synthesis of thin films/membranes of metal organic frameworks and its gas separation performances. <i>RSC Advances</i> , 2014, 4, 54322-54334.	1.7	65
4	Aminosilane-functionalization of a nanoporous Y-type zeolite for application in a cellulose acetate based mixed matrix membrane for CO ₂ separation. <i>RSC Advances</i> , 2014, 4, 63966-63976.	1.7	89
5	High permeability hydrogel membranes of chitosan/poly ether-block-amide blends for CO ₂ separation. <i>Journal of Membrane Science</i> , 2014, 469, 198-208.	4.1	103
6	Enhanced CO ₂ Permeability of Membranes by Incorporating Polyzwitterion@CNT Composite Particles into Polyimide Matrix. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 13051-13060.	4.0	73
7	Polyaniline in situ modified halloysite nanotubes incorporated asymmetric mixed matrix membrane for gas separation. <i>Separation and Purification Technology</i> , 2014, 132, 187-194.	3.9	69
8	Ethylene vinyl acetate/poly(ethylene glycol) blend membranes for CO ₂ /N ₂ separation. , 2015, 5, 668-681.		15
9	Comparison of silica and novel functionalized silica-based cellulose acetate hybrid membranes in gas permeation study. <i>Journal of Polymer Research</i> , 2015, 22, 1.	1.2	18
10	Function-led design of new porous materials. <i>Science</i> , 2015, 348, aaa8075.	6.0	1,272
11	Constructing CO ₂ transport passageways in Matrimid® membranes using nanohydrogels for efficient carbon capture. <i>Journal of Membrane Science</i> , 2015, 474, 156-166.	4.1	45
12	Enhanced CO ₂ transport properties of membranes by embedding nano-porous zeolite particles into Matrimid®5218 matrix. <i>RSC Advances</i> , 2015, 5, 8552-8565.	1.7	98
13	Synergistic effect of combining carbon nanotubes and graphene oxide in mixed matrix membranes for efficient CO ₂ separation. <i>Journal of Membrane Science</i> , 2015, 479, 1-10.	4.1	219
14	Enhancing gas permeability in mixed matrix membranes through tuning the nanoparticle properties. <i>Journal of Membrane Science</i> , 2015, 482, 49-55.	4.1	65
15	Efficient CO ₂ Capture by Functionalized Graphene Oxide Nanosheets as Fillers To Fabricate Multi-Permeable Mixed Matrix Membranes. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 5528-5537.	4.0	305
16	Gas permeation and sorption properties of poly(amide-12-b-ethyleneoxide)(Pebax1074)/SAPO-34 mixed matrix membrane for CO ₂ /CH ₄ and CO ₂ /N ₂ separation. <i>Journal of Industrial and Engineering Chemistry</i> , 2015, 27, 223-239.	2.9	116
17	The novel Elvaloy4170/functionalized multi-walled carbon nanotubes mixed matrix membranes: Fabrication, characterization and gas separation study. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2015, 49, 220-228.	2.7	46
18	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.	4.1	140

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19	Metal-organic framework based mixed matrix membranes: a solution for highly efficient CO ₂ capture?. Chemical Society Reviews, 2015, 44, 2421-2454.	18.7	732
20	Anionic surfactant-doped Pebax membrane with optimal free volume characteristics for efficient CO ₂ separation. Journal of Membrane Science, 2015, 493, 460-469.	4.1	34
21	Preparation and characterization of Matrimid® 5218 based binary and ternary mixed matrix membranes for CO ₂ separation. International Journal of Greenhouse Gas Control, 2015, 39, 225-235.	2.3	65
22	The impact of water vapor on CO ₂ separation performance of mixed matrix membranes. Journal of Membrane Science, 2015, 492, 471-477.	4.1	29
23	Rationalizing the role of the anion in CO ₂ capture and conversion using imidazolium-based ionic liquid modified mesoporous silica. RSC Advances, 2015, 5, 64220-64227.	1.7	53
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27	Multifunctional lanthanide coordination polymers. Progress in Polymer Science, 2015, 48, 40-84.	11.8	176
28	The effects of aminosilane grafting on NaY zeolite-Matrimid®5218 mixed matrix membranes for CO ₂ /CH ₄ separation. Journal of Membrane Science, 2015, 490, 364-379.	4.1	147
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30	Comparative studies on the effects of casting solvent on physico-chemical and gas transport properties of dense polysulfone membrane used for CO ₂ /CH ₄ separation. Journal of Applied Polymer Science, 2015, 132, .	1.3	28
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34	Recent developments in membranes for efficient hydrogen purification. Journal of Membrane Science, 2015, 495, 130-168.	4.1	229
35	Separations of binary mixtures of CO ₂ /CH ₄ and CO ₂ /N ₂ with mixed-matrix membranes containing Zn(pyrz) ₂ (SiF ₆) metal-organic framework. Journal of Membrane Science, 2015, 495, 169-175.	4.1	57
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37	High-performance composite membranes incorporated with carboxylic acid nanogels for CO ₂ separation. <i>Journal of Membrane Science</i> , 2015, 495, 72-80.	4.1	65
38	Mixed matrix membranes composed of two-dimensional metal-organic framework nanosheets for pre-combustion CO ₂ capture: a relationship study of filler morphology versus membrane performance. <i>Journal of Materials Chemistry A</i> , 2015, 3, 20801-20810.	5.2	121
39	Synergistic interactions between POSS and fumed silica and their effect on the properties of crosslinked PDMS nanocomposite membranes. <i>RSC Advances</i> , 2015, 5, 82460-82470.	1.7	118
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47	Simulation of CO ₂ absorption by solution of ammonium ionic liquid in hollow-fiber contactors. <i>Chemical Engineering and Processing: Process Intensification</i> , 2016, 108, 27-34.	1.8	75
48	Simultaneous enhancement of mechanical properties and CO ₂ selectivity of ZIF-8 mixed matrix membranes: Interfacial toughening effect of ionic liquid. <i>Journal of Membrane Science</i> , 2016, 511, 130-142.	4.1	242
49	Poly(ionic liquid)/Ionic Liquid Ion-Gels with High Free-Ionic Liquid Content: Platform Membrane Materials for CO ₂ /Light Gas Separations. <i>Accounts of Chemical Research</i> , 2016, 49, 724-732.	7.6	182
50	Advances in high permeability polymer-based membrane materials for CO ₂ separations. <i>Energy and Environmental Science</i> , 2016, 9, 1863-1890.	15.6	612
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54	Imidazole functionalized graphene oxide/PEBAX mixed matrix membranes for efficient CO ₂ capture. <i>Separation and Purification Technology</i> , 2016, 166, 171-180.	3.9	150
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58	Surface Modification of AMH-3 for Development of Mixed Matrix Membranes. <i>Procedia Engineering</i> , 2016, 148, 86-92.	1.2	5
59	Elevating the selectivity of layer-by-layer membranes by in situ bioinspired mineralization. <i>Journal of Membrane Science</i> , 2016, 520, 364-373.	4.1	32
60	Improved Interfacial Affinity and CO ₂ Separation Performance of Asymmetric Mixed Matrix Membranes by Incorporating Postmodified MIL-53(Al). <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 22696-22704.	4.0	115
61	Amine-Appended Hierarchical Ca Zeolite for Enhancing CO ₂ /CH ₄ Selectivity of Mixed Matrix Membranes. <i>ChemPhysChem</i> , 2016, 17, 3165-3169.	1.0	29
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63	Recent advances in multi-layer composite polymeric membranes for CO ₂ separation: A review. <i>Green Energy and Environment</i> , 2016, 1, 102-128.	4.7	215
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68	A novel zeolitic imidazolate framework based mixed-matrix membrane for efficient CO ₂ separation under wet conditions. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2016, 65, 427-436.	2.7	26
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70	The morphology and gas separation performance of membranes comprising multiwalled carbon nanotubes/polysulfone-Kapton. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	1.3	30
71	Plasticization and Swelling in Polymeric Membranes in CO ₂ Removal from Natural Gas. <i>Chemical Engineering and Technology</i> , 2016, 39, 1604-1616.	0.9	84
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73	Current Development and Challenges of Mixed Matrix Membranes for CO ₂ /CH ₄ Separation. <i>Separation and Purification Reviews</i> , 2016, 45, 321-344.	2.8	107
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99	Extending effective medium theory to finite size systems: Theory and simulation for permeation in mixed-matrix membranes. <i>Journal of Membrane Science</i> , 2017, 531, 148-159.	4.1	24
100	Interfacial Design of Ternary Mixed Matrix Membranes Containing Pebax 1657/Silver-Nanopowder/[BMIM][BF ₄] for Improved CO ₂ Separation Performance. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 10094-10105.	4.0	92
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110	Membrane process optimization for carbon capture. <i>International Journal of Greenhouse Gas Control</i> , 2017, 62, 1-12.	2.3	32

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112	Organic-Inorganic Composite Polymer Electrolyte Membranes. , 2017, , .		10
113	Influence of Cross-Linking, Temperature, and Humidity on CO ₂ /N ₂ Separation Performance of PDMS Coated Zeolite Membranes Grown within a Porous Poly(ether sulfone) Polymer. Industrial & Engineering Chemistry Research, 2017, 56, 6065-6077.	1.8	9
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143	Enhanced selectivity in mixed matrix membranes for CO ₂ capture through efficient dispersion of amine-functionalized MOF nanoparticles. <i>Nature Energy</i> , 2017, 2, .	19.8	428
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