

# Isabel C Escobar

## List of Publications by Year in descending order

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83  
papers

2,237  
citations

257357

24  
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243529

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85  
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85  
docs citations

85  
times ranked

2251  
citing authors

#	ARTICLE	IF	CITATIONS
1	Microcystin-LR Removal from Water via Enzymatic Linearization and Ultrafiltration. <i>Toxins</i> , 2022, 14, 231.	1.5	4
2	Non-Solvent Induced Phase Separation (NIPS) for Fabricating High Filtration Efficiency (FE) Polymeric Membranes for Face Mask and Air Filtration Applications. <i>Membranes</i> , 2022, 12, 637.	1.4	6
3	Positively charged nanofiltration membrane synthesis, transport models, and lanthanides separation. <i>Journal of Membrane Science</i> , 2021, 620, 118973.	4.1	27
4	Polymers and Solvents Used in Membrane Fabrication: A Review Focusing on Sustainable Membrane Development. <i>Membranes</i> , 2021, 11, 309.	1.4	92
5	Advanced Research and Development of Face Masks and Respirators Pre and Post the Coronavirus Disease 2019 (COVID-19) Pandemic: A Critical Review. <i>Polymers</i> , 2021, 13, 1998.	2.0	28
6	Scale-up of Nanocomposite Membranes Embedded with Silver Nanoparticles: From Laboratory Scale to Production Scale. <i>Materials and Energy</i> , 2021, , 413-440.	2.5	0
7	Dual-Functional Phosphorene Nanocomposite Membranes for the Treatment of Perfluorinated Water: An Investigation of Perfluorooctanoic Acid Removal via Filtration Combined with Ultraviolet Irradiation or Oxygenation. <i>Membranes</i> , 2021, 11, 18.	1.4	9
8	Membrane functionalization using bisamide-based organic frameworks for molecular weight cutoff reduction. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48327.	1.3	3
9	Comparison of two low-hazard organic solvents as individual and cosolvents for the fabrication of polysulfone membranes. <i>AIChE Journal</i> , 2020, 66, e16790.	1.8	20
10	Lithium Ion Battery Electrodes Made Using Dimethyl Sulfoxide (DMSO) – A Green Solvent. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 11046-11051.	3.2	40
11	Nanohybrid Membrane Synthesis with Phosphorene Nanoparticles: A Study of the Addition, Stability and Toxicity. <i>Polymers</i> , 2020, 12, 1555.	2.0	9
12	Eco-friendly solvents and their mixture for the fabrication of polysulfone ultrafiltration membranes: An investigation of doctor blade and slot die casting methods. <i>Journal of Membrane Science</i> , 2020, 614, 118510.	4.1	33
13	Biomimetic and bioinspired membranes for water purification: A critical review and future directions. <i>Environmental Progress and Sustainable Energy</i> , 2019, 38, e13215.	1.3	27
14	Increasing Salt Rejection of Polybenzimidazole Nanofiltration Membranes via the Addition of Immobilized and Aligned Aquaporins. <i>Processes</i> , 2019, 7, 76.	1.3	13
15	Thiol-Affinity Immobilization of Casein-Coated Silver Nanoparticles on Polymeric Membranes for Biofouling Control. <i>Polymers</i> , 2019, 11, 2057.	2.0	14
16	Nanocomposite membranes for water separation and purification: Fabrication, modification, and applications. <i>Separation and Purification Technology</i> , 2019, 213, 465-499.	3.9	346
17	Desalination using low biofouling nanocomposite membranes: From batch-scale to continuous-scale membrane fabrication. <i>Desalination</i> , 2019, 451, 81-91.	4.0	17
18	Bio-inspired immobilization of casein-coated silver nanoparticles on cellulose acetate membranes for biofouling control. <i>Journal of Environmental Chemical Engineering</i> , 2018, 6, 2480-2491.	3.3	23

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19	Ozonation, biofiltration and the role of membrane surface charge and hydrophobicity in removal and destruction of algal toxins at basic pH values. Separation and Purification Technology, 2018, 194, 56-63.	3.9	17
20	Does casting method matter in filtration membranes? A comparison in performance between doctor blade and slot-die extruded polymeric membranes. Journal of Applied Polymer Science, 2018, 135, 45563.	1.3	8
21	Investigation of PolarClean and Gamma-Valerolactone as Solvents for Polysulfone Membrane Fabrication. ACS Symposium Series, 2018, , 385-403.	0.5	10
22	Self-Cleaning Nanocomposite Membranes with Phosphorene-Based Pore Fillers for Water Treatment. Membranes, 2018, 8, 79.	1.4	16
23	Investigation of the Use of a Bio-Derived Solvent for Non-Solvent-Induced Phase Separation (NIPS) Fabrication of Polysulfone Membranes. Membranes, 2018, 8, 23.	1.4	101
24	Fouling control using temperature responsive N-isopropylacrylamide (NIPAAm) membranes. Environmental Progress and Sustainable Energy, 2016, 35, 416-427.	1.3	10
25	Study of copper-charged membranes for control of fouling due to bacteria and algae organic matter. Journal of Water Reuse and Desalination, 2015, 5, 516-527.	1.2	2
26	A new technique to fabricate high-performance biologically inspired membranes for water treatment. Separation and Purification Technology, 2015, 156, 754-765.	3.9	30
27	Modification of microfiltration membranes by hydrogel impregnation for plasmid DNA purification. Journal of Applied Polymer Science, 2015, 132, .	1.3	10
28	Microfiltration and ultrafiltration membrane science and technology. Journal of Applied Polymer Science, 2015, 132, .	1.3	31
29	Plasmid DNA/RNA separation by ultrafiltration: Modeling and application study. Journal of Membrane Science, 2014, 463, 1-10.	4.1	8
30	An investigation of low biofouling copper-charged membranes for desalination. Desalination, 2014, 338, 17-25.	4.0	12
31	A comparison of silver- and copper-charged polypropylene feed spacers for biofouling control. Journal of Applied Polymer Science, 2013, 128, 1706-1714.	1.3	12
32	Application of atomic force microscopy for characterizing membrane biofouling in the micrometer and nanometer scales. Environmental Progress and Sustainable Energy, 2013, 32, 449-457.	1.3	10
33	Novel charged and hydrophilized polybenzimidazole (PBI) membranes for forward osmosis. Journal of Membrane Science, 2013, 434, 85-92.	4.1	59
34	A bi-layer electrospun nanofiber membrane for plasmid DNA recovery from fermentation broths. Separation and Purification Technology, 2013, 112, 20-25.	3.9	14
35	An investigation of polymer dope and heating effects on hollow fiber membranes. Desalination and Water Treatment, 2013, 51, 6970-6977.	1.0	3
36	Novel Charged and Hydrophilized Polybenzimidazole (PBI) Nanofiltration Membranes. Procedia Engineering, 2012, 44, 220.	1.2	0

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37	Plasmid DNA recovery from fermentation broths by a combined process of micro- and ultrafiltration: Modeling and application. Journal of Membrane Science, 2012, 415-416, 24-35.	4.1	14
38	Determining the influence of active cells and conditioning layer on early stage biofilm formation using cellulose acetate ultrafiltration membranes. Desalination, 2012, 286, 296-303.	4.0	22
39	N-isopropylacrylamide (NIPAAm) modified cellulose acetate ultrafiltration membranes. Journal of Membrane Science, 2011, 383, 272-279.	4.1	36
40	Surface Functionalization of Polybenzimidazole Membranes To Increase Hydrophilicity and Charge. ACS Symposium Series, 2011, , 303-321.	0.5	7
41	Analysis of the Development of Membrane Technology for Gas Separation and CO <sub>2</sub> Capture. ACS Symposium Series, 2011, , 7-26.	0.5	6
42	Membranes for Water Treatment Applications – An Overview. ACS Symposium Series, 2011, , 155-170.	0.5	8
43	Investigation of the Effects of Thickness and Presence of Pore Formers on Tailor-Made Ultrafiltration Polysulfone Membranes. ACS Symposium Series, 2011, , 271-283.	0.5	4
44	Studying the Effect of Feed Water Characteristics on the Hydrophobicity of Cellulose Acetate Ultrafiltration Membranes and Its Correlation to Membrane Morphology: A Chemical Force Microscopy Approach. ACS Symposium Series, 2011, , 247-256.	0.5	0
45	A Fourier Transform Infrared Spectroscopic Based Biofilm Characterization Technique and Its Use to Show the Effect of Copper-Charged Polypropylene Feed Spacers in Biofouling Control. ACS Symposium Series, 2011, , 225-237.	0.5	2
46	Thermally responsive membrane-based microbiological sensing component for early detection of membrane biofouling. Desalination, 2011, 270, 116-123.	4.0	11
47	Ultrafiltration of supercoiled plasmid DNA: Modeling and application. Journal of Membrane Science, 2011, 378, 280-289.	4.1	22
48	Development of copper-charged polypropylene feedspacers for biofouling control. Journal of Membrane Science, 2010, 358, 114-121.	4.1	37
49	A green membrane functionalization method to decrease natural organic matter fouling. Journal of Membrane Science, 2010, 360, 155-164.	4.1	29
50	Functionalization of polybenzimidazole membranes to impart negative charge and hydrophilicity. Journal of Membrane Science, 2010, 363, 195-203.	4.1	55
51	Chapter 14 Conclusion: A Summary of Challenges still Facing Desalination and Water Reuse. Sustainability Science and Engineering, 2010, 2, 389-397.	0.6	10
52	Chapter 4 Desalination: Reverse Osmosis and Membrane Distillation. Sustainability Science and Engineering, 2010, , 65-93.	0.6	28
53	Chapter 1 An Overview of the Global Water Situation. Sustainability Science and Engineering, 2010, 2, 3-5.	0.6	3
54	Use of a Temperature Sensitive Surface Gel to Reduce Fouling. Separation Science and Technology, 2009, 44, 3369-3391.	1.3	11

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55	Development of low-biofouling polypropylene feedspacers for reverse osmosis. Journal of Applied Polymer Science, 2009, 114, 3068-3073.	1.3	28
56	Development of a model for membrane filtration of long and flexible macromolecules: Application to predict dextran and linear DNA rejections in ultrafiltration. Journal of Membrane Science, 2009, 336, 61-70.	4.1	18
57	Development of microbial sensing membranes. Desalination, 2009, 248, 99-105.	4.0	10
58	Study of the hydrophilic-enhanced ultrafiltration membrane. Environmental Progress, 2008, 27, 210-217.	0.8	16
59	Selected water/wastewater membrane-related presentations from the North American Membrane Society 2007 Annual Meeting. Environmental Progress, 2008, 27, 169-172.	0.8	1
60	Characterisation of ultrafiltration and nanofiltration membranes from rejections of neutral reference solutes using a model of asymmetric pores. Journal of Membrane Science, 2008, 319, 64-75.	4.1	22
61	Evolution of a Polysulfone Nanofiltration Membrane following Ion Beam Irradiation. Langmuir, 2008, 24, 5569-5579.	1.6	23
62	Effect of Ion Beam Irradiation on Two Nanofiltration Water Treatment Membranes. Separation Science and Technology, 2008, 43, 4009-4029.	1.3	7
63	Development of Smart Membrane Filters for Microbial Sensing. Separation Science and Technology, 2008, 43, 4056-4074.	1.3	15
64	Foreword: Selected Functionalized/Surface Modified Membrane-Related Presentations from the North American Membrane Society 2007 Annual Meeting. Separation Science and Technology, 2008, 43, 3937-3941.	1.3	0
65	Characterization of commercial water treatment membranes modified via ion beam irradiation. Desalination, 2006, 188, 203-212.	4.0	34
66	Effects of dynamic or secondary-layer coagulation on ultrafiltration. Desalination, 2006, 188, 239-249.	4.0	22
67	Polymer evolution of a sulfonated polysulfone membrane as a function of ion beam irradiation fluence. Journal of Membrane Science, 2006, 280, 253-260.	4.1	22
68	Engineering for Teachers of Migrant Students (ETMS). Environmental Engineering Science, 2006, 23, 472-478.	0.8	1
69	Membrane developed systems for water and wastewater treatment. Environmental Progress, 2005, 24, 355-357.	0.8	6
70	Postsynthesis modification of a cellulose acetate ultrafiltration membrane for applications in water and wastewater treatment. Environmental Progress, 2005, 24, 367-382.	0.8	21
71	Evaluation of factors influencing membrane performance. Environmental Progress, 2005, 24, 392-399.	0.8	7
72	Biostability characterization in a full-scale hybrid NF/RO treatment system. Journal - American Water Works Association, 2005, 97, 101-110.	0.2	18

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73	Effects of water chemistries and properties of membrane on the performance and fouling—a model development study. <i>Journal of Membrane Science</i> , 2004, 238, 33-46.	4.1	87
74	Ion Beam Irradiation Modifications of a Commercial Polyether Sulfone Water-Treatment Membrane. <i>Environmental Chemistry</i> , 2004, 1, 55.	0.7	10
75	Rejection Efficiency of Water Quality Parameters by Reverse Osmosis and Nanofiltration Membranes. <i>Environmental Science &amp; Technology</i> , 2003, 37, 4435-4441.	4.6	54
76	Effect of solution chemistry on assimilable organic carbon removal by nanofiltration: full and bench scale evaluation. <i>Journal of Water Supply: Research and Technology - AQUA</i> , 2002, 51, 67-76.	0.6	10
77	Modification of commercial water treatment membranes by ion beam irradiation. <i>Desalination</i> , 2002, 146, 259-264.	4.0	30
78	Bacterial Growth in Distribution Systems: A Effect of Assimilable Organic Carbon and Biodegradable Dissolved Organic Carbon. <i>Environmental Science &amp; Technology</i> , 2001, 35, 3442-3447.	4.6	119
79	Assimilable organic carbon (AOC) and biodegradable dissolved organic carbon (BDOC):. <i>Water Research</i> , 2001, 35, 4444-4454.	5.3	127
80	Case Study: Ozonation and distribution system biostability. <i>Journal - American Water Works Association</i> , 2001, 93, 77-89.	0.2	33
81	Removal of assimilable organic carbon and biodegradable dissolved organic carbon by reverse osmosis and nanofiltration membranes. <i>Journal of Membrane Science</i> , 2000, 175, 1-17.	4.1	88
82	Sample storage impact on the assimilable organic carbon (AOC) bioassay. <i>Water Research</i> , 2000, 34, 1680-1686.	5.3	15
83	Influence of NF on distribution system biostability. <i>Journal - American Water Works Association</i> , 1999, 91, 76-89.	0.2	23