Beatriz Zornoza

List of Publications by Citations

52 papers	3,612 citations	29 h-index	54 g-index
54 ext. papers	3,986 ext. citations	6.4 avg, IF	5.46 L-index

#	Paper	IF	Citations
52	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	5.3	399
51	Practical Approach to Zeolitic Membranes and Coatings: State of the Art, Opportunities, Barriers, and Future Perspectives. *Chemistry of Materials*, **2012**, 24, 2829-2844	9.6	296
50	Functionalized flexible MOFs as fillers in mixed matrix membranes for highly selective separation of CO2 from CH4 at elevated pressures. *Chemical Communications*, **2011**, 47, 9522-4	5.8	296
49	Visualizing MOF Mixed Matrix Membranes at the Nanoscale: Towards Structure-Performance Relationships in CO2/CH4 Separation Over NH2-MIL-53(Al)@PI. *Advanced Functional Materials*, **2014**, 24, 249-256	15.6	236
48	Combination of MOFs and zeolites for mixed-matrix membranes. *ChemPhysChem*, **2011**, 12, 2781-5	3.2	196
47	Mixed matrix membranes comprising glassy polymers and dispersed mesoporous silica spheres for gas separation. *Journal of Membrane Science*, **2011**, 368, 100-109	9.6	163
46	Mesoporous silica sphere-polysulfone mixed matrix membranes for gas separation. *Langmuir*, **2009**, 25, 5903-9	4	162
45	Ordered mesoporous silica-(ZIF-8) core-shell spheres. *Chemical Communications*, **2012**, 48, 9388-90	5.8	119
44	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	9.6	105
43	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	9.6	92
42	Mixed matrix membranes comprising silica-(ZIF-8) core–shell spheres with ordered meso–microporosity for natural- and bio-gas upgrading. *Journal of Membrane Science*, **2014**, 452, 184-192	9.6	90
41	Hollow silicalite-1 sphere-polymer mixed matrix membranes for gas separation. *Separation and Purification Technology*, **2011**, 77, 137-145	8.3	89
40	Selective release of phenols from apple skin: Mass transfer kinetics during solvent and enzyme-assisted extraction. *Separation and Purification Technology*, **2008**, 63, 620-627	8.3	89
39	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	13	85
38	Synthesis and characterisation of MOF/ionic liquid/chitosan mixed matrix membranes for CO2/N2 separation. *RSC Advances*, **2015**, 5, 102350-102361	3.7	84
37	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	5.3	81
36	Pervaporation and membrane reactor performance of polyimide based mixed matrix membranes containing MOF HKUST-1. *Chemical Engineering Science*, **2015**, 124, 37-44	4.4	77

35	Pervaporation of water/ethanol mixtures through polyimide based mixed matrix membranes containing ZIF-8, ordered mesoporous silica and ZIF-8-silica core-shell spheres. *Journal of Chemical Technology and Biotechnology*, **2015**, 90, 669-677	3.5	75
34	Mixed matrix membranes comprising MOFs and porous silicate fillers prepared via spin coating for gas separation. *Chemical Engineering Science*, **2014**, 107, 66-75	4.4	74
33	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	6.3	68
32	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	8.3	53
31	Chemocatalysis of sugars to produce lactic acid derivatives on zeolitic imidazolate frameworks. *Journal of Catalysis*, **2016**, 334, 60-67	7.3	53
30	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	8.1	47
29	Mixed matrix membranes based on 6FDA polyimide with silica and zeolite microsphere dispersed phases. *AICHE Journal*, **2015**, 61, 4481-4490	3.6	47
28	Increased Selectivity in CO2/CH4 Separation with Mixed-Matrix Membranes of Polysulfone and Mixed-MOFs MIL-101(Cr) and ZIF-8. *European Journal of Inorganic Chemistry*, **2016**, 2016, 4363-4367	2.3	47
27	On the chemical filler–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	13	41
26	Tuning the separation properties of zeolitic imidazolate framework core–shell structures via post-synthetic modification. *Journal of Materials Chemistry A*, **2017**, 5, 25601-25608	13	40
25	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	8.3	35
24	Mixed matrix membranes for gas separation with special nanoporous fillers. *Desalination and Water Treatment*, **2011**, 27, 42-47		33
23	Ultrapermeable Thin Film ZIF-8/Polyamide Membrane for H2/CO2 Separation at High Temperature without Using Sweep Gas. *Advanced Materials Interfaces*, **2018**, 5, 1800647	4.6	28
22	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	8.6	27
21	Fabrication of ultrathin films containing the metal organic framework Fe-MIL-88B-NH2 by the Langmuir–Blodgett technique. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2015**, 470, 161-170	5.1	26
20	Thin supported MOF based mixed matrix membranes of Pebax® 1657 for biogas upgrade. *New Journal of Chemistry*, **2019**, 43, 312-319	3.6	24
19	Ultrathin Composite Polymeric Membranes for CO /N Separation with Minimum Thickness and High CO Permeance. *ChemSusChem*, **2017**, 10, 4014-4017	8.3	24
18	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	4.4	23

17	Synthesis and gas adsorption properties of mesoporous silica-NH2-MIL-53(Al) core shell spheres. *Microporous and Mesoporous Materials*, **2016**, 225, 116-121	5.3	22
16	Advances in Hydrogen Separation and Purification with Membrane Technology **2013**, 245-268		20
15	Separation of H2 and CO2 Containing Mixtures with Mixed Matrix Membranes Based on Layered Materials. *Current Organic Chemistry*, **2014**, 18, 2351-2363	1.7	20
14	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	3.9	20
13	Nanosheets of MIL-53(Al) applied in membranes with improved CO/N and CO/CH selectivities. *Dalton Transactions*, **2019**, 48, 3392-3403	4.3	17
12	Synthesis of ZIF-93/11 Hybrid Nanoparticles via Post-Synthetic Modification of ZIF-93 and Their Use for H /CO Separation. *Chemistry - A European Journal*, **2018**, 24, 11211-11219	4.8	17
11	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	9.3	15
10	Tin-Carboxylate MOFs for Sugar Transformation into Methyl Lactate. *European Journal of Inorganic Chemistry*, **2019**, 2019, 2624-2629	2.3	13
9	High performance MIL-101(Cr)@6FDA-mPD and MOF-199@6FDA-mPD mixed-matrix membranes for CO/CH separation. *Dalton Transactions*, **2020**, 49, 1822-1829	4.3	11
8	Homogeneous thin coatings of zeolitic imidazolate frameworks prepared on quartz crystal sensors for CO2 adsorption. *Microporous and Mesoporous Materials*, **2018**, 272, 44-52	5.3	11
7	Characterization of the polymer/particle interphase in composite materials by molecular probing. *Polymer*, **2020**, 205, 122792	3.9	10
6	Metal-Organic Frameworks: Visualizing MOF Mixed Matrix Membranes at the Nanoscale: Towards Structure-Performance Relationships in CO2/CH4 Separation Over NH2-MIL-53(Al)@PI (Adv. Funct. Mater. 2/2014). *Advanced Functional Materials*, **2014**, 24, 268-268	15.6	4
5	Insight into ETS-10 synthesis for the preparation of mixed matrix membranes for CO2/CH4 gas separation. *RSC Advances*, **2015**, 5, 102392-102398	3.7	2
4	Polymer-Stabilized Percolation Membranes Based on Nanosized Zeolitic Imidazolate Frameworks for H2/CO2 Separation. *ChemNanoMat*, **2018**, 4, 698-703	3.5	2
3	Inside Cover: Combination of MOFs and Zeolites for Mixed-Matrix Membranes (ChemPhysChem 15/2011). *ChemPhysChem*, **2011**, 12, 2678-2678	3.2	2
2	Study of Melamine-Formaldehyde/Phase Change Material Microcapsules for the Preparation of Polymer Films by Extrusion.. *Membranes*, **2022**, 12,	3.8	2
1	Influence of solvent, Lewis acid base complex, and nanoparticles on the morphology and gas separation properties of polysulfone membranes. *Polymer Engineering and Science*, **2021**, 61, 1931-1942	2.3	