Bing Wu

List of Publications by Year
in descending order

74 papers	3,853 citations	101543 36 h-index	128289 60 g-index
74 all docs	74 docs citations	74 times ranked	4050 citing authors

#	Article	IF	Citations
1	Gravity-driven membrane filtration of primary wastewater effluent for edible plant cultivations: Membrane performance and health risk assessment. Journal of Environmental Chemical Engineering, 2022, 10, 107046.	6.7	12
2	Design of nanofibre interlayer supported forward osmosis composite membranes and its evaluation in fouling study with cleaning. Frontiers of Environmental Science and Engineering, 2022, 16, 1.	6.0	3
3	Biocarriers facilitated gravity-driven membrane filtration of domestic wastewater in cold climate: Combined effect of temperature and periodic cleaning. Science of the Total Environment, 2022, 833, 155248.	8.0	7
4	Combined alginate-humic acid fouling mechanism and mitigation during microfiltration: Effect of alginate viscosity. Journal of Water Process Engineering, 2021, 39, 101852.	5.6	6
5	Thermal associated pressure-retarded osmosis processes for energy production: A review. Science of the Total Environment, 2021, 757, 143731.	8.0	15
6	Direct membrane filtration of municipal wastewater: Linking periodical physical cleaning with fouling mechanisms. Separation and Purification Technology, 2021, 259, 118125.	7.9	25
7	Enhancing performance of biocarriers facilitated gravity-driven membrane (GDM) reactor for decentralized wastewater treatment: Effect of internal recirculation and membrane packing density. Science of the Total Environment, 2021, 762, 144104.	8.0	26
8	Membrane filtration of manganese (II) remediated-microalgae: Manganese (II) removal, extracellular organic matter, and membrane fouling. Algal Research, 2021, 55, 102279.	4.6	5
9	Gravity-Driven Membrane Reactor for Decentralized Wastewater Treatment: Effect of Reactor Configuration and Cleaning Protocol. Membranes, 2021, 11, 388.	3.0	9
10	Mitigation of emerging pollutants and pathogens in decentralized wastewater treatment processes: A review. Science of the Total Environment, 2021, 779, 146545.	8.0	52
11	Fouling and mitigation mechanisms during direct microfiltration and ultrafiltration of primary wastewater. Journal of Water Process Engineering, 2021, 44, 102331.	5.6	13
12	Characterizing spatial distribution of fouling on flat-sheet membranes in a pilot-scale gravity-driven membrane reactor for seawater pretreatment. Journal of Water Process Engineering, 2021, 44, 102436.	5.6	7
13	The roles of particles in enhancing membrane filtration: A review. Journal of Membrane Science, 2020, 595, 117570.	8.2	55
14	Direct membrane filtration for wastewater treatment and resource recovery: A review. Science of the Total Environment, 2020, 710, 136375.	8.0	336
15	Integration of an anaerobic fluidized-bed membrane bioreactor (MBR) with zeolite adsorption and reverse osmosis (RO) for municipal wastewater reclamation: Comparison with an anoxic-aerobic MBR coupled with RO. Chemosphere, 2020, 245, 125569.	8.2	30
16	Engineered bacterial biofloc formation enhancing phenol removal and cell tolerance. Applied Microbiology and Biotechnology, 2020, 104, 1187-1199.	3.6	13
17	Anaerobic Membrane Bioreactors for Nonpotable Water Reuse and Energy Recovery. Journal of Environmental Engineering, ASCE, 2020, 146, .	1.4	34
18	Impact of salt accumulation in the bioreactor on the performance of nanofiltration membrane bioreactor (NF-MBR)+Reverse osmosis (RO) process for water reclamation. Water Research, 2020, 170, 115352.	11.3	19

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19	Gravity-driven membrane (GDM) filtration of algae-polluted surface water. Journal of Water Process Engineering, 2020, 36, 101257.	5.6	25
20	Membrane fouling mitigation by fluidized granular activated carbon: Effect of fiber looseness and impact on irreversible fouling. Separation and Purification Technology, 2020, 242, 116764.	7.9	13
21	Phytoremediation of pharmaceutical-contaminated wastewater: Insights into rhizobacterial dynamics related to pollutant degradation mechanisms during plant life cycle. Chemosphere, 2020, 253, 126681.	8.2	32
22	Biocarriers facilitated gravity-driven membrane (GDM) reactor for wastewater reclamation: Effect of intermittent aeration cycle. Science of the Total Environment, 2019, 694, 133719.	8.0	34
23	A comparison of gravity-driven membrane (GDM) reactor and biofiltrationÂ+ GDM reactor for seawater reverse osmosis desalination pretreatment. Water Research, 2019, 154, 72-83.	11.3	31
24	Spacer vibration for fouling control of submerged flat sheet membranes. Separation and Purification Technology, 2019, 210, 719-728.	7.9	36
25	Enhancing fouling mitigation of submerged flat-sheet membranes by vibrating 3D-spacers. Separation and Purification Technology, 2019, 215, 70-80.	7.9	44
26	Gravity-driven membrane filtration for water and wastewater treatment: A review. Water Research, 2019, 149, 553-565.	11.3	306
27	Recycling rainwater by submerged gravity-driven membrane (GDM) reactors: Effect of hydraulic retention time and periodic backwash. Science of the Total Environment, 2019, 654, 10-18.	8.0	34
28	A novel thin film composite hollow fiber osmotic membrane with one-step prepared dual-layer substrate for sludge thickening. Journal of Membrane Science, 2019, 575, 98-108.	8.2	21
29	Membrane-based technology in greywater reclamation: A review. Science of the Total Environment, 2019, 656, 184-200.	8.0	91
30	Monitoring local membrane fouling mitigation by fluidized GAC in lab-scale and pilot-scale AnFMBRs. Separation and Purification Technology, 2018, 199, 331-345.	7.9	14
31	High-strength N-methyl-2-pyrrolidone-containing process wastewater treatment using sequencing batch reactor and membrane bioreactor: A feasibility study. Chemosphere, 2018, 194, 534-542.	8.2	13
32	The feasibility of nanofiltration membrane bioreactor (NF-MBR)+reverse osmosis (RO) process for water reclamation: Comparison with ultrafiltration membrane bioreactor (UF-MBR)+RO process. Water Research, 2018, 129, 180-189.	11.3	87
33	Effect of mechanical scouring by granular activated carbon (GAC) on membrane fouling mitigation. Desalination, 2017, 403, 80-87.	8.2	49
34	Improved performance of gravity-driven membrane filtration for seawater pretreatment: Implications of membrane module configuration. Water Research, 2017, 114, 59-68.	11.3	62
35	Gravity-driven microfiltration pretreatment for reverse osmosis (RO) seawater desalination: Microbial community characterization and RO performance. Desalination, 2017, 418, 1-8.	8.2	50
36	The roles of bacteriophages in membrane-based water andÂwastewater treatment processes: A review. Water Research, 2017, 110, 120-132.	11.3	73

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37	Single-stage versus two-stage anaerobic fluidized bed bioreactors in treating municipal wastewater: Performance, foulant characteristics, and microbial community. Chemosphere, 2017, 171, 158-167.	8.2	54
38	Effect of fluidized granular activated carbon (GAC) on critical flux in the microfiltration of particulate foulants. Journal of Membrane Science, 2017, 523, 409-417.	8.2	26
39	Phytoextraction, phytotransformation and rhizodegradation of ibuprofen associated with Typha angustifolia in a horizontal subsurface flow constructed wetland. Water Research, 2016, 102, 294-304.	11.3	61
40	High-throughput pyrosequencing analysis of bacteria relevant to cometabolic and metabolic degradation of ibuprofen in horizontal subsurface flow constructed wetlands. Science of the Total Environment, 2016, 562, 604-613.	8.0	52
41	Characterizing the scouring efficiency of Granular Activated Carbon (GAC) particles in membrane fouling mitigation via wavelet decomposition of accelerometer signals. Journal of Membrane Science, 2016, 498, 105-115.	8.2	43
42	Correlating the hydrodynamics of fluidized granular activated carbon (GAC) with membrane-fouling mitigation. Journal of Membrane Science, 2016, 510, 38-49.	8.2	45
43	Optimization of gravity-driven membrane (GDM) filtration process for seawater pretreatment. Water Research, 2016, 93, 133-140.	11.3	78
44	Enhanced performance of submerged hollow fibre microfiltration by fluidized granular activated carbon. Journal of Membrane Science, 2016, 499, 47-55.	8.2	33
45	The potential roles of granular activated carbon in anaerobic fluidized membrane bioreactors: effect on membrane fouling and membrane integrity. Desalination and Water Treatment, 2015, 53, 1450-1459.	1.0	37
46	Gravity-driven membrane filtration as pretreatment for seawater reverse osmosis: Linking biofouling layer morphology with flux stabilization. Water Research, 2015, 70, 158-173.	11.3	129
47	Impact of membrane bioreactor operating conditions on fouling behavior of reverse osmosis membranes in MBRâ€“RO processes. Desalination, 2013, 311, 37-45.	8.2	39
48	Optimization of membrane bioreactors by the addition of powdered activated carbon. Bioresource Technology, 2013, 138, 38-47.	9.6	56
49	Flux-Dependent Fouling Phenomena in Membrane Bioreactors under Different Food to Microorganisms (F/M) Ratios. Separation Science and Technology, 2013, 48, 840-848.	2.5	9
50	Fouling reduction in MBR-RO processes: the effect of MBR F/M ratio. Desalination and Water Treatment, 2013, 51, 4829-4838.	1.0	5
51	Microbial Relevant Fouling in Membrane Bioreactors: Influencing Factors, Characterization, and Fouling Control. Membranes, 2012, 2, 565-584.	3.0	51
52	Effect of Substrate Composition (C/N/P ratio) on Microbial Community and Membrane Fouling Tendency of Biomass in Membrane Bioreactors. Separation Science and Technology, 2012, 47, 440-445.	2.5	15
53	Role of initially formed cake layers on limiting membrane fouling in membrane bioreactors. Bioresource Technology, 2012, 118, 589-593.	9.6	28
54	Nanoparticles facilitate gene delivery to microorganisms via an electrospray process. Journal of Microbiological Methods, 2011, 84, 228-233.	1.6	23

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55	Cu-doped TiO2 nanoparticles enhance survival of Shewanella oneidensis MR-1 under Ultraviolet Light (UV) exposure. Science of the Total Environment, 2011, 409, 4635-4639.	8.0	40
56	Microbial community developments and biomass characteristics in membrane bioreactors under different organic loadings. Bioresource Technology, 2011, 102, 6808-6814.	9.6	40
57	Evaluating Factors That Influence Microbial Synthesis Yields by Linear Regression with Numerical and Ordinal Variables. Biotechnology and Bioengineering, 2011, 108, 893-901.	3.3	29
58	Microbial behaviors involved in cake fouling in membrane bioreactors under different solids retention times. Bioresource Technology, 2011, 102, 2511-2516.	9.6	64
59	Role of dopant concentration, crystal phase and particle size on microbial inactivation of Cu-doped TiO₂nanoparticles. Nanotechnology, 2011, 22, 415704.	2.6	16
60	Post-treatment of upflow anaerobic sludge blanket effluent by combining the membrane filtration process: fouling control by intermittent permeation and air sparging. Water and Environment Journal, 2010, 24, 32-38.	2.2	18
61	Alternative isoleucine synthesis pathway in cyanobacterial species. Microbiology (United Kingdom), 2010, 156, 596-602.	1.8	52
62	Mixotrophic and photoheterotrophic metabolism in Cyanothece sp. ATCC 51142 under continuous light. Microbiology (United Kingdom), 2010, 156, 2566-2574.	1.8	80
63	Mechanisms of Fouling Control in Membrane Bioreactors by the Addition of Powdered Activated Carbon. Separation Science and Technology, 2010, 45, 873-889.	2.5	31
64	Comparative Eco-Toxicities of Nano-ZnO Particles under Aquatic and Aerosol Exposure Modes. Environmental Science & Technology, 2010, 44, 1484-1489.	10.0	145
65	Viability and Metal Reduction of Shewanella oneidensis MR-1 under CO₂ Stress: Implications for Ecological Effects of CO₂ Leakage from Geologic CO₂ Sequestration. Environmental Science & Technology, 2010, 44, 9213-9218.	10.0	34
66	Bacterial responses to Cu-doped TiO2 nanoparticles. Science of the Total Environment, 2010, 408, 1755-1758.	8.0	127
67	Anti-microbial activities of aerosolized transition metal oxide nanoparticles. Chemosphere, 2010, 80, 525-529.	8.2	118
68	Characterization of the Central Metabolic Pathways in Thermoanaerobacter sp. Strain X514 via Isotopomer-Assisted Metabolite Analysis. Applied and Environmental Microbiology, 2009, 75, 5001-5008.	3.1	57
69	Experimental Study and Design of a Submerged Membrane Distillation Bioreactor. Chemical Engineering and Technology, 2009, 32, 38-44.	1.5	87
70	Effect of adsorption/coagulation on membrane fouling in microfiltration process post-treating anaerobic digestion effluent. Desalination, 2009, 242, 183-192.	8.2	55
71	A novel membrane bioreactor based on membrane distillation. Desalination, 2008, 223, 386-395.	8.2	130
72	The integration of methanogenesis with shortcut nitrification and denitrification in a combined UASB with MBR. Bioresource Technology, 2008, 99, 3714-3720.	9.6	40

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73	Membrane bioreactor with bubble-size transformer: Design and fouling control. AICHE Journal, 2007, 53, 243-248.	3.6	27
74	Biodegradation ofp-Nitrophenol by Aerobic Granules in a Sequencing Batch Reactor. Environmental Science & Technology, 2006, 40, 2396-2401.	10.0	197