

Meijia Zhang

List of Publications by Year in descending order

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48
papers

3,752
citations

159358

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docs citations

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times ranked

2353
citing authors

#	ARTICLE	IF	CITATIONS
1	A critical review of extracellular polymeric substances (EPSs) in membrane bioreactors: Characteristics, roles in membrane fouling and control strategies. <i>Journal of Membrane Science</i> , 2014, 460, 110-125.	4.1	583
2	A review on anaerobic membrane bioreactors: Applications, membrane fouling and future perspectives. <i>Desalination</i> , 2013, 314, 169-188.	4.0	545
3	Membrane fouling in a membrane bioreactor: High filtration resistance of gel layer and its underlying mechanism. <i>Water Research</i> , 2016, 102, 82-89.	5.3	209
4	A unified thermodynamic mechanism underlying fouling behaviors of soluble microbial products (SMPs) in a membrane bioreactor. <i>Water Research</i> , 2019, 149, 477-487.	5.3	203
5	Mechanistic insights into alginate fouling caused by calcium ions based on terahertz time-domain spectra analyses and DFT calculations. <i>Water Research</i> , 2018, 129, 337-346.	5.3	168
6	Fouling mechanisms of gel layer in a submerged membrane bioreactor. <i>Bioresource Technology</i> , 2014, 166, 295-302.	4.8	133
7	Effect of calcium ions on fouling properties of alginate solution and its mechanisms. <i>Journal of Membrane Science</i> , 2017, 525, 320-329.	4.1	131
8	Effects of hydrophilicity/hydrophobicity of membrane on membrane fouling in a submerged membrane bioreactor. <i>Bioresource Technology</i> , 2015, 175, 59-67.	4.8	130
9	A new insight into membrane fouling mechanism in submerged membrane bioreactor: Osmotic pressure during cake layer filtration. <i>Water Research</i> , 2013, 47, 2777-2786.	5.3	117
10	A novel in-situ micro-aeration functional membrane with excellent decoloration efficiency and antifouling performance. <i>Journal of Membrane Science</i> , 2022, 641, 119925.	4.1	101
11	Thermodynamic analysis of membrane fouling in a submerged membrane bioreactor and its implications. <i>Bioresource Technology</i> , 2013, 146, 7-14.	4.8	83
12	Realization of quantifying interfacial interactions between a randomly rough membrane surface and a foulant particle. <i>Bioresource Technology</i> , 2017, 226, 220-228.	4.8	77
13	Thermodynamic mechanisms of membrane fouling during filtration of alginate solution in coagulation-ultrafiltration (UF) process in presence of different ionic strength and iron(III) ion concentration. <i>Journal of Membrane Science</i> , 2021, 635, 119532.	4.1	72
14	Electroless Ni-Sn-P plating to fabricate nickel alloy coated polypropylene membrane with enhanced performance. <i>Journal of Membrane Science</i> , 2021, 640, 119820.	4.1	72
15	Quantification of interfacial interactions between a rough sludge floc and membrane surface in a membrane bioreactor. <i>Journal of Colloid and Interface Science</i> , 2017, 490, 710-718.	5.0	69
16	Facile preparation of polyvinylidene fluoride substrate supported thin film composite polyamide nanofiltration: Effect of substrate pore size. <i>Journal of Membrane Science</i> , 2021, 638, 119699.	4.1	68
17	A new method for modeling rough membrane surface and calculation of interfacial interactions. <i>Bioresource Technology</i> , 2016, 200, 451-457.	4.8	66
18	A novel composite membrane for simultaneous separation and catalytic degradation of oil/water emulsion with high performance. <i>Chemosphere</i> , 2022, 288, 132490.	4.2	65

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19	A facile method for simulating randomly rough membrane surface associated with interface behaviors. <i>Applied Surface Science</i> , 2018, 427, 915-921.	3.1	52
20	Membrane technologies for microalgal cultivation and dewatering: Recent progress and challenges. <i>Algal Research</i> , 2019, 44, 101686.	2.4	49
21	Novel catalytic self-cleaning membrane with peroxydisulfate activation for dual-function wastewater purification: Performance and mechanism. <i>Journal of Cleaner Production</i> , 2022, 355, 131858.	4.6	49
22	The biological performance of a novel microalgal-bacterial membrane photobioreactor: Effects of HRT and N/P ratio. <i>Chemosphere</i> , 2020, 261, 128199.	4.2	48
23	Fundamental thermodynamic mechanisms of membrane fouling caused by transparent exopolymer particles (TEP) in water treatment. <i>Science of the Total Environment</i> , 2022, 820, 153252.	3.9	45
24	Membrane fouling in a submerged membrane bioreactor: Effect of pH and its implications. <i>Bioresource Technology</i> , 2014, 152, 7-14.	4.8	44
25	Osmotic pressure effect on membrane fouling in a submerged anaerobic membrane bioreactor and its experimental verification. <i>Bioresource Technology</i> , 2012, 125, 97-101.	4.8	43
26	In situ conversion of ZnO into zeolitic imidazolate framework-8 in polyamide layers for well-structured high-permeance thin-film nanocomposite nanofiltration membranes. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7684-7691.	5.2	43
27	A new strategy to accelerate co-deposition of plant polyphenol and amine for fabrication of antibacterial nanofiltration membranes by in-situ grown Ag nanoparticles. <i>Separation and Purification Technology</i> , 2022, 280, 119866.	3.9	43
28	Fractal reconstruction of rough membrane surface related with membrane fouling in a membrane bioreactor. <i>Bioresource Technology</i> , 2016, 216, 817-823.	4.8	37
29	Effects of ionic strength on membrane fouling in a membrane bioreactor. <i>Bioresource Technology</i> , 2014, 156, 35-41.	4.8	35
30	A novel approach for quantitative evaluation of the physicochemical interactions between rough membrane surface and sludge foulants in a submerged membrane bioreactor. <i>Bioresource Technology</i> , 2014, 171, 247-252.	4.8	31
31	A novel insight into membrane fouling mechanism regarding gel layer filtration: Flory-Huggins based filtration mechanism. <i>Scientific Reports</i> , 2016, 6, 33343.	1.6	31
32	Thermodynamic analysis of effects of contact angle on interfacial interactions and its implications for membrane fouling control. <i>Bioresource Technology</i> , 2016, 201, 245-252.	4.8	30
33	Influences of fractal dimension of membrane surface on interfacial interactions related to membrane fouling in a membrane bioreactor. <i>Journal of Colloid and Interface Science</i> , 2017, 500, 79-87.	5.0	28
34	Membrane fouling in a submerged membrane bioreactor with focus on surface properties and interactions of cake sludge and bulk sludge. <i>Bioresource Technology</i> , 2014, 169, 213-219.	4.8	27
35	Modeling three-dimensional surface morphology of biocake layer in a membrane bioreactor based on fractal geometry. <i>Bioresource Technology</i> , 2016, 222, 478-484.	4.8	24
36	Influences of acid-base property of membrane on interfacial interactions related with membrane fouling in a membrane bioreactor based on thermodynamic assessment. <i>Bioresource Technology</i> , 2016, 214, 355-362.	4.8	23

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37	Quantitative assessment of interfacial forces between two rough surfaces and its implications for anti-adhesion membrane fabrication. <i>Separation and Purification Technology</i> , 2017, 189, 238-245.	3.9	23
38	Experimental evidence for osmotic pressure-induced fouling in a membrane bioreactor. <i>Bioresource Technology</i> , 2014, 158, 119-126.	4.8	22
39	A new approach to construct three-dimensional surface morphology of sludge flocs in a membrane bioreactor. <i>Bioresource Technology</i> , 2016, 219, 521-526.	4.8	20
40	Quantitative evaluation of the interfacial interactions between a randomly rough sludge floc and membrane surface in a membrane bioreactor based on fractal geometry. <i>Bioresource Technology</i> , 2017, 234, 198-207.	4.8	19
41	Characterization of foaming and non-foaming sludge relating to aeration and the implications for membrane fouling control in submerged membrane bioreactors. <i>Journal of Water Process Engineering</i> , 2019, 28, 250-259.	2.6	18
42	Membrane fouling in a microalgal-bacterial membrane photobioreactor: Effects of P-availability controlled by N:P ratio. <i>Chemosphere</i> , 2021, 282, 131015.	4.2	15
43	Evaluation of membrane fouling in a microalgal-bacterial membrane photobioreactor: Effects of SRT. <i>Science of the Total Environment</i> , 2022, 839, 156414.	3.9	15
44	In-situ growth of UiO-66-NH ₂ in porous polymeric substrates at room temperature for fabrication of mixed matrix membranes with fast molecular separation performance. <i>Chemical Engineering Journal</i> , 2022, 435, 134804.	6.6	13
45	Membrane fouling in a submerged membrane bioreactor: An unified approach to construct topography and to evaluate interaction energy between two randomly rough surfaces. <i>Bioresource Technology</i> , 2017, 243, 1121-1132.	4.8	11
46	Effects of solids retention time on the biological performance of a novel microalgal-bacterial membrane photobioreactor for industrial wastewater treatment. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105500.	3.3	11
47	Membrane Photobioreactor Applied for Municipal Wastewater Treatment at a High Solids Retention Time: Effects of Microalgae Decay on Treatment Performance and Biomass Properties. <i>Membranes</i> , 2022, 12, 564.	1.4	8
48	Author's responses to the comment by Seong-Hoon Yoon on "A new insight into membrane fouling mechanism in submerged membrane bioreactor: Osmotic pressure during cake layer filtration" published in <i>Water Research</i> , vol. 47, pp. 2777-2786, 2013. <i>Water Research</i> , 2013, 47, 4790-4791.	5.3	3