Huachang Hong

List of Publications by Year
in descending order

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70	5,294	81743	88477
papers	citations	39 h-index	70 g-index

70	70	70	3605
all docs	docs citations	times ranked	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. Journal of Membrane Science, 2014, 460, 110-125.	4.1	583
2	A review on anaerobic membrane bioreactors: Applications, membrane fouling and future perspectives. Desalination, 2013, 314, 169-188.	4.0	545
3	Membrane Bioreactors for Industrial Wastewater Treatment: A Critical Review. Critical Reviews in Environmental Science and Technology, 2012, 42, 677-740.	6.6	256
4	A unified thermodynamic mechanism underlying fouling behaviors of soluble microbial products (SMPs) in a membrane bioreactor. Water Research, 2019, 149, 477-487.	5.3	203
5	Membrane fouling caused by biological foams in a submerged membrane bioreactor: Mechanism insights. Water Research, 2020, 181, 115932.	5.3	189
6	New methods based on back propagation (BP) and radial basis function (RBF) artificial neural networks (ANNs) for predicting the occurrence of haloketones in tap water. Science of the Total Environment, 2021, 772, 145534.	3.9	176
7	Mechanistic insights into alginate fouling caused by calcium ions based on terahertz time-domain spectra analyses and DFT calculations. Water Research, 2018, 129, 337-346.	5.3	168
8	Feasibility evaluation of submerged anaerobic membrane bioreactor for municipal secondary wastewater treatment. Desalination, 2011, 280, 120-126.	4.0	160
9	Facile synthesis of 2D TiO2@MXene composite membrane with enhanced separation and antifouling performance. Journal of Membrane Science, 2021, 640, 119854.	4.1	154
10	Fouling mechanisms of gel layer in a submerged membrane bioreactor. Bioresource Technology, 2014, 166, 295-302.	4.8	133
11	Factors affecting THMs, HAAs and HNMs formation of Jin Lan Reservoir water exposed to chlorine and monochloramine. Science of the Total Environment, 2013, 444, 196-204.	3.9	131
12	Effects of hydrophilicity/hydrophobicity of membrane on membrane fouling in a submerged membrane bioreactor. Bioresource Technology, 2015, 175, 59-67.	4.8	130
13	Enhanced permeability and antifouling performance of polyether sulfone (PES) membrane via elevating magnetic Ni@MXene nanoparticles to upper layer in phase inversion process. Journal of Membrane Science, 2021, 623, 119080.	4.1	130
14	A new insight into membrane fouling mechanism in submerged membrane bioreactor: Osmotic pressure during cake layer filtration. Water Research, 2013, 47, 2777-2786.	5.3	117
15	Preparation of Ni@UiO-66 incorporated polyethersulfone (PES) membrane by magnetic field assisted strategy to improve permeability and photocatalytic self-cleaning ability. Journal of Colloid and Interface Science, 2022, 618, 483-495.	5.0	109
16	Environmental factors influencing the distribution of total and fecal coliform bacteria in six water storage reservoirs in the Pearl River Delta Region, China. Journal of Environmental Sciences, 2010, 22, 663-668.	3.2	93
17	Novel membranes with extremely high permeability fabricated by 3D printing and nickel coating for oil/water separation. Journal of Materials Chemistry A, 2022, 10, 12055-12061.	5.2	89
18	Quantification of interfacial energies associated with membrane fouling in a membrane bioreactor by using BP and GRNN artificial neural networks. Journal of Colloid and Interface Science, 2020, 565, 1-10.	5.0	86

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19	Thermodynamic analysis of membrane fouling in a submerged membrane bioreactor and its implications. Bioresource Technology, 2013, 146, 7-14.	4.8	83
20	Membrane fouling by alginate in polyaluminum chloride (PACl) coagulation/microfiltration process: Molecular insights. Separation and Purification Technology, 2020, 236, 116294.	3.9	79
21	Mechanisms of arsenic disruption on gonadal, adrenal and thyroid endocrine systems in humans: A review. Environment International, 2016, 95, 61-68.	4.8	78
22	Radial basis function artificial neural network (RBF ANN) as well as the hybrid method of RBF ANN and grey relational analysis able to well predict trihalomethanes levels in tap water. Journal of Hydrology, 2020, 591, 125574.	2.3	74
23	Radial basis function artificial neural network able to accurately predict disinfection by-product levels in tap water: Taking haloacetic acids as a case study. Chemosphere, 2020, 248, 125999.	4.2	69
24	A new method for modeling rough membrane surface and calculation of interfacial interactions. Bioresource Technology, 2016, 200, 451-457.	4.8	66
25	A novel composite membrane for simultaneous separation and catalytic degradation of oil/water emulsion with high performance. Chemosphere, 2022, 288, 132490.	4.2	65
26	Physicochemical correlations between membrane surface hydrophilicity and adhesive fouling in membrane bioreactors. Journal of Colloid and Interface Science, 2017, 505, 900-909.	5.0	56
27	Filtration behaviors and fouling mechanisms of ultrafiltration process with polyacrylamide flocculation for water treatment. Science of the Total Environment, 2020, 703, 135540.	3.9	55
28	Membrane fouling in a membrane bioreactor: A novel method for membrane surface morphology construction and its application in interaction energy assessment. Journal of Membrane Science, 2016, 516, 135-143.	4.1	53
29	Factors influencing DBPs occurrence in tap water of Jinhua Region in Zhejiang Province, China. Ecotoxicology and Environmental Safety, 2019, 171, 813-822.	2.9	53
30	Using simple and easy water quality parameters to predict trihalomethane occurrence in tap water. Chemosphere, 2022, 286, 131586.	4.2	52
31	Enhanced performance of a submerged membrane bioreactor with powdered activated carbon addition for municipal secondary effluent treatment. Journal of Hazardous Materials, 2011, 192, 1509-1514.	6.5	46
32	Fundamental thermodynamic mechanisms of membrane fouling caused by transparent exopolymer particles (TEP) in water treatment. Science of the Total Environment, 2022, 820, 153252.	3.9	45
33	Membrane fouling in a submerged membrane bioreactor: Effect of pH and its implications. Bioresource Technology, 2014, 152, 7-14.	4.8	44
34	Influence of membrane surface roughness on interfacial interactions with sludge flocs in a submerged membrane bioreactor. Journal of Colloid and Interface Science, 2015, 446, 84-90.	5.0	44
35	Precursors for brominated haloacetic acids during chlorination and a new useful indicator for bromine substitution factor. Science of the Total Environment, 2020, 698, 134250.	3.9	44
36	Osmotic pressure effect on membrane fouling in a submerged anaerobic membrane bioreactor and its experimental verification. Bioresource Technology, 2012, 125, 97-101.	4.8	43

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37	Effects of polysaccharides' molecular structure on membrane fouling and the related mechanisms. Science of the Total Environment, 2022, 836, 155579.	3.9	41
38	Pollutant removal and membrane fouling in an anaerobic submerged membrane bioreactor for real sewage treatment. Water Science and Technology, 2014, 69, 1712-1719.	1.2	40
39	Use of multiple regression models to evaluate the formation of halonitromethane via chlorination/chloramination of water from Tai Lake and the Qiantang River, China. Chemosphere, 2015, 119, 540-546.	4.2	39
40	Effects of surface charge on interfacial interactions related to membrane fouling in a submerged membrane bioreactor based on thermodynamic analysis. Journal of Colloid and Interface Science, 2016, 465, 33-41.	5.0	39
41	Bromine incorporation into five DBP classes upon chlorination of water with extremely low SUVA values. Science of the Total Environment, 2017, 590-591, 720-728.	3.9	39
42	Formation of disinfection by-products during chlorination of organic matter from phoenix tree leaves and Chlorella vulgaris. Environmental Pollution, 2018, 243, 1887-1893.	3.7	37
43	Membrane fouling in a submerged membrane bioreactor: New method and its applications in interfacial interaction quantification. Bioresource Technology, 2017, 241, 406-414.	4.8	36
44	Effects of ionic strength on membrane fouling in a membrane bioreactor. Bioresource Technology, 2014, 156, 35-41.	4.8	35
45	Regression models evaluating THMs, HAAs and HANs formation upon chloramination of source water collected from Yangtze River Delta Region, China. Ecotoxicology and Environmental Safety, 2018, 160, 249-256.	2.9	35
46	A novel approach for quantitative evaluation of the physicochemical interactions between rough membrane surface and sludge foulants in a submerged membrane bioreactor. Bioresource Technology, 2014, 171, 247-252.	4.8	31
47	Using regression models to evaluate the formation of trihalomethanes and haloacetonitriles via chlorination of source water with low SUVA values in the Yangtze River Delta region, China. Environmental Geochemistry and Health, 2016, 38, 1303-1312.	1.8	30
48	Thermodynamic analysis of effects of contact angle on interfacial interactions and its implications for membrane fouling control. Bioresource Technology, 2016, 201, 245-252.	4.8	30
49	Environmentally relevant concentrations of arsenite induces developmental toxicity and oxidative responses in the early life stage of zebrafish. Environmental Pollution, 2019, 254, 113022.	3.7	29
50	Influences of fractal dimension of membrane surface on interfacial interactions related to membrane fouling in a membrane bioreactor. Journal of Colloid and Interface Science, 2017, 500, 79-87.	5.0	28
51	Membrane fouling in a submerged membrane bioreactor with focus on surface properties and interactions of cake sludge and bulk sludge. Bioresource Technology, 2014, 169, 213-219.	4.8	27
52	Hydrophobic organic compounds in drinking water reservoirs: Toxic effects of chlorination and protective effects of dietary antioxidants against disinfection by-products. Water Research, 2019, 166, 115041.	5.3	25
53	Effect of nitrite on the formation of halonitromethanes during chlorination of organic matter from different origin. Journal of Hydrology, 2015, 531, 802-809.	2.3	24
54	Effects of molecular weight distribution (Md) on the performances of the polyethersulfone (PES) ultrafiltration membranes. Journal of Membrane Science, 2015, 490, 220-226.	4.1	24

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55	A novel integrated method for quantification of interfacial interactions between two rough bioparticles. Journal of Colloid and Interface Science, 2018, 516, 295-303.	5.0	24
56	Influences of acidâ€“base property of membrane on interfacial interactions related with membrane fouling in a membrane bioreactor based on thermodynamic assessment. Bioresource Technology, 2016, 214, 355-362.	4.8	23
57	Quantitative assessment of interfacial forces between two rough surfaces and its implications for anti-adhesion membrane fabrication. Separation and Purification Technology, 2017, 189, 238-245.	3.9	23
58	Experimental evidence for osmotic pressure-induced fouling in a membrane bioreactor. Bioresource Technology, 2014, 158, 119-126.	4.8	22
59	A facile strategy to prepare superhydrophilic polyvinylidene fluoride (PVDF) based membranes and the thermodynamic mechanisms underlying the improved performance. Separation and Purification Technology, 2018, 197, 271-280.	3.9	20
60	Quantitative assessment of interfacial interactions with rough membrane surface and its implications for membrane selection and fabrication in a MBR. Bioresource Technology, 2015, 179, 367-372.	4.8	18
61	Effects of ozone pretreatment on the formation of disinfection by-products and its associated bromine substitution factors upon chlorination/chloramination of Tai Lake water. Science of the Total Environment, 2014, 475, 23-28.	3.9	12
62	Membrane fouling in a submerged membrane bioreactor: An unified approach to construct topography and to evaluate interaction energy between two randomly rough surfaces. Bioresource Technology, 2017, 243, 1121-1132.	4.8	11
63	Transcriptome analyses unravel CYP1A1 and CYP1B1 as novel biomarkers for disinfection by-products (DBPs) derived from chlorinated algal organic matter. Journal of Hazardous Materials, 2020, 387, 121685.	6.5	10
64	Factors affecting formation of haloacetonitriles and haloketones during chlorination/monochloramination of Jinlan Reservoir water. Water Science and Technology: Water Supply, 2013, 13, 1123-1129.	1.0	9
65	Impacts of morphology on fouling propensity in a membrane bioreactor based on thermodynamic analyses. Journal of Colloid and Interface Science, 2018, 531, 282-290.	5.0	9
66	Precursor characteristics of mono-HAAs during chlorination and cytotoxicity of mono-HAAs on HEK-293T cells. Chemosphere, 2022, 301, 134689.	4.2	6
67	Effect of Nitrite on the Formation of Trichloronitromethane (TCNM) During Chlorination of Polyhydroxy-Phenols and Sugars. Water, Air, and Soil Pollution, 2017, 228, 1.	1.1	5
68	Thermodynamic insights into membrane fouling in a membrane bioreactor: Evaluating thermodynamic interactions with Gaussian membrane surface. Journal of Colloid and Interface Science, 2018, 527, 280-288.	5.0	5
69	Effect of Metal Ions on the Formation of Trichloronitromethane during Chlorination of Catechol and Nitrite. Journal of Environmental Quality, 2016, 45, 1933-1940.	1.0	4
70	Author's responses to the comment by Seong-Hoon Yoon on â€œA new insight into membrane fouling mechanism in submerged membrane bioreactor: Osmotic pressure during cake layer filtrationâ€• published in Water Research, vol. 47, pp.Â2777â€“2786, 2013. Water Research, 2013, 47, 4790-4791.	5.3	3