

Anthony Szymczyk

List of Publications by Year in descending order

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68
papers

2,805
citations

117453

34
h-index

182168

51
g-index

70
all docs

70
docs citations

70
times ranked

2676
citing authors

#	ARTICLE	IF	CITATIONS
1	Investigating transport properties of nanofiltration membranes by means of a steric, electric and dielectric exclusion model. <i>Journal of Membrane Science</i> , 2005, 252, 77-88.	4.1	269
2	Structure and dynamics of water confined in a polyamide reverse-osmosis membrane: A molecular-simulation study. <i>Journal of Membrane Science</i> , 2014, 458, 236-244.	4.1	118
3	Polyacrylonitrile membranes for microalgae filtration: Influence of porosity, surface charge and microalgae species on membrane fouling. <i>Algal Research</i> , 2016, 19, 128-137.	2.4	108
4	Influence of operating conditions on the rejection of cobalt and lead ions in aqueous solutions by a nanofiltration polyamide membrane. <i>Journal of Membrane Science</i> , 2008, 325, 150-157.	4.1	96
5	Physico-chemical characterization of polyamide NF/RO membranes: Insight from streaming current measurements. <i>Journal of Membrane Science</i> , 2014, 461, 130-138.	4.1	91
6	Influence of salts on the rejection of polyethyleneglycol by an NF organic membrane: Pore swelling and salting-out effects. <i>Journal of Membrane Science</i> , 2010, 347, 174-182.	4.1	89
7	Electrokinetic Phenomena in Homogeneous Cylindrical Pores. <i>Journal of Colloid and Interface Science</i> , 1999, 216, 285-296.	5.0	79
8	Physics behind Water Transport through Nanoporous Boron Nitride and Graphene. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3371-3376.	2.1	70
9	Transport Properties and Electrokinetic Characterization of an Amphoteric Nanofilter. <i>Langmuir</i> , 2006, 22, 3910-3919.	1.6	66
10	On the structure and rejection of ions by a polyamide membrane in pressure-driven molecular dynamics simulations. <i>Desalination</i> , 2015, 368, 76-80.	4.0	66
11	A review on the coupling of cooling, desalination and solar photovoltaic systems. <i>Renewable and Sustainable Energy Reviews</i> , 2015, 47, 703-717.	8.2	64
12	Molecular simulations of polyamide reverse osmosis membranes. <i>Desalination</i> , 2014, 343, 48-53.	4.0	63
13	Ultrafast diffusion of Ionic Liquids Confined in Carbon Nanotubes. <i>Scientific Reports</i> , 2016, 6, 28518.	1.6	62
14	Weak polyelectrolyte multilayers as tunable membranes for solvent resistant nanofiltration. <i>Journal of Membrane Science</i> , 2016, 514, 322-331.	4.1	58
15	On the salt rejection properties of nanofiltration polyamide membranes formed by interfacial polymerization. <i>Journal of Membrane Science</i> , 2011, 379, 215-223.	4.1	53
16	Degradation of Poly(Ether Sulfone)/Polyvinylpyrrolidone Membranes by Sodium Hypochlorite: Insight from Advanced Electrokinetic Characterizations. <i>Environmental Science & Technology</i> , 2014, 48, 13419-13426.	4.6	52
17	Filtration performance and pore size distribution of hypochlorite aged PES/PVP ultrafiltration membranes. <i>Journal of Membrane Science</i> , 2015, 474, 175-186.	4.1	52
18	Influence of Steric, Electric, and Dielectric Effects on Membrane Potential. <i>Langmuir</i> , 2008, 24, 7955-7962.	1.6	51

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19	Characterisation of the electrokinetic properties of plane inorganic membranes using streaming potential measurements. <i>Journal of Membrane Science</i> , 1997, 134, 59-66.	4.1	50
20	Influence of PVP content on degradation of PES/PVP membranes: Insights from characterization of membranes with controlled composition. <i>Journal of Membrane Science</i> , 2017, 533, 261-269.	4.1	50
21	Confinement of <i>tert</i> -Butanol Nanoclusters in Hydrophilic and Hydrophobic Silica Nanopores. <i>Journal of Physical Chemistry C</i> , 2013, 117, 15203-15212.	1.5	49
22	High-performance membranes with full pH-stability. <i>RSC Advances</i> , 2018, 8, 8813-8827.	1.7	49
23	An application of the space charge model to the electrolyte conductivity inside a charged microporous membrane. <i>Journal of Membrane Science</i> , 1999, 161, 275-285.	4.1	48
24	Ion Rejection Properties of Nanopores with Bipolar Fixed Charge Distributions. <i>Journal of Physical Chemistry B</i> , 2010, 114, 10143-10150.	1.2	46
25	Electrokinetic analysis of PES/PVP membranes aged by sodium hypochlorite solutions at different pH. <i>Journal of Membrane Science</i> , 2016, 501, 24-32.	4.1	45
26	A new lateral method for characterizing the electrical conductivity of ion-exchange membranes. <i>Journal of Membrane Science</i> , 2016, 507, 34-42.	4.1	45
27	Tangential streaming potential as a tool in modeling of ion transport through nanoporous membranes. <i>Journal of Colloid and Interface Science</i> , 2007, 309, 245-252.	5.0	44
28	Influence of inorganic electrolytes on the retention of polyethyleneglycol by a nanofiltration ceramic membrane. <i>Journal of Membrane Science</i> , 2007, 290, 216-221.	4.1	43
29	Water confinement in nanoporous silica materials. <i>Journal of Chemical Physics</i> , 2014, 140, 044704.	1.2	43
30	Hydration of a polyamide reverse-osmosis membrane. <i>Journal of Membrane Science</i> , 2016, 501, 248-253.	4.1	41
31	Molecular simulations of confined liquids: An alternative to the grand canonical Monte Carlo simulations. <i>Journal of Chemical Physics</i> , 2011, 134, 074104.	1.2	40
32	Ion transport through nanofiltration membranes: the steric, electric and dielectric exclusion model. <i>Desalination</i> , 2006, 200, 122-124.	4.0	37
33	Advanced electrokinetic characterization of composite porous membranes. <i>Journal of Membrane Science</i> , 2013, 429, 44-51.	4.1	37
34	Pressure-Driven Ionic Transport through Nanochannels with Inhomogenous Charge Distributions. <i>Langmuir</i> , 2010, 26, 1214-1220.	1.6	35
35	Concentration Dependence of the Dielectric Permittivity, Structure, and Dynamics of Aqueous NaCl Solutions: Comparison between the Drude Oscillator and Electronic Continuum Models. <i>Journal of Physical Chemistry B</i> , 2014, 118, 3931-3940.	1.2	35
36	Determining the Dielectric Constant inside Pores of Nanofiltration Membranes from Membrane Potential Measurements. <i>Langmuir</i> , 2010, 26, 14628-14635.	1.6	33

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37	Superpermeability of nanoconfined water. <i>Journal of Chemical Physics</i> , 2015, 142, 184706.	1.2	32
38	Nanofiltration performance of conical and hourglass nanopores. <i>Journal of Membrane Science</i> , 2018, 552, 336-340.	4.1	32
39	High Water Flux with Ions Sieving in a Desalination 2D Sub-Nanoporous Boron Nitride Material. <i>ACS Omega</i> , 2018, 3, 6305-6310.	1.6	28
40	Rejection of Gd(III) by nanofiltration assisted by complexation on charged organic membrane: Influences of pH, pressure, flux, ionic strength and temperature. <i>Journal of Membrane Science</i> , 2005, 267, 41-49.	4.1	27
41	Physicochemical properties and pervaporation performance of dense membranes based on cellulose acetate propionate (CAP) and containing polymerizable ionic liquid (PIL). <i>Journal of Membrane Science</i> , 2017, 544, 243-251.	4.1	25
42	Real-scale chlorination at pH4 of BW30 TFC membranes and their physicochemical characterization. <i>Journal of Membrane Science</i> , 2018, 551, 123-135.	4.1	24
43	Transferring bulk chemistry to interfacial synthesis of TFC-membranes to create chemically robust poly(epoxyether) films. <i>Journal of Membrane Science</i> , 2019, 582, 442-453.	4.1	24
44	On the amphoteric behavior of Desal DK nanofiltration membranes at low salt concentrations. <i>Journal of Membrane Science</i> , 2010, 355, 60-68.	4.1	23
45	Interactions of Organics within Hydrated Selective Layer of Reverse Osmosis Desalination Membrane: A Combined Experimental and Computational Study. <i>Environmental Science & Technology</i> , 2017, 51, 2714-2719.	4.6	21
46	Ozone compatibility with polymer nanofiltration membranes. <i>Journal of Membrane Science</i> , 2021, 618, 118656.	4.1	21
47	Formation mechanism of sPEEK hydrophilized PES supports for forward osmosis. <i>Desalination</i> , 2017, 419, 29-38.	4.0	20
48	Contact angle and surface tension of water on a hexagonal boron nitride monolayer: a methodological investigation. <i>Molecular Simulation</i> , 2019, 45, 454-461.	0.9	20
49	Enhancement of microbial fuel cell efficiency by incorporation of graphene oxide and functionalized graphene oxide in sulfonated polyethersulfone membrane. <i>Renewable Energy</i> , 2021, 179, 788-801.	4.3	20
50	Design study of the coupling of an air gap membrane distillation unit to an air conditioner. <i>Desalination</i> , 2017, 420, 308-317.	4.0	19
51	Effect of salts on the retention of polyethyleneglycol by a nanofiltration ceramic membrane. <i>Desalination</i> , 2009, 240, 94-98.	4.0	18
52	Theoretical Investigation of the Ionic Selectivity of Polyelectrolyte Multilayer Membranes in Nanofiltration. <i>Langmuir</i> , 2015, 31, 451-457.	1.6	18
53	Controlled chlorination of polyamide reverse osmosis membranes at real scale for enhanced desalination performance. <i>Journal of Membrane Science</i> , 2020, 611, 118400.	4.1	18
54	Analysis of the Pressure-Induced Potential Arising through Composite Membranes with Selective Surface Layers. <i>Langmuir</i> , 2005, 21, 1818-1826.	1.6	16

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55	The effect of cross-contamination in the sequential interfacial polymerization on the RO performance of polyamide bilayer membranes. <i>Journal of Membrane Science</i> , 2014, 466, 348-356.	4.1	16
56	Adsorption of small organic solutes from beet distillery condensates on reverse-osmosis membranes: Consequences on the process performances. <i>Journal of Membrane Science</i> , 2013, 446, 132-144.	4.1	14
57	Modelling the transport of asymmetric electrolytes through nanofiltration membranes. <i>Desalination</i> , 2009, 245, 396-407.	4.0	13
58	Interfacial Structure of Toluene at an Ionic Liquid/Vapor Interface: A Molecular Dynamics Simulation Investigation. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9966-9972.	1.5	13
59	Computation of the hindrance factor for the diffusion for nanoconfined ions: molecular dynamics simulations versus continuum-based models. <i>Molecular Physics</i> , 2012, 110, 1107-1114.	0.8	12
60	Dielectric constant of electrolyte solutions confined in a charged nanofiltration membrane. <i>Desalination</i> , 2006, 200, 125-126.	4.0	10
61	Water treatment intensification using a monophasic hybrid process coupling nanofiltration and ozone/hydrogen peroxide advanced oxidation. <i>Chemical Engineering Journal</i> , 2022, 437, 135263.	6.6	10
62	Impact of sodium hypochlorite on rejection of non-steroidal anti-inflammatory drugs by biomimetic forward osmosis membranes. <i>Journal of Membrane Science</i> , 2021, 633, 119388.	4.1	8
63	Development of a Sustainable Heterogeneous Catalyst Based on an Open-Cell Glass Foam Support: Application in Gas-Phase Ozone Decomposition. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 2854-2864.	3.2	7
64	Modification Mechanism of Polyamide Reverse Osmosis Membrane by Persulfate: Roles of Hydroxyl and Sulfate Radicals. <i>Environmental Science & Technology</i> , 2022, 56, 8864-8874.	4.6	6
65	Biofouling in membrane bioreactors: nexus between polyacrylonitrile surface charge and community composition. <i>Biofouling</i> , 2018, 34, 237-251.	0.8	5
66	Computational Assessment of Water Desalination Performance of Multi-Walled Carbon Nanotubes. <i>Advanced Theory and Simulations</i> , 2020, 3, 1900254.	1.3	5
67	Interactions between methanol/toluene binary mixtures and an organic solvent nanofiltration PIM-1 membrane. <i>Journal of Molecular Liquids</i> , 2022, 357, 119146.	2.3	2
68	Water transport through a two-dimensional nanoporous material: is there a relationship between water flux and surface tension?. <i>Molecular Physics</i> , 0, , .	0.8	0