Beatriz Zornoza

List of Publications by Year
in descending order

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53	4,350	126858	168321
papers	citations	33 h-index	53 g-index

54	54	54	4221
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Metal organic framework based mixed matrix membranes: An increasingly important field of research with a large application potential. Microporous and Mesoporous Materials, 2013, 166, 67-78.	2.2	434
2	Functionalized flexible MOFs as fillers in mixed matrix membranes for highly selective separation of CO2 from CH4 at elevated pressures. Chemical Communications, 2011, 47, 9522.	2.2	340
3	Practical Approach to Zeolitic Membranes and Coatings: State of the Art, Opportunities, Barriers, and Future Perspectives. Chemistry of Materials, 2012, 24, 2829-2844.	3.2	332
4	Visualizing MOF Mixed Matrix Membranes at the Nanoscale: Towards Structureâ€Performance Relationships in CO₂/CH₄ Separation Over NH₂â€MILâ€53(Al)@PI. Advanced Functional Materials, 2014, 24, 249-256.	7.8	262
5	Combination of MOFs and Zeolites for Mixedâ€Matrix Membranes. ChemPhysChem, 2011, 12, 2781-2785.	1.0	225
6	Mixed matrix membranes comprising glassy polymers and dispersed mesoporous silica spheres for gas separation. Journal of Membrane Science, 2011, 368, 100-109.	4.1	182
7	Mesoporous Silica Sphereâ^'Polysulfone Mixed Matrix Membranes for Gas Separation. Langmuir, 2009, 25, 5903-5909.	1.6	175
8	Influence of ZIF-8 particle size in the performance of polybenzimidazole mixed matrix membranes for pre-combustion CO2 capture and its validation through interlaboratory test. Journal of Membrane Science, 2016, 515, 45-53.	4.1	145
9	Ordered mesoporous silicaâ€“(ZIF-8) coreâ€“shell spheres. Chemical Communications, 2012, 48, 9388.	2.2	139
10	Enhanced gas separation performance of 6FDA-DAM based mixed matrix membranes by incorporating MOF UiO-66 and its derivatives. Journal of Membrane Science, 2018, 558, 64-77.	4.1	126
11	Controlled deposition of MOFs by dip-coating in thin film nanocomposite membranes for organic solvent nanofiltration. Journal of Industrial and Engineering Chemistry, 2018, 59, 8-16.	2.9	111
12	Selective release of phenols from apple skin: Mass transfer kinetics during solvent and enzyme-assisted extraction. Separation and Purification Technology, 2008, 63, 620-627.	3.9	104
13	Hollow silicalite-1 sphere-polymer mixed matrix membranes for gas separation. Separation and Purification Technology, 2011, 77, 137-145.	3.9	104
14	Mixed matrix membranes comprising silica-(ZIF-8) coreâ€“shell spheres with ordered mesoâ€“microporosity for natural- and bio-gas upgrading. Journal of Membrane Science, 2014, 452, 184-192.	4.1	102
15	Synthesis and characterisation of MOF/ionic liquid/chitosan mixed matrix membranes for CO₂/N₂ separation. RSC Advances, 2015, 5, 102350-102361.	1.7	102
16	Beyond the H₂/CO₂ upper bound: one-step crystallization and separation of nano-sized ZIF-11 by centrifugation and its application in mixed matrix membranes. Journal of Materials Chemistry A, 2015, 3, 6549-6556.	5.2	99
17	Pervaporation and membrane reactor performance of polyimide based mixed matrix membranes containing MOF HKUST-1. Chemical Engineering Science, 2015, 124, 37-44.	1.9	98
18	Mixed matrix membranes for gas separation by combination of silica MCM-41 and MOF NH2-MIL-53(Al) in glassy polymers. Microporous and Mesoporous Materials, 2014, 192, 23-28.	2.2	95

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19	Mixed matrix membranes comprising MOFs and porous silicate fillers prepared via spin coating for gas separation. Chemical Engineering Science, 2014, 107, 66-75.	1.9	91
20	Pervaporation of water/ethanol mixtures through polyimide based mixed matrix membranes containing <scp>ZIF</scp>â€8, ordered mesoporous silica and <scp>ZIF</scp>â€8â€silica coreâ€shell spheres. Journal of Chemical Technology and Biotechnology, 2015, 90, 669-677.	1.6	91
21	PBI mixed matrix hollow fiber membrane: Influence of ZIF-8 filler over H2/CO2 separation performance at high temperature and pressure. Separation and Purification Technology, 2020, 237, 116347.	3.9	71
22	Chemocatalysis of sugars to produce lactic acid derivatives on zeolitic imidazolate frameworks. Journal of Catalysis, 2016, 334, 60-67.	3.1	62
23	Enhancement of CO2/CH4 separation performances of 6FDA-based co-polyimides mixed matrix membranes embedded with UiO-66 nanoparticles. Separation and Purification Technology, 2018, 192, 465-474.	3.9	62
24	Mixed matrix membranes based on 6FDA polyimide with silica and zeolite microsphere dispersed phases. AICHE Journal, 2015, 61, 4481-4490.	1.8	60
25	Increased Selectivity in CO₂/CH₄ Separation with Mixedâ€Matrix Membranes of Polysulfone and Mixedâ€MOFs MILâ€101(Cr) and ZIFâ€8. European Journal of Inorganic Chemistry, 2016, 2016, 4363-4367.	1.0	57
26	Tuning the separation properties of zeolitic imidazolate framework coreâ€“shell structures via post-synthetic modification. Journal of Materials Chemistry A, 2017, 5, 25601-25608.	5.2	56
27	Metal-organic framework MIL-101(Cr) based mixed matrix membranes for esterification of ethanol and acetic acid in a membrane reactor. Renewable Energy, 2016, 88, 12-19.	4.3	52
28	On the chemical fillerâ€“polymer interaction of nano- and micro-sized ZIF-11 in PBI mixed matrix membranes and their application for H₂/CO₂ separation. Journal of Materials Chemistry A, 2016, 4, 14334-14341.	5.2	51
29	Ultrapermeable Thin Film ZIFâ€8/Polyamide Membrane for H₂/CO₂ Separation at High Temperature without Using Sweep Gas. Advanced Materials Interfaces, 2018, 5, 1800647.	1.9	41
30	Mixed matrix membranes for gas separation with special nanoporous fillers. Desalination and Water Treatment, 2011, 27, 42-47.	1.0	40
31	Asymmetric polybenzimidazole membranes with thin selective skin layer containing ZIF-8 for H2/CO2 separation at pre-combustion capture conditions. Journal of Membrane Science, 2018, 563, 427-434.	4.1	38
32	Thin supported MOF based mixed matrix membranes of PebaxÂ® 1657 for biogas upgrade. New Journal of Chemistry, 2019, 43, 312-319.	1.4	37
33	Ultrathin Composite Polymeric Membranes for CO₂/N₂ Separation with Minimum Thickness and High CO₂ Permeance. ChemSusChem, 2017, 10, 4014-4017.	3.6	36
34	Advances in Hydrogen Separation and Purification with Membrane Technology. , 2013, , 245-268.		28
35	Fabrication of ultrathin films containing the metal organic framework Fe-MIL-88B-NH 2 by the Langmuirâ€“Blodgett technique. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 470, 161-170.	2.3	28
36	Synthesis and gas adsorption properties of mesoporous silica-NH2-MIL-53(Al)Âcoreâ€“shell spheres. Microporous and Mesoporous Materials, 2016, 225, 116-121.	2.2	28

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37	Mathematical modeling of temperature and pressure effects on permeability, diffusivity and solubility in polymeric and mixed matrix membranes. Chemical Engineering Science, 2019, 205, 58-73.	1.9	28
38	Synthesis of ZIFâ€93/11 Hybrid Nanoparticles via Postâ€Synthetic Modification of ZIFâ€93 and Their Use for H₂/CO₂ Separation. Chemistry - A European Journal, 2018, 24, 11211-11219.	1.7	27
39	Hydrogen Separation at High Temperature with Dense and Asymmetric Membranes Based on PIM-EA(H₂)-TB/PBI Blends. Industrial & Engineering Chemistry Research, 2018, 57, 16909-16916.	1.8	26
40	Separation of H₂ and CO₂ Containing Mixtures with Mixed Matrix Membranes Based on Layered Materials. Current Organic Chemistry, 2014, 18, 2351-2363.	0.9	24
41	Nanosheets of MIL-53(Al) applied in membranes with improved CO₂/N₂and CO₂/CH₄selectivities. Dalton Transactions, 2019, 48, 3392-3403.	1.6	21
42	The fabrication of ultrathin films and their gas separation performance from polymers of intrinsic microporosity with two-dimensional (2D) and three-dimensional (3D) chain conformations. Journal of Colloid and Interface Science, 2019, 536, 474-482.	5.0	20
43	Homogeneous thin coatings of zeolitic imidazolate frameworks prepared on quartz crystal sensors for CO2 adsorption. Microporous and Mesoporous Materials, 2018, 272, 44-52.	2.2	19
44	Characterization of the polymer/particle interphase in composite materials by molecular probing. Polymer, 2020, 205, 122792.	1.8	19
45	Tinâ€Carboxylate MOFs for Sugar Transformation into Methyl Lactate. European Journal of Inorganic Chemistry, 2019, 2019, 2624-2629.	1.0	17
46	High performance MIL-101(Cr)@6FDA-mPD and MOF-199@6FDA-mPD mixed-matrix membranes for CO2/CH4 separation. Dalton Transactions, 2020, 49, 1822-1829.	1.6	14
47	Metal-Organic Frameworks: Visualizing MOF Mixed Matrix Membranes at the Nanoscale: Towards Structure-Performance Relationships in CO2/CH4Separation Over NH2-MIL-53(Al)@PI (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Overlock	3.8	
48	Caffeine Encapsulation in Metal Organic Framework MIL-53(Al) at Pilot Plant Scale for Preparation of Polyamide Textile Fibers with Cosmetic Properties. ACS Applied Materials & Interfaces, 2022, 14, 22476-22488.	4.0	6
49	Insight into ETS-10 synthesis for the preparation of mixed matrix membranes for CO₂/CH₄ gas separation. RSC Advances, 2015, 5, 102392-102398.	1.7	5
50	Study of Melamine-Formaldehyde/Phase Change Material Microcapsules for the Preparation of Polymer Films by Extrusion. Membranes, 2022, 12, 266.	1.4	5
51	Polymerâ€Stabilized Percolation Membranes Based on Nanosized Zeolitic Imidazolate Frameworks for H₂/CO₂ Separation. ChemNanoMat, 2018, 4, 698-703.	1.5	4
52	Inside Cover: Combination of MOFs and Zeolites for Mixed-Matrix Membranes (ChemPhysChem 15/2011). ChemPhysChem, 2011, 12, 2678-2678.	1.0	2
53	Influence of solvent, Lewis acidâ€“base complex, and nanoparticles on the morphology and gas separation properties of polysulfone membranes. Polymer Engineering and Science, 2021, 61, 1931-1942.	1.5	2