

Huaqiang Chu

List of Publications by Year in descending order

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82
papers

3,024
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117571

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2869
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#	ARTICLE	IF	CITATIONS
1	Unraveling the Overlooked Involvement of High-Valent Cobalt-Oxo Species Generated from the Cobalt(II)-Activated Peroxymonosulfate Process. <i>Environmental Science & Technology</i> , 2020, 54, 16231-16239.	4.6	310
2	Effect of TiO ₂ nanowire addition on PVDF ultrafiltration membrane performance. <i>Desalination</i> , 2011, 272, 90-97.	4.0	148
3	Enhancing methane production from rice straw by extrusion pretreatment. <i>Applied Energy</i> , 2014, 122, 34-41.	5.1	140
4	<i>Chlorella pyrenoidosa</i> cultivation using anaerobic digested starch processing wastewater in an airlift circulation photobioreactor. <i>Bioresource Technology</i> , 2014, 170, 538-548.	4.8	120
5	Pretreatment and Membrane Hydrophilic Modification to Reduce Membrane Fouling. <i>Membranes</i> , 2013, 3, 226-241.	1.4	117
6	Nutrients removal and lipids production by <i>Chlorella pyrenoidosa</i> cultivation using anaerobic digested starch wastewater and alcohol wastewater. <i>Bioresource Technology</i> , 2015, 181, 54-61.	4.8	116
7	Carbamazepine degradation by heterogeneous activation of peroxymonosulfate with lanthanum cobaltite perovskite: Performance, mechanism and toxicity. <i>Journal of Environmental Sciences</i> , 2020, 91, 10-21.	3.2	82
8	Bio-diatomite dynamic membrane reactor for micro-polluted surface water treatment. <i>Water Research</i> , 2010, 44, 1573-1579.	5.3	73
9	Effect of modified attapulgite addition on the performance of a PVDF ultrafiltration membrane. <i>Desalination</i> , 2014, 344, 71-78.	4.0	71
10	Dynamic membrane bioreactor for wastewater treatment: Operation, critical flux, and dynamic membrane structure. <i>Journal of Membrane Science</i> , 2014, 450, 265-271.	4.1	70
11	Extraction procedure optimization and the characteristics of dissolved extracellular organic matter (dEOM) and bound extracellular organic matter (bEOM) from <i>Chlorella pyrenoidosa</i> . <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 125, 238-246.	2.5	66
12	Characteristics of bio-diatomite dynamic membrane process for municipal wastewater treatment. <i>Journal of Membrane Science</i> , 2008, 325, 271-276.	4.1	63
13	Integrated anaerobic digestion and algae cultivation for energy recovery and nutrient supply from post-hydrothermal liquefaction wastewater. <i>Bioresource Technology</i> , 2018, 266, 349-356.	4.8	62
14	Amorphous nickel phosphide as a noble metal-free cathode for electrochemical dechlorination. <i>Water Research</i> , 2019, 165, 114930.	5.3	59
15	The filtration and fouling performance of membranes with different pore sizes in algae harvesting. <i>Science of the Total Environment</i> , 2017, 587-588, 87-93.	3.9	57
16	Characteristics of algogenic organic matter generated under different nutrient conditions and subsequent impact on microfiltration membrane fouling. <i>Desalination</i> , 2012, 293, 104-111.	4.0	55
17	Microalgae harvesting by an axial vibration membrane: The mechanism of mitigating membrane fouling. <i>Journal of Membrane Science</i> , 2016, 508, 127-135.	4.1	55
18	Increasing the vibration frequency to mitigate reversible and irreversible membrane fouling using an axial vibration membrane in microalgae harvesting. <i>Journal of Membrane Science</i> , 2017, 529, 215-223.	4.1	55

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19	Biological Denitrification Using Corncobs as a Carbon Source and Biofilm Carrier. <i>Water Environment Research</i> , 2009, 81, 242-247.	1.3	52
20	Effect of temperature on extracellular organic matter (EOM) of <i>Chlorella pyrenoidosa</i> and effect of EOM on irreversible membrane fouling. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 136, 431-439.	2.5	51
21	Removal of ofloxacin with biofuel production by oleaginous microalgae <i>Scenedesmus obliquus</i> . <i>Bioresource Technology</i> , 2020, 315, 123738.	4.8	48
22	Evaluation of different algogenic organic matters on the fouling of microfiltration membranes. <i>Desalination</i> , 2014, 344, 329-338.	4.0	45
23	A membrane combined process to cope with algae blooms in water. <i>Desalination</i> , 2015, 355, 99-109.	4.0	45
24	Degradation mechanism and kinetic modeling for UV/peroxydisulfate treatment of penicillin antibiotics. <i>Chemical Engineering Journal</i> , 2018, 341, 93-101.	6.6	43
25	Dewatering of <i>Chlorella pyrenoidosa</i> using diatomite dynamic membrane: Filtration performance, membrane fouling and cake behavior. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 113, 458-466.	2.5	41
26	The impact of temperature on membrane fouling in algae harvesting. <i>Algal Research</i> , 2016, 16, 458-464.	2.4	40
27	Can flow-electrode capacitive deionization become a new in-situ soil remediation technology for heavy metal removal?. <i>Journal of Hazardous Materials</i> , 2021, 402, 123568.	6.5	39
28	Characteristics of dynamic membrane filtration: structure, operation mechanisms, and cost analysis. <i>Science Bulletin</i> , 2014, 59, 247-260.	1.7	38
29	Comparison of axial vibration membrane and submerged aeration membrane in microalgae harvesting. <i>Bioresource Technology</i> , 2016, 208, 178-183.	4.8	38
30	Pollutant removal mechanisms in a bio-diatomite dynamic membrane reactor for micro-polluted surface water purification. <i>Desalination</i> , 2012, 293, 38-45.	4.0	37
31	Bio-enhanced powder-activated carbon dynamic membrane reactor for municipal wastewater treatment. <i>Journal of Membrane Science</i> , 2013, 433, 126-134.	4.1	37
32	Effects of combined ozone and PAC pretreatment on ultrafiltration membrane fouling control and mechanisms. <i>Journal of Membrane Science</i> , 2017, 533, 378-389.	4.1	37
33	Understanding the fouling of algogenic organic matter in microfiltration using membrane-foulant interaction energy analysis: Effects of organic hydrophobicity. <i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 122, 447-456.	2.5	36
34	Using axial vibration membrane process to mitigate membrane fouling and reject extracellular organic matter in microalgae harvesting. <i>Journal of Membrane Science</i> , 2016, 517, 30-38.	4.1	35
35	Impact of transmembrane pressure (TMP) on membrane fouling in microalgae harvesting with a uniform shearing vibration membrane system. <i>Algal Research</i> , 2018, 35, 613-623.	2.4	35
36	A uniform shearing vibration membrane system reducing membrane fouling in algae harvesting. <i>Journal of Cleaner Production</i> , 2018, 196, 1026-1033.	4.6	35

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37	Pilot-scale hybrid bio-diatomite/dynamic membrane reactor for slightly polluted raw water purification. <i>Desalination</i> , 2012, 285, 73-82.	4.0	33
38	Highly efficient degradation of dimethyl phthalate from Cu(II) and dimethyl phthalate wastewater by EDTA enhanced ozonation: Performance, intermediates and mechanism. <i>Journal of Hazardous Materials</i> , 2019, 366, 378-385.	6.5	33
39	The comparison between vibration and aeration on the membrane performance in algae harvesting. <i>Journal of Membrane Science</i> , 2019, 592, 117390.	4.1	29
40	The influence of four pharmaceuticals on <i>Chlorellapyrenoidosa</i> culture. <i>Scientific Reports</i> , 2019, 9, 1624.	1.6	28
41	Effects on the purification of tannic acid and natural dissolved organic matter by forward osmosis membrane. <i>Journal of Membrane Science</i> , 2014, 455, 31-43.	4.1	24
42	Improve the biodegradability of post-hydrothermal liquefaction wastewater with ozone: conversion of phenols and N-heterocyclic compounds. <i>Water Science and Technology</i> , 2018, 2017, 248-255.	1.2	23
43	Ultrafiltration membrane fouling performance by mixtures with micromolecular and macromolecular organics. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 277-286.	1.2	20
44	Remarkable phosphate recovery from wastewater by a novel Ca/Fe composite: Synergistic effects of crystal structure and abundant oxygen-vacancies. <i>Chemosphere</i> , 2021, 266, 129102.	4.2	20
45	Pretreatment of micro-polluted surface water with a biologically enhanced PACâ€“diatomite dynamic membrane reactor to produce drinking water. <i>Desalination and Water Treatment</i> , 2012, 40, 84-91.	1.0	19
46	Activation of dissolved molecular oxygen by Cu(0) for bisphenol a degradation: Role of Cu(0) and formation of reactive oxygen species. <i>Chemosphere</i> , 2020, 241, 125034.	4.2	19
47	Characteristics of the biodiatomite dynamic membrane (cake layer) for municipal wastewater treatment. <i>Desalination</i> , 2010, 250, 544-547.	4.0	18
48	Forward osmosis filtration for removal of organic foulants: Effects of combined tannic and alginic acids. <i>Water Research</i> , 2016, 91, 251-263.	5.3	18
49	Intelligent mitigation of fouling by means of membrane vibration for algae separation: Dynamics model, comprehensive evaluation, and critical vibration frequency. <i>Water Research</i> , 2020, 182, 115972.	5.3	18
50	UF fouling behavior of allelopathy of extracellular organic matter produced by mixed algae co-cultures. <i>Separation and Purification Technology</i> , 2021, 261, 118297.	3.9	18
51	A promising microalgal wastewater cyclic cultivation technology: Dynamic simulations, economic viability, and environmental suitability. <i>Water Research</i> , 2022, 217, 118411.	5.3	18
52	Dewatering of <i>Chlorella pyrenoidosa</i> using a diatomite dynamic membrane: Characteristics of a long-term operation. <i>Journal of Membrane Science</i> , 2015, 492, 340-347.	4.1	17
53	Multi-dimensional in-depth dissection the algae-related membrane fouling in heterotrophic microalgae harvesting: Deposition dynamics, algae cake formation, and interaction force analysis. <i>Journal of Membrane Science</i> , 2021, 635, 119501.	4.1	17
54	Effect of temperature on the conversion ratio of glucose to <i>Chlorella pyrenoidosa</i> cells: Reducing the cost of cultivation. <i>Algal Research</i> , 2015, 12, 431-435.	2.4	16

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55	Evaluation of humic acid removal by a flat submerged membrane photoreactor. <i>Science Bulletin</i> , 2011, 56, 3437-3444.	1.7	15
56	Simultaneous molybdate (Mo(VI)) recovery and hazardous ions immobilization via nanoscale zerovalent iron. <i>Journal of Hazardous Materials</i> , 2018, 344, 698-706.	6.5	15
57	The Degradation of Natural Organic Matter in Surface Water by a Nano-TiO ₂ /Diatomite Photocatalytic Reactor. <i>Clean - Soil, Air, Water</i> , 2014, 42, 1190-1198.	0.7	14
58	Fouling effects of algogenic organic matters during nanofiltration of naproxen. <i>Desalination</i> , 2014, 350, 69-78.	4.0	14
59	Natural organic matter separation by forward osmosis: Performance and mechanisms. <i>Water Research</i> , 2021, 191, 116829.	5.3	13
60	Effects of macro-porous anion exchange and coagulation treatment on organic removal and membrane fouling reduction in water treatment. <i>Desalination</i> , 2015, 355, 204-216.	4.0	12
61	Gravity filtration performances of the bio-diatomite dynamic membrane reactor for slightly polluted surface water purification. <i>Water Science and Technology</i> , 2012, 66, 1139-1146.	1.2	11
62	Characterization of dissolved organic matter in a dynamic membrane bioreactor for wastewater treatment. <i>Science Bulletin</i> , 2013, 58, 1717-1724.	1.7	10
63	Performance enhancement and fouling alleviation by controlling transmembrane pressure in a vibration membrane system for algae separation. <i>Journal of Membrane Science</i> , 2022, 647, 120252.	4.1	10
64	Study on surface water treatment by hybrid sand filtration and nanofiltration. <i>Desalination and Water Treatment</i> , 2013, 51, 5327-5336.	1.0	9
65	Cu(II)-enhanced activation of molecular oxygen using Fe(II): Factors affecting the yield of oxidants. <i>Chemosphere</i> , 2019, 221, 383-391.	4.2	8
66	Effect of PACs pretreatment on UF performance for NOM removal. <i>Desalination and Water Treatment</i> , 2014, 52, 6878-6885.	1.0	7
67	Performance and properties of coking nanofiltration concentrate treatment and membrane fouling mitigation by an Fe(III)/persulfate-coagulation-ultrafiltration process. <i>RSC Advances</i> , 2019, 9, 15277-15287.	1.7	7
68	The interaction between microalgae and membrane surface in filtration by uniform shearing vibration membrane. <i>Algal Research</i> , 2020, 50, 102012.	2.4	7
69	Nutrients recycling and energy evaluation in a closed microalgal biofuel production system. <i>Algal Research</i> , 2018, 33, 399-405.	2.4	5
70	Simulation of cake layer topography in heterotrophic microalgae harvesting based on interface modified diffusion-limited-aggregation (IMDLA) and its implications for membrane fouling control. <i>Journal of Membrane Science</i> , 2021, 620, 118837.	4.1	5
71	Application of Coagulation-Membrane Rotation to Improve Ultrafiltration Performance in Drinking Water Treatment. <i>Membranes</i> , 2021, 11, 643.	1.4	4
72	Removal of natural organic matter in full-scale conventional and advanced water treatment plants: Assimilable organic carbon and its precursors. <i>Chemical Engineering Journal Advances</i> , 2021, 8, 100183.	2.4	4

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73	PAC-UF Process Improving Surface Water Treatment: PAC Effects and Membrane Fouling Mechanism. <i>Membranes</i> , 2022, 12, 487.	1.4	4
74	A Pilot-Scale Diatomite Membrane Bioreactor for Slightly Polluted Surface Water Treatment. <i>Clean - Soil, Air, Water</i> , 2018, 46, 1700117.	0.7	3
75	Multiple views of biological stability and optimized coagulation in the control of biostability in traditional water treatment processes: a pilot test. <i>Desalination and Water Treatment</i> , 2016, 57, 18619-18629.	1.0	2
76	Ultrafiltration of distinct natural waters: correlation of fouling resistances with water constituents. , 0, 68, 40-48.		2
77	Characterizing dissolved organic matter fouling of nanofiltration membranes and evaluating effects of naproxen retention. <i>Desalination and Water Treatment</i> , 0, , 1-13.	1.0	1
78	Fouling and Cake Behavior of Algal Organic Foulants on Microfiltration Membranes in Various Growth Phases. <i>Clean - Soil, Air, Water</i> , 2016, 44, 1661-1671.	0.7	1
79	Cellulose triacetate (CTA)-based forward osmosis membranes for water purification: optimization of dope solution composition and preparation conditions. , 0, 106, 11-20.		1
80	Diatomite Dynamic Membrane Fouling Behaviour during Dewatering of <i>Chlorella pyrenoidosa</i> in Aquaculture Wastewater. <i>Membranes</i> , 2021, 11, 945.	1.4	1
81	Characteristics of the Bio-enhanced powder activated carbon dynamic membrane reactor for municipal wastewater treatment. , 2011, , .		0
82	Assessing pre-adsorption time impact on ultrafiltration performance for surface water treatment. <i>Water Science and Technology: Water Supply</i> , 2018, 18, 950-955.	1.0	0