

Lianfa Song

List of Publications by Year in descending order

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80
papers

3,906
citations

126858

33
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123376

61
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81
all docs

81
docs citations

81
times ranked

3084
citing authors

#	ARTICLE	IF	CITATIONS
1	Modeling and Optimization of Membrane Process for Salinity Gradient Energy Production. Separations, 2021, 8, 64.	1.1	3
2	True driving force and characteristics of water transport in osmotic membranes. Desalination, 2021, 520, 115360.	4.0	20
3	Effects of NaClO shock on MBR performance under continuous operating conditions. Environmental Science: Water Research and Technology, 2021, 7, 396-404.	1.2	35
4	Accurate Determination of Electrical Potential on Ion Exchange Membranes in Reverse Electrodialysis. Separations, 2021, 8, 170.	1.1	4
5	Characterization of the Fouling Layer on the Membrane Surface in a Membrane Bioreactor: Evolution of the Foulants' Composition and Aggregation Ability. Membranes, 2019, 9, 85.	1.4	8
6	On rigorous definition of ion transport process and accurate determination of membrane potential at steady state. AIChE Journal, 2019, 65, e16715.	1.8	4
7	Characterization of activated sludge flocs in membrane bioreactor: stable and unstable flocs. Environmental Science and Pollution Research, 2019, 26, 31786-31792.	2.7	3
8	New insights into the rapid formation of initial membrane fouling after in-situ cleaning in a membrane bioreactor. Process Biochemistry, 2019, 78, 108-113.	1.8	143
9	Independence of hydraulic pressures on the feed and draw solutions in the osmotically driven membrane processes. Journal of Membrane Science, 2019, 586, 1-6.	4.1	5
10	Sulfate-enhanced degradation of Rhodamine B in the hydrogen peroxide/hydroxylamine system. Environmental Chemistry Letters, 2019, 17, 1831-1837.	8.3	1
11	Fate of NaClO and membrane foulants during in-situ cleaning of membrane bioreactors: Combined effect on thermodynamic properties of sludge. Biochemical Engineering Journal, 2019, 147, 146-152.	1.8	132
12	Metastable State of Water and Performance of Osmotically Driven Membrane Processes. Membranes, 2019, 9, 43.	1.4	5
13	Numerical analysis of performance of ideal counter-current flow pressure retarded osmosis. Desalination, 2018, 433, 41-47.	4.0	10
14	Effects of Loosely Bound EPS Release and Floc Reconstruction on Sludge Dewaterability. Water, Air, and Soil Pollution, 2018, 229, 1.	1.1	13
15	Influence of selective permeation of backwashing solution on the cleaning effectiveness in hollow fiber system. Journal of Membrane Science, 2018, 546, 139-150.	4.1	9
16	Quantitative Analysis of Membrane Fouling Mechanisms Involved in Microfiltration of Humic Acid-Protein Mixtures at Different Solution Conditions. Water (Switzerland), 2018, 10, 1306.	1.2	12
17	Decolorization and Mineralization of Rhodamine B in Aqueous Solution with a Triple System of Cerium(IV)/H ₂ O ₂ /Hydroxylamine. ACS Omega, 2018, 3, 18456-18465.	1.6	23
18	Dynamic analysis of self-forming dynamic membrane (SFDM) filtration in submerged anaerobic bioreactor: Performance, characteristic, and mechanism. Bioresource Technology, 2018, 270, 383-390.	4.8	26

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19	Micro-bubbles enhanced breakage warning for hollow fiber membrane integrity with a low-cost real-time monitoring device. <i>Environmental Science and Pollution Research</i> , 2018, 25, 24639-24652.	2.7	5
20	Bisection method for accurate modeling and simulation of fouling in hollow fiber membrane system. <i>Environmental Science and Pollution Research</i> , 2017, 24, 14346-14354.	2.7	4
21	Limiting extractable energy from pressure retarded osmosis with different pretreatment costs for feed and draw solutions. <i>Journal of Membrane Science</i> , 2017, 544, 208-212.	4.1	4
22	Calcium ion on membrane fouling reduction and biofouling promotion in membrane bioreactor at high salt shock. <i>Bioresource Technology</i> , 2016, 200, 535-540.	4.8	39
23	Stratification structure of polysaccharides and proteins in activated sludge with different aeration in membrane bioreactor. <i>Bioresource Technology</i> , 2015, 192, 361-366.	4.8	16
24	Relation between sludge properties and filterability in MBR: Under infinite SRT. <i>Membrane Water Treatment</i> , 2015, 6, 501-512.	0.5	5
25	Impact of sludge cation distribution pattern on its filterability in membrane bioreactor. <i>Bioresource Technology</i> , 2014, 171, 16-21.	4.8	14
26	Modeling of Concentration Polarization in a Reverse Osmosis Channel with Parabolic Crossflow. <i>Water Environment Research</i> , 2014, 86, 56-62.	1.3	5
27	Integration of Renewable Energy Technologies With Desalination. <i>Current Sustainable/Renewable Energy Reports</i> , 2014, 1, 11-18.	1.2	6
28	Performance enhancement and fouling mitigation by organic flocculant addition in membrane bioreactor at high salt shock. <i>Bioresource Technology</i> , 2014, 164, 34-40.	4.8	46
29	The use of covalently attached organo-selenium to inhibit <i>S. aureus</i> and <i>E. coli</i> biofilms on RO membranes and feed spacers. <i>Desalination</i> , 2013, 317, 142-151.	4.0	16
30	Attachment of organo-selenium to polyamide composite reverse osmosis membranes to inhibit biofilm formation of <i>S. aureus</i> and <i>E. coli</i> . <i>Desalination</i> , 2013, 309, 291-295.	4.0	16
31	The Seminole Project: Renewable Energy for Municipal Water Desalination. <i>Journal of Contemporary Water Research and Education</i> , 2013, 151, 50-60.	0.7	7
32	Calculation of energy consumption for crossflow RO desalination processes. <i>Desalination and Water Treatment</i> , 2012, 42, 295-303.	1.0	6
33	Evaluating RO performance with biological pretreatment of graywater. <i>Journal of Water Reuse and Desalination</i> , 2012, 2, 109-120.	1.2	2
34	Energy analysis and efficiency assessment of reverse osmosis desalination process. <i>Desalination</i> , 2011, 276, 352-358.	4.0	85
35	Attachment of selenium to a reverse osmosis membrane to inhibit biofilm formation of <i>S. aureus</i> . <i>Journal of Membrane Science</i> , 2011, 378, 171-178.	4.1	31
36	Concentration polarization in a narrow reverse osmosis membrane channel. <i>AIChE Journal</i> , 2010, 56, 143-149.	1.8	9

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37	Morphological visualization, componential characterization and microbiological identification of membrane fouling in membrane bioreactors (MBRs). <i>Journal of Membrane Science</i> , 2010, 361, 1-14.	4.1	149
38	Fouling behavior and foulant characteristics of reverse osmosis membranes for treated secondary effluent reclamation. <i>Journal of Membrane Science</i> , 2010, 349, 65-74.	4.1	73
39	Fouling of RO membranes by effluent organic matter (EfOM): Relating major components of EfOM to their characteristic fouling behaviors. <i>Journal of Membrane Science</i> , 2010, 349, 75-82.	4.1	60
40	Effect of pH and ionic strength on boron removal by RO membranes. <i>Desalination</i> , 2009, 246, 605-612.	4.0	84
41	Two-Step Optimization of Pressure and Recovery of Reverse Osmosis Desalination Process. <i>Environmental Science & Technology</i> , 2009, 43, 3272-3277.	4.6	18
42	Effect of solution chemistry on the fouling potential of dissolved organic matter in membrane bioreactor systems. <i>Journal of Membrane Science</i> , 2008, 310, 503-511.	4.1	57
43	Impact of feed water acidification with weak and strong acids on colloidal silica fouling in ultrafiltration membrane processes. <i>Water Research</i> , 2008, 42, 707-713.	5.3	12
44	Characteristics and Fouling Behaviors of Dissolved Organic Matter in Submerged Membrane Bioreactor Systems. <i>Environmental Engineering Science</i> , 2007, 24, 652-662.	0.8	25
45	Differential Pressure in Membrane Channel Caused by Foulant Capture onto Spacers. <i>Water Environment Research</i> , 2007, 79, 788-794.	1.3	2
46	Soluble microbial products in membrane bioreactor operation: Behaviors, characteristics, and fouling potential. <i>Water Research</i> , 2007, 41, 95-101.	5.3	291
47	Experimental correlations of pH and ionic strength effects on the colloidal fouling potential of silica nanoparticles in crossflow ultrafiltration. <i>Journal of Membrane Science</i> , 2007, 303, 112-118.	4.1	43
48	Cake Compressibility of Silica Colloids in Membrane Filtration Processes. <i>Industrial & Engineering Chemistry Research</i> , 2006, 45, 7633-7638.	1.8	22
49	A Modeling Study of Fouling Development in Membrane Bioreactors for Wastewater Treatment. <i>Water Environment Research</i> , 2006, 78, 857-864.	1.3	27
50	Numerical study on permeate flux enhancement by spacers in a crossflow reverse osmosis channel. <i>Journal of Membrane Science</i> , 2006, 284, 102-109.	4.1	63
51	A numerical study on concentration polarization and system performance of spiral wound RO membrane modules. <i>Journal of Membrane Science</i> , 2006, 271, 38-46.	4.1	97
52	Performance prediction of a long crossflow reverse osmosis membrane channel. <i>Journal of Membrane Science</i> , 2006, 281, 163-169.	4.1	26
53	Quantifying the effect of ionic strength on colloidal fouling potential in membrane filtration. <i>Journal of Colloid and Interface Science</i> , 2005, 284, 630-638.	5.0	51
54	Influence of various monovalent cations and calcium ion on the colloidal fouling potential. <i>Journal of Colloid and Interface Science</i> , 2005, 289, 479-487.	5.0	22

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55	A more effective method for fouling characterization in a full-scale reverse osmosis process. <i>Desalination</i> , 2005, 177, 95-107.	4.0	32
56	Numerical Studies of the Impact of Spacer Geometry on Concentration Polarization in Spiral Wound Membrane Modules. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 7638-7645.	1.8	47
57	Experimental Study of Water and Salt Fluxes through Reverse Osmosis Membranes. <i>Environmental Science & Technology</i> , 2005, 39, 3382-3387.	4.6	38
58	A new normalization method for determination of colloidal fouling potential in membrane processes. <i>Journal of Colloid and Interface Science</i> , 2004, 271, 426-433.	5.0	31
59	The development of membrane fouling in full-scale RO processes. <i>Journal of Membrane Science</i> , 2004, 232, 63-72.	4.1	86
60	Improvement of recoveries for the determination of protozoa <i>Cryptosporidium</i> and <i>Giardia</i> in water using method 1623. <i>Journal of Microbiological Methods</i> , 2004, 58, 321-325.	0.7	49
61	Emergence of thermodynamic restriction and its implications for full-scale reverse osmosis processes. <i>Desalination</i> , 2003, 155, 213-228.	4.0	59
62	Performance limitation of the full-scale reverse osmosis process. <i>Journal of Membrane Science</i> , 2003, 214, 239-244.	4.1	66
63	Emerging research needs for membrane processes. <i>Water Environment Research</i> , 2003, 75, 99-100.	1.3	0
64	Evaluation of Feed Concentration Effects on Salt/Ion Transport through RO/NF Membranes with the Nernst-Planck-Donnan Model. <i>Environmental Engineering Science</i> , 2002, 19, 429-439.	0.8	27
65	Simulations of Full-Scale Reverse Osmosis Membrane Process. <i>Journal of Environmental Engineering, ASCE</i> , 2002, 128, 960-966.	0.7	53
66	THERMODYNAMIC MODELING OF SOLUTE TRANSPORT THROUGH REVERSE OSMOSIS MEMBRANE. <i>Chemical Engineering Communications</i> , 2000, 180, 145-167.	1.5	15
67	Mechanisms and Parameters Affecting Flux Decline in Cross-Flow Microfiltration and Ultrafiltration of Colloids. <i>Environmental Science & Technology</i> , 2000, 34, 3767-3773.	4.6	61
68	Flux decline in crossflow microfiltration and ultrafiltration: experimental verification of fouling dynamics. <i>Journal of Membrane Science</i> , 1999, 160, 41-50.	4.1	75
69	Permeate Flux in Crossflow Ultrafiltration under Intermediate Pressures. <i>Journal of Colloid and Interface Science</i> , 1999, 214, 251-263.	5.0	15
70	Concentration polarization in cross-flow reverse osmosis. <i>AIChE Journal</i> , 1999, 45, 921-928.	1.8	51
71	Flux decline in crossflow microfiltration and ultrafiltration: mechanisms and modeling of membrane fouling. <i>Journal of Membrane Science</i> , 1998, 139, 183-200.	4.1	284
72	A new model for the calculation of the limiting flux in ultrafiltration. <i>Journal of Membrane Science</i> , 1998, 144, 173-185.	4.1	88

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73	Particle Deposition onto a Permeable Surface in Laminar Flow. <i>Journal of Colloid and Interface Science</i> , 1995, 173, 165-180.	5.0	123
74	Theory of concentration polarization in crossflow filtration. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1995, 91, 3389.	1.7	288
75	Transient Deposition of Colloidal Particles in Heterogeneous Porous Media. <i>Journal of Colloid and Interface Science</i> , 1994, 167, 301-313.	5.0	85
76	Kinetics of Colloid Deposition onto Heterogeneously Charged Surfaces in Porous Media. <i>Environmental Science & Technology</i> , 1994, 28, 1164-1171.	4.6	225
77	Dynamics of colloid deposition in porous media: Modeling the role of retained particles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 1993, 73, 49-63.	2.3	119
78	Calculation of particle deposition rate under unfavourable particle-surface interactions. <i>Journal of the Chemical Society, Faraday Transactions</i> , 1993, 89, 3443-3452.	1.7	38
79	Theoretical investigation of colloid separation from dilute aqueous suspensions by oppositely charged granular media. <i>Separation and Purification Technology</i> , 1992, 2, 2-12.	0.7	34
80	Deposition of Brownian particles in porous media: Modified boundary conditions for the sphere-in-cell model. <i>Journal of Colloid and Interface Science</i> , 1992, 153, 294-297.	5.0	23