Joanna Kujawa

List of Publications by Year
in descending order

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Version: 2024-02-01

96 papers	3,373 citations	117571 34 h-index	168321 53 g-index
96 all docs	96 docs citations	96 times ranked	3068 citing authors

#	Article	IF	Citations
1	Membrane distillation research & implementation: Lessons from the past five decades. Separation and Purification Technology, 2017, 189, 108-127.	3.9	174
2	Removal of hazardous volatile organic compounds from water by vacuum pervaporation with hydrophobic ceramic membranes. Journal of Membrane Science, 2015, 474, 11-19.	4.1	122
3	Membrane bioreactors and electrochemical processes for treatment of wastewaters containing heavy metal ions, organics, micropollutants and dyes: Recent developments. Journal of Hazardous Materials, 2019, 370, 172-195.	6.5	109
4	Influence of hydrophobization conditions and ceramic membranes pore size on their properties in vacuum membrane distillation of waterâ€“organic solvent mixtures. Journal of Membrane Science, 2016, 499, 442-451.	4.1	106
5	Recent developments in hazardous pollutants removal from wastewater and water reuse within a circular economy. Npj Clean Water, 2022, 5, .	3.1	101
6	Highly Efficient Hydrophobic Titania Ceramic Membranes for Water Desalination. ACS Applied Materials & Interfaces, 2014, 6, 14223-14230.	4.0	95
7	Photocatalytic hollow fiber membranes for the degradation of pharmaceutical compounds in wastewater. Journal of Environmental Chemical Engineering, 2017, 5, 5014-5024.	3.3	88
8	Chemically and Thermally Crosslinked PVA-Based Membranes: Effect on Swelling and Transport Behavior. Polymers, 2019, 11, 1799.	2.0	85
9	Thin film deposition techniques for polymeric membranesâ€“ A review. Journal of Membrane Science, 2020, 610, 118258.	4.1	77
10	Highly hydrophobic ceramic membranes applied to the removal of volatile organic compounds in pervaporation. Chemical Engineering Journal, 2015, 260, 43-54.	6.6	75
11	Influence of downstream pressure on pervaporation properties of PDMS and POMS based membranes. Separation and Purification Technology, 2016, 159, 68-80.	3.9	71
12	Polyamide-6 based pervaporation membranes for organicâ€“organic separation. Separation and Purification Technology, 2013, 110, 63-73.	3.9	69
13	Molecular Grafting of Fluorinated and Nonfluorinated Alkylsiloxanes on Various Ceramic Membrane Surfaces for the Removal of Volatile Organic Compounds Applying Vacuum Membrane Distillation. ACS Applied Materials & Interfaces, 2017, 9, 6571-6590.	4.0	67
14	PVDF/magnetite blend membranes for enhanced flux and salt rejection in membrane distillation. Desalination, 2018, 436, 69-80.	4.0	64
15	Membrane distillation properties of TiO₂ceramic membranes modified by perfluoroalkylsilanes. Desalination and Water Treatment, 2013, 51, 1352-1361.	1.0	61
16	Fabrication of blend polyvinylidene fluoride/chitosan membranes for enhanced flux and fouling resistance. Separation and Purification Technology, 2018, 190, 68-76.	3.9	61
17	Functionalization of Ceramic Metal Oxide Powders and Ceramic Membranes by Perfluoroalkylsilanes and Alkylsilanes Possessing Different Reactive Groups: Physicochemical and Tribological Properties. ACS Applied Materials & Interfaces, 2016, 8, 7509-7521.	4.0	59
18	Efficiency of grafting of Al2O3, TiO2 and ZrO2 powders by perfluoroalkylsilanes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 420, 64-73.	2.3	58

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19	How To Functionalize Ceramics by Perfluoroalkylsilanes for Membrane Separation Process? Properties and Application of Hydrophobized Ceramic Membranes. ACS Applied Materials & Interfaces, 2016, 8, 7564-7577.	4.0	56
20	A Short Review on the Valorization of Green Seaweeds and Ulvan: FEEDSTOCK for Chemicals and Biomaterials. Biomolecules, 2020, 10, 991.	1.8	56
21	Leaching of PVP from PVDF/PVP blend membranes: impacts on membrane structure and fouling in membrane bioreactors. Journal of Materials Science, 2016, 51, 4328-4341.	1.7	54
22	The influence of surface modification on the physicochemical properties of ceramic membranes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 443, 567-575.	2.3	53
23	On the effect of fumed silica particles on the structure, properties and application of PVDF membranes. Separation and Purification Technology, 2017, 187, 365-373.	3.9	52
24	Photocatalytic properties of PVDF membranes modified with g-C3N4 in the process of Rhodamines decomposition. Separation and Purification Technology, 2020, 250, 117231.	3.9	51
25	Raw Juice Concentration by Osmotic Membrane Distillation Process with Hydrophobic Polymeric Membranes. Food and Bioprocess Technology, 2015, 8, 2146-2158.	2.6	49
26	Hydrophobic Ceramic Membranes for Water Desalination. Applied Sciences (Switzerland), 2017, 7, 402.	1.3	48
27	Reversing membrane wetting in membrane distillation: comparing dryout to backwashing with pressurized air. Environmental Science: Water Research and Technology, 2017, 3, 930-939.	1.2	47
28	Characterization of the surface modification process of Al2O3, TiO2 and ZrO2 powders by PFAS molecules. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 447, 14-22.	2.3	46
29	Shrinkage, defect and membrane distillation performance of composite PVDF membranes. Desalination, 2015, 376, 62-72.	4.0	44
30	Upgrading of zirconia membrane performance in removal of hazardous VOCs from water by surface functionalization. Chemical Engineering Journal, 2019, 374, 155-169.	6.6	42
31	Investigation of the stability of metal oxide powders and ceramic membranes grafted by perfluoroalkylsilanes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 443, 109-117.	2.3	40
32	Highly effective enzymes immobilization on ceramics: Requirements for supports and enzymes. Science of the Total Environment, 2021, 801, 149647.	3.9	39
33	Synthesis of polydopamine coated tungsten oxide@ poly(vinylidene fluoride-co-hexafluoropropylene) electrospun nanofibers as multifunctional membranes for water applications. Chemical Engineering Journal, 2022, 427, 131021.	6.6	37
34	Enhanced starch hydrolysis using Î±-amylase immobilized on cellulose ultrafiltration affinity membrane. Carbohydrate Polymers, 2016, 152, 710-717.	5.1	36
35	Lithium dedicated adsorbent for the preparation of electrodes useful in the ion pumping method. Separation and Purification Technology, 2018, 194, 231-238.	3.9	33
36	CNT/PVP blend PVDF membranes for the removal of organic pollutants from simulated treated wastewater effluent. Journal of Environmental Chemical Engineering, 2018, 6, 6733-6740.	3.3	33

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37	A Review on Ionic Liquids-Based Membranes for Middle and High Temperature Polymer Electrolyte Membrane Fuel Cells (PEM FCs). International Journal of Molecular Sciences, 2021, 22, 5430.	1.8	33
38	Fabrication of PDMS based membranes with improved separation efficiency in hydrophobic pervaporation. Separation and Purification Technology, 2020, 234, 116092.	3.9	32
39	Direct contact membrane distillation for effective concentration of perfluoroalkyl substances â€“ Impact of surface fouling and material stability. Water Research, 2020, 182, 116010.	5.3	32
40	Plasma deposited fluorinated films on porous membranes. Materials Chemistry and Physics, 2015, 151, 233-242.	2.0	31
41	Implementation of osmotic membrane distillation with various hydrophobic porous membranes for concentration of sugars solutions and preservation of the quality of cactus pear juice. Journal of Food Engineering, 2018, 230, 28-38.	2.7	31
42	Development and Characterization of Polyamide-Supported Chitosan Nanocomposite Membranes for Hydrophilic Pervaporation. Polymers, 2018, 10, 868.	2.0	30
43	Zirconium dioxide membranes decorated by silanes based-modifiers for membrane distillation â€“ Material chemistry approach. Journal of Membrane Science, 2020, 596, 117597.	4.1	29
44	Performance of commercial composite hydrophobic membranes applied for pervaporative reclamation of acetone, butanol, and ethanol from aqueous solutions: Binary mixtures. Separation and Purification Technology, 2017, 188, 512-522.	3.9	28
45	The Effect of Reactive Ionic Liquid or Plasticizer Incorporation on the Physicochemical and Transport Properties of Cellulose Acetate Propionate-Based Membranes. Polymers, 2018, 10, 86.	2.0	27
46	Enhanced transport and antifouling properties of polyethersulfone membranes modified with Î±-amylase incorporated in chitosan-based polymeric micelles. Journal of Membrane Science, 2020, 595, 117605.	4.1	27
47	Crystalline porous frameworks as nano-enhancers for membrane liquid separation â€“ Recent developments. Coordination Chemistry Reviews, 2021, 440, 213969.	9.5	27
48	Functional groups docking on PVDF membranes: Novel Piranha approach. European Polymer Journal, 2017, 96, 414-428.	2.6	26
49	Tunable separation via chemical functionalization of polyvinylidenefluoride membranes using piranha reagent. Journal of Membrane Science, 2017, 541, 567-579.	4.1	26
50	Enhancing membrane performance in removal of hazardous VOCs from water by modified fluorinated PVDF porous material. Journal of Membrane Science, 2018, 556, 214-226.	4.1	26
51	Physicochemical properties and pervaporation performance of dense membranes based on cellulose acetate propionate (CAP) and containing polymerizable ionic liquid (PIL). Journal of Membrane Science, 2017, 544, 243-251.	4.1	25
52	Driving force and activation energy in air-gap membrane distillation process. Chemical Papers, 2015, 69, .	1.0	24
53	Assessment of air-gap membrane distillation with hydrophobic porous membranes utilized for damaged paintings humidification. Journal of Membrane Science, 2017, 538, 1-8.	4.1	24
54	Fluorinated MOF-808 with various modulators to fabricate high-performance hybrid membranes with enhanced hydrophobicity for organic-organic pervaporation. Separation and Purification Technology, 2021, 264, 118315.	3.9	23

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55	Dewatering of 2,2,3,3-tetrafluoropropan-1-ol by hydrophilic pervaporation with poly(vinyl alcohol) based Pervapâ„¢ membranes. Separation and Purification Technology, 2017, 174, 520-528.	3.9	22
56	Novel heterogeneous membranes for enhanced separation in organic-organic pervaporation. Journal of Membrane Science, 2020, 599, 117814.	4.1	22
57	Biomimetic hybrid membranes with covalently anchored chitosan â€“ Material design, transport and separation. Desalination, 2020, 491, 114550.	4.0	22
58	New reactive ionic liquids as carriers in polymer inclusion membranes for transport and separation of Cd(II), Cu(II), Pb(II), and Zn(II) ions from chloride aqueous solutions. Journal of Membrane Science, 2021, 638, 119674.	4.1	22
59	Preparation and Characterization of Cellulose Acetate Propionate Films Functionalized with Reactive Ionic Liquids. Polymers, 2019, 11, 1217.	2.0	21
60	Silica Filled Polyphenylsulfone/Polydimethylsiloxane Composite Membranes for Pervaporation Separation of Biobutanol from ABE Mixtures. Chemical Engineering and Processing: Process Intensification, 2020, 156, 108099.	1.8	21
61	Thin Film Mixed Matrix Hollow Fiber Membrane Fabricated by Incorporation of Amine Functionalized Metal-Organic Framework for CO2/N2 Separation. Materials, 2021, 14, 3366.	1.3	21
62	Improved antifouling properties of polyethersulfone membranes modified with Î±-amylase entrapped in TetronicÂ® micelles. Journal of Membrane Science, 2019, 570-571, 436-444.	4.1	20
63	One-dimensional modeling of pervaporation systems using a semi-empirical flux model. Separation and Purification Technology, 2017, 174, 502-512.	3.9	19
64	From nanoscale modification to separation - The role of substrate and modifiers in the transport properties of ceramic membranes in membrane distillation. Journal of Membrane Science, 2019, 580, 296-306.	4.1	19
65	Revisiting Wetting, Freezing, and Evaporation Mechanisms of Water on Copper. ACS Applied Materials & Interfaces, 2021, 13, 37893-37903.	4.0	17
66	Membrane assisted processing of acetone, butanol, and ethanol (ABE) aqueous streams. Chemical Engineering and Processing: Process Intensification, 2021, 166, 108462.	1.8	16
67	The Effects of PEI Hollow Fiber Substrate Characteristics on PDMS/PEI Hollow Fiber Membranes for CO2/N2 Separation. Membranes, 2021, 11, 56.	1.4	16
68	Effect of the polarâ€“nonpolar liquid mixtures on pervaporative behavior of perfluorinated sulfonic membranes in lithium form. Journal of Membrane Science, 2016, 518, 313-327.	4.1	15
69	Fabrication of Polydimethysiloxane (PDMS) Dense Layer on Polyetherimide (PEI) Hollow Fiber Support for the Efficient CO2/N2 Separation Membranes. Polymers, 2021, 13, 756.	2.0	15
70	Evaluation of CO2 separation performance with enhanced features of materials â€“ PebaxÂ® 2533 mixed matrix membranes containing ZIF-8-PEI@[P(3)HIm][Tf2N]. Chemical Engineering Research and Design, 2022, 181, 195-208.	2.7	15
71	Molecular Decoration of Ceramic Supports for Highly Effective Enzyme Immobilizationâ€”Material Approach. Materials, 2021, 14, 201.	1.3	14
72	Hedgehog-like structure, PVDF- carbon nanohorn hybrid membranes for improved removal of VOCs from water. Chemical Engineering Journal, 2022, 438, 135574.	6.6	14

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73	Molecular activation of fluoropolymer membranes via base piranha treatment to enhance transport and mitigate fouling â€“ new materials for water purification. Journal of Membrane Science, 2021, 624, 119105.	4.1	12
74	Ab initio study of cationic polymeric membranes in water and methanol. Ionics, 2016, 22, 357-367.	1.2	11
75	Activation of PVDF membranes through facile hydroxylation of the polymeric dope. Journal of Materials Research, 2017, 32, 4219-4231.	1.2	11
76	Pervaporative efficiency of organic solvents separation employing hydrophilic and hydrophobic commercial polymeric membranes. Journal of Membrane Science, 2018, 564, 444-455.	4.1	11
77	Preparation and Characterization of Polyphenylsulfone (PPSU) Membranes for Biogas Upgrading. Materials, 2020, 13, 2847.	1.3	11
78	The fabrication, characterization, and pervaporation performance of poly(ether-block-amide) membranes blended with 4-(trifluoromethyl)-N(pyridine-2-yl)benzamide and 4-(dimethylamino)-N(pyridine-2-yl)benzamide fillers. Separation and Purification Technology, 2021, 268, 118707.	3.9	11
79	Carbon nanohorn improved durable PVDF membranes - The future of membrane distillation and desalination. Desalination, 2021, 511, 115117.	4.0	11
80	Tunable hydrophobicity and roughness on PVDF surface by grafting to mode â€“ Approach to enhance membrane performance in membrane distillation process. Separation and Purification Technology, 2022, 291, 120935.	3.9	11
81	Are nanohedgehogs thirsty? Toward new superhydrophobic and anti-icing carbon nanohorn-polymer hybrid surfaces. Chemical Engineering Journal, 2022, 446, 137126.	6.6	11
82	Covalent surface entanglement of polyvinylidene fluoride membranes with carbon nanotubes. European Polymer Journal, 2018, 100, 153-164.	2.6	10
83	Physicochemical and magnetic properties of functionalized lanthanide oxides with enhanced hydrophobicity. Applied Surface Science, 2021, 542, 148563.	3.1	9
84	How Can the Desert Beetle and Biowaste Inspire Hybrid Separation Materials for Water Desalination?. ACS Applied Materials & Interfaces, 2021, 13, 11268-11283.	4.0	9
85	A New Type of Composite Membrane PVA-NaY/PA-6 for Separation of Industrially Valuable Mixture Ethanol/Ethyl Tert-Butyl Ether by Pervaporation. Materials, 2020, 13, 3676.	1.3	7
86	High Throughput Screening and Characterization Methods of Jordanian Oil Shale as a Case Study. Energies, 2019, 12, 3148.	1.6	6
87	Improvement of separation and transport performance of ultrafiltration membranes by magnetically active nanolayer. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 569, 67-77.	2.3	6
88	Advanced Material-Ordered Nanotubular Ceramic Membranes Covalently Capped with Single-Wall Carbon Nanotubes. Materials, 2018, 11, 739.	1.3	5
89	Transport properties and fouling issues of membranes utilized for the concentration of dairy products by air-gap membrane distillation and microfiltration. Chemical Papers, 2019, 73, 565-582.	1.0	5
90	The Impact of Reactive Ionic Liquids Addition on the Physicochemical and Sorption Properties of Poly(Vinyl Alcohol)-Based Films. Polymers, 2020, 12, 1958.	2.0	5

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91	Pyrolysis Kinetic Parameters of Omari Oil Shale Using Thermogravimetric Analysis. Energies, 2020, 13, 4060.	1.6	5
92	Nitrogen plasma modification boosts up the hemocompatibility of new PVDF-carbon nanohorns composite materials with potential cardiological and circulatory system implants application. , 2022, 138, 212941.		5
93	Bioconjugation Strategy for Ceramic Membranes Decorated with Candida Antarctica Lipase Bâ€"Impact of Immobilization Process on Material Features. Materials, 2022, 15, 671.	1.3	4
94	The Synthesis of Poly(Vinyl Alcohol) Grafted with Fluorinated Protic Ionic Liquids Containing Sulfo Functional Groups. Molecules, 2021, 26, 4158.	1.7	3
95	The Chemical and Cytotoxic Properties of Sambucus nigra Extractsâ€"A Natural Food Colorant. Sustainability, 2021, 13, 12702.	1.6	3
96	Surfaces with Adjustable Featuresâ€"Effective and Durable Materials for Water Desalination. International Journal of Molecular Sciences, 2021, 22, 11743.	1.8	1