Fangshu Qu

List of Publications by Year
in descending order

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98 papers	5,340 citations	70961 41 h-index	88477 70 g-index
98 all docs	98 docs citations	98 times ranked	3878 citing authors

#	Article	IF	Citations
1	Efficient biostimulants for bacterial quorum quenching to control fouling in MBR. Chemosphere, 2022, 286, 131689.	4.2	14
2	The influence of environmental factor on the coagulation enhanced ultrafiltration of algae-laden water: Role of two anionic surfactants to the separation performance. Chemosphere, 2022, 291, 132745.	4.2	21
3	Separation performance of ultrafiltration during the treatment of algae-laden water in the presence of an anionic surfactant. Separation and Purification Technology, 2022, 281, 119894.	3.9	38
4	A moderate activated sulfite pre-oxidation on ultrafiltration treatment of algae-laden water: Fouling mitigation, organic rejection, cell integrity and cake layer property. Separation and Purification Technology, 2022, 282, 120102.	3.9	17
5	Oxidation-enhanced ferric coagulation for alleviating ultrafiltration membrane fouling by algal organic matter: A comparison of moderate and strong oxidation. Algal Research, 2022, 63, 102652.	2.4	14
6	Membrane distillation treatment of landfill leachate: Characteristics and mechanism of membrane fouling. Separation and Purification Technology, 2022, 289, 120787.	3.9	28
7	Confining Nano-Fe₃O₄ in the Superhydrophilic Membrane Skin Layer to Minimize Internal Fouling. ACS Applied Materials & Interfaces, 2022, 14, 26044-26056.	4.0	9
8	Chemical Cleaning and Membrane Aging in MBR for Textile Wastewater Treatment. Membranes, 2022, 12, 704.	1.4	5
9	Effect of biopolymers and humic substances on gypsum scaling and membrane wetting during membrane distillation. Journal of Membrane Science, 2021, 617, 118638.	4.1	78
10	Fabrication of heterostructured Ag/AgCl@g-C3N4@UIO-66(NH2) nanocomposite for efficient photocatalytic inactivation of Microcystis aeruginosa under visible light. Journal of Hazardous Materials, 2021, 404, 124062.	6.5	113
11	Membrane fouling control by UV/persulfate in tertiary wastewater treatment with ultrafiltration: A comparison with UV/hydroperoxide and role of free radicals. Separation and Purification Technology, 2021, 257, 117877.	3.9	27
12	Algae-laden water treatment with ultrafiltration: effects of moderate oxidation by Fe(<scp>ii</scp>)/permanganate on hydraulically irreversible fouling and deposition of iron and manganese oxides. Environmental Science: Water Research and Technology, 2021, 7, 122-133.	1.2	6
13	Effect of sewage sludge ash contents on the performance of thermo-sensitive hydrogel as draw agent for forward osmosis application. Journal of Cleaner Production, 2021, 313, 127941.	4.6	9
14	Sewage sludge ash-based thermo-responsive hydrogel as a novel draw agent towards high performance of water flux and recovery for forward-osmosis. Desalination, 2021, 512, 115147.	4.0	10
15	Integration of seeding- and heating-induced crystallization with membrane distillation for membrane gypsum scaling and wetting control. Desalination, 2021, 511, 115115.	4.0	27
16	Recyclable self-floating A-GUN-coated foam as effective visible-light-driven photocatalyst for inactivation of Microcystis aeruginosa. Journal of Hazardous Materials, 2021, 419, 126407.	6.5	32
17	Evaluation of applying membrane distillation for landfill leachate treatment. Desalination, 2021, 520, 115358.	4.0	33
18	Fast photocatalytic inactivation of Microcystis aeruginosa by metal-organic frameworks under visible light. Chemosphere, 2020, 239, 124721.	4.2	37

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19	Impacts of Natural Organic Matter Adhesion on Irreversible Membrane Fouling during Surface Water Treatment Using Ultrafiltration. Membranes, 2020, 10, 238.	1.4	9
20	Front-face fluorescence excitation-emission matrix (FF-EEM) for direct analysis of flocculated suspension without sample preparation in coagulation-ultrafiltration for wastewater reclamation. Water Research, 2020, 187, 116452.	5.3	39
21	Fouling Mechanisms Analysis via Combined Fouling Models for Surface Water Ultrafiltration Process. Membranes, 2020, 10, 149.	1.4	16
22	Effect of residual commercial antiscalants on gypsum scaling and membrane wetting during direct contact membrane distillation. Desalination, 2020, 486, 114493.	4.0	39
23	A new backwash strategy for reducing the cost of an immersed ultrafiltration system by restricting cake layer breakage. Water Science and Technology: Water Supply, 2020, 20, 1453-1462.	1.0	0
24	An innovative alkaline protease-based pretreatment approach for enhanced short-chain fatty acids production via a short-term anaerobic fermentation of waste activated sludge. Bioresource Technology, 2020, 312, 123397.	4.8	19
25	Cation exchange resin-induced hydrolysis for improving biodegradability of waste activated sludge: Characterization of dissolved organic matters and microbial community. Bioresource Technology, 2020, 302, 122870.	4.8	60
26	Application of membrane distillation to anaerobic digestion effluent treatment: Identifying culprits of membrane fouling and scaling. Science of the Total Environment, 2019, 688, 880-889.	3.9	63
27	Development of correlation spectroscopy (COS) method for analyzing fluorescence excitation emission matrix (EEM): A case study of effluent organic matter (EfOM) ozonation. Chemosphere, 2019, 228, 35-43.	4.2	33
28	Tertiary treatment of secondary effluent using ultrafiltration for wastewater reuse: correlating membrane fouling with rejection of effluent organic matter and hydrophobic pharmaceuticals. Environmental Science: Water Research and Technology, 2019, 5, 672-683.	1.2	30
29	Growth inhibition of harmful cyanobacteria by nanocrystalline Cu-MOF-74: Efficiency and its mechanisms. Journal of Hazardous Materials, 2019, 367, 529-538.	6.5	66
30	Characterization of fluorescence foulants on ultrafiltration membrane using front-face excitation-emission matrix (FF-EEM) spectroscopy: Fouling evolution and mechanism analysis. Water Research, 2019, 148, 546-555.	5.3	52
31	Synergistic effects of wheat straw powder and persulfate/Fe(II) on enhancing sludge dewaterability. Chemosphere, 2019, 215, 333-341.	4.2	28
32	Treatment of anaerobic digestion effluent using membrane distillation: Effects of feed acidification on pollutant removal, nutrient concentration and membrane fouling. Desalination, 2019, 449, 6-15.	4.0	54
33	Free-standing hierarchical Î±-MnO2@CuO membrane for catalytic filtration degradation of organic pollutants. Chemosphere, 2018, 200, 237-247.	4.2	101
34	Effect of quorum quenching on biofouling and ammonia removal in membrane bioreactor under stressful conditions. Chemosphere, 2018, 199, 114-121.	4.2	28
35	Reverse osmosis brine treatment using direct contact membrane distillation (DCMD): effect of membrane characteristics on desalination performance and the wetting phenomenon. Environmental Science: Water Research and Technology, 2018, 4, 428-437.	1.2	23
36	Dual-Bioinspired Design for Constructing Membranes with Superhydrophobicity for Direct Contact Membrane Distillation. Environmental Science & Technology, 2018, 52, 3027-3036.	4.6	130

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37	Membrane Fouling and Rejection of Organics during Algae-Laden Water Treatment Using Ultrafiltration: A Comparison between in Situ Pretreatment with Fe(II)/Persulfate and Ozone. Environmental Science & Technology, 2018, 52, 765-774.	4.6	111
38	A pilot study of hybrid biological activated carbon (BAC) filtration-ultrafiltration process for water supply in rural areas: role of BAC pretreatment in alleviating membrane fouling. Environmental Science: Water Research and Technology, 2018, 4, 315-324.	1.2	15
39	Applying ultraviolet/persulfate (UV/PS) pre-oxidation for controlling ultrafiltration membrane fouling by natural organic matter (NOM) in surface water. Water Research, 2018, 132, 190-199.	5.3	195
40	Biodiesel production with the simultaneous removal of nitrogen, phosphorus and COD in microalgal-bacterial communities for the treatment of anaerobic digestion effluent in photobioreactors. Chemical Engineering Journal, 2018, 350, 1092-1102.	6.6	80
41	Removal of iron, manganese and ammonia from groundwater using a PAC-MBR system: The anti-pollution ability, microbial population and membrane fouling. Desalination, 2017, 403, 97-106.	4.0	92
42	Microcystis aeruginosa -laden surface water treatment using ultrafiltration: Membrane fouling, cell integrity and extracellular organic matter rejection. Water Research, 2017, 112, 83-92.	5.3	78
43	Algae-laden water treatment using ultrafiltration: Individual and combined fouling effects of cells, debris, extracellular and intracellular organic matter. Journal of Membrane Science, 2017, 528, 178-186.	4.1	91
44	Impact of bubbly flow in feed channel of forward osmosis for wastewater treatment: Flux performance and biofouling. Chemical Engineering Journal, 2017, 316, 1047-1058.	6.6	27
45	Comparison of Hydrophilicity and Mechanical Properties of Nanocomposite Membranes with Cellulose Nanocrystals and Carbon Nanotubes. Environmental Science & Technology, 2017, 51, 253-262.	4.6	99
46	Fluorescent natural organic matter responsible for ultrafiltration membrane fouling: Fate, contributions and fouling mechanisms. Chemosphere, 2017, 182, 183-193.	4.2	49
47	Microbial community composition and electricity generation in cattle manure slurry treatment using microbial fuel cells: effects of inoculum addition. Environmental Science and Pollution Research, 2017, 24, 23226-23235.	2.7	19
48	Reverse osmosis brine treatment using direct contact membrane distillation: Effects of feed temperature and velocity. Desalination, 2017, 423, 149-156.	4.0	67
49	Microcystis aeruginosa-laden water treatment using enhanced coagulation by persulfate/Fe(II), ozone and permanganate: Comparison of the simultaneous and successive oxidant dosing strategy. Water Research, 2017, 125, 72-80.	5.3	113
50	Hydraulic backwashing for low-pressure membranes in drinking water treatment: A review. Journal of Membrane Science, 2017, 540, 362-380.	4.1	138
51	Control of ultrafiltration membrane fouling caused by algal extracellular organic matter (EOM) using enhanced Al coagulation with permanganate. Separation and Purification Technology, 2017, 172, 51-58.	3.9	54
52	Fabrication of Mn oxide incorporated ceramic membranes for membrane fouling control and enhanced catalytic ozonation of p -chloronitrobenzene. Chemical Engineering Journal, 2017, 308, 1010-1020.	6.6	62
53	A Pilot Study of the Sludge Recycling Enhanced Coagulationâ€“Ultrafiltration Process for Drinking Water: The Effects of Sludge Recycling Ratio and Coagulation Stirring Strategy. Water (Switzerland), 2017, 9, 183.	1.2	8
54	Preliminary Study on the Removal of Steroidal Estrogens Using TiO2-Doped PVDF Ultrafiltration Membranes. Water (Switzerland), 2016, 8, 134.	1.2	22

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55	Preparation and properties of polyvinyl chloride ultrafiltration membranes blended with functionalized multiâ€walled carbon nanotubes and MWCNTs/Fe₃O₄ hybrids. Journal of Applied Polymer Science, 2016, 133, .	1.3	7
56	Effect of solid retention time on membrane fouling in membrane bioreactor: from the perspective of quorum sensing and quorum quenching. Applied Microbiology and Biotechnology, 2016, 100, 7887-7897.	1.7	32
57	Effect of operation parameters on the flux stabilization of gravity-driven membrane (GDM) filtration system for decentralized water supply. Environmental Science and Pollution Research, 2016, 23, 16771-16780.	2.7	39
58	Biofouling control by biostimulation of quorumâ€quenching bacteria in a membrane bioreactor for wastewater treatment. Biotechnology and Bioengineering, 2016, 113, 2624-2632.	1.7	59
59	Effects of pre-ozonation on the ultrafiltration of different natural organic matter (NOM) fractions: Membrane fouling mitigation, prediction and mechanism. Journal of Membrane Science, 2016, 505, 15-25.	4.1	142
60	Towards a better hydraulic cleaning strategy for ultrafiltration membrane fouling by humic acid: Effect of backwash water composition. Journal of Environmental Sciences, 2016, 43, 177-186.	3.2	45
61	Application of response surface methodology to the chemical cleaning process of ultrafiltration membrane. Chinese Journal of Chemical Engineering, 2016, 24, 651-657.	1.7	28
62	Cake properties in ultrafiltration of TiO2 fine particles combined with HA: in situ measurement of cake thickness by fluid dynamic gauging and CFD calculation of imposed shear stress for cake controlling. Environmental Science and Pollution Research, 2016, 23, 8806-8818.	2.7	12
63	Combined influence by humic acid (HA) and powdered activated carbon (PAC) particles on ultrafiltration membrane fouling. Journal of Membrane Science, 2016, 500, 99-105.	4.1	79
64	Role of backwash water composition in alleviating ultrafiltration membrane fouling by sodium alginate and the effectiveness of salt backwashing. Journal of Membrane Science, 2016, 499, 429-441.	4.1	65
65	Performance of adsorption pretreatment in mitigating humic acid fouling of ultrafiltration membrane under environmentally relevant ionic conditions. Desalination, 2016, 377, 91-98.	4.0	37
66	A pilot-scale study of a powdered activated carbon-membrane bioreactor for the treatment of water with a high concentration of ammonia. Environmental Science: Water Research and Technology, 2016, 2, 125-133.	1.2	9
67	Combined effects of PAC adsorption and in situ chlorination on membrane fouling in a pilot-scale coagulation and ultrafiltration process. Chemical Engineering Journal, 2016, 283, 1374-1383.	6.6	72
68	Comparison of evaluation methods for Microcystis cell breakage based on dissolved organic carbon release, potassium release and flow cytometry. Chemical Engineering Journal, 2015, 281, 174-182.	6.6	30
69	Impact of dataset diversity on accuracy and sensitivity of parallel factor analysis model of dissolved organic matter fluorescence excitation-emission matrix. Scientific Reports, 2015, 5, 10207.	1.6	72
70	Understanding ultrafiltration membrane fouling by soluble microbial product and effluent organic matter using fluorescence excitationâ€“emission matrix coupled with parallel factor analysis. International Biodeterioration and Biodegradation, 2015, 102, 56-63.	1.9	27
71	Correlating ultrafiltration membrane fouling with membrane properties, water quality, and permeate flux. Desalination and Water Treatment, 2015, 56, 1746-1757.	1.0	5
72	Powdered activated carbon â€“ membrane bioreactor operated underÂintermittent aeration and short sludge retention times forÂmicro-polluted surface water treatment. International Biodeterioration and Biodegradation, 2015, 102, 81-88.	1.9	13

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73	Surface modification of UF membranes with functionalized MWCNTs to control membrane fouling by NOM fractions. Journal of Membrane Science, 2015, 492, 400-411.	4.1	121
74	Hydraulic irreversibility of ultrafiltration membrane fouling by humic acid: Effects of membrane properties and backwash water composition. Journal of Membrane Science, 2015, 493, 723-733.	4.1	102
75	Effect of calcium addition on sludge properties and membrane fouling potential of the membrane-coupled expanded granular sludge bed process. Journal of Membrane Science, 2015, 489, 55-63.	4.1	30
76	Effects of agricultural waste-based conditioner on ultrasonic-aided activated sludge dewatering. RSC Advances, 2015, 5, 43065-43073.	1.7	19
77	Effects of manganese dioxides on the ultrafiltration membrane fouling by algal extracellular organic matter. Separation and Purification Technology, 2015, 153, 29-36.	3.9	20
78	Control of ultrafiltration membrane fouling caused by Microcystis cells with permanganate preoxidation: Significance of in situ formed manganese dioxide. Chemical Engineering Journal, 2015, 279, 56-65.	6.6	61
79	Effects of poly aluminum chloride dosing positions on the performance of a pilot scale anoxic/oxic-membrane bioreactor (A/O-MBR). Water Science and Technology, 2015, 72, 689-695.	1.2	2
80	Relationship between soluble microbial products (SMP) and effluent organic matter (EfOM): Characterized by fluorescence excitation emission matrix coupled with parallel factor analysis. Chemosphere, 2015, 121, 101-109.	4.2	107
81	Quick start-up of membrane bioreactor for treating micro-polluted surface water under low temperature. Journal of Water Supply: Research and Technology - AQUA, 2014, 63, 350-357.	0.6	2
82	Understanding ultrafiltration membrane fouling by extracellular organic matter of Microcystis aeruginosa using fluorescence excitationâ€“emission matrix coupled with parallel factor analysis. Desalination, 2014, 337, 67-75.	4.0	52
83	Performance of mesoporous adsorbent resin and powdered activated carbon in mitigating ultrafiltration membrane fouling caused by algal extracellular organic matter. Desalination, 2014, 336, 129-137.	4.0	60
84	Effect of granular activated carbon addition on the effluent properties and fouling potentials of membrane-coupled expanded granular sludge bed process. Bioresource Technology, 2014, 171, 240-246.	4.8	27
85	Effect of adding wood chips on sewage sludge dewatering in a pilot-scale plate-and-frame filter press process. RSC Advances, 2014, 4, 24762-24768.	1.7	40
86	Control of natural organic matter fouling of ultrafiltration membrane by adsorption pretreatment: Comparison of mesoporous adsorbent resin and powdered activated carbon. Journal of Membrane Science, 2014, 471, 94-102.	4.1	128
87	Characterization of membrane foulants in a pilot-scale powdered activated carbonâ€“membrane bioreactor for drinking water treatment. Process Biochemistry, 2014, 49, 1741-1746.	1.8	18
88	Ultrafiltration membrane fouling caused by extracellular organic matter (EOM) from Microcystis aeruginosa: Effects of membrane pore size and surface hydrophobicity. Journal of Membrane Science, 2014, 449, 58-66.	4.1	236
89	Use of threshold flux concept to aid selection of sustainable operating flux: A multi-scale study from laboratory to full scale. Separation and Purification Technology, 2014, 123, 69-78.	3.9	10
90	Fluorescent natural organic matter fractions responsible for ultrafiltration membrane fouling: Identification by adsorption pretreatment coupled with parallel factor analysis of excitationâ€“emission matrices. Journal of Membrane Science, 2014, 464, 33-42.	4.1	98

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91	Removal of antimony (III) from polluted surface water using a hybrid coagulationâ€“flocculationâ€“ultrafiltration (CFâ€“UF) process. Chemical Engineering Journal, 2014, 254, 293-301.	6.6	70
92	Start up of a gravity flow CANON-like MBR treating surface water under low temperature. Chemical Engineering Journal, 2013, 217, 466-474.	6.6	12
93	Membrane fouling during ultrafiltration (UF) of surface water: Effects of sludge discharge interval (SDI). Desalination, 2013, 319, 18-24.	4.0	27
94	A novel integrated vertical membrane bioreactor (IVMBR) for removal of nitrogen from synthetic wastewater/domestic sewage. Chemical Engineering Journal, 2013, 223, 908-914.	6.6	22
95	Ultrafiltration membrane fouling by extracellular organic matters (EOM) of Microcystis aeruginosa in stationary phase: Influences of interfacial characteristics of foulants and fouling mechanisms. Water Research, 2012, 46, 1490-1500.	5.3	255
96	Characterization of dissolved extracellular organic matter (dEOM) and bound extracellular organic matter (bEOM) of Microcystis aeruginosa and their impacts on UF membrane fouling. Water Research, 2012, 46, 2881-2890.	5.3	316
97	Ultrafiltration (UF) membrane fouling caused by cyanobateria: Fouling effects of cells and extracellular organics matter (EOM). Desalination, 2012, 293, 30-37.	4.0	103
98	Effect of low temperature on the performance of a gravity flow CANON-like pilot plant MBR treating surface water. Desalination and Water Treatment, 0, , 1-11.	1.0	1