Jeonghwan Kim

List of Publications by Year
in descending order

89 papers	6,759 citations	117625 34 h-index	60623 81 g-index
91 all docs	91 docs citations	91 times ranked	6038 citing authors

#	Article	IF	Citations
1	Response surface methodology to investigate the effects of operational parameters on membrane fouling and organic matter rejection in hard-shell encased hollow-fiber membrane. Chemosphere, 2022, 287, 132132.	8.2	11
2	Dynamic anaerobic membrane bioreactor coupled with sulfate reduction (SrDMBR) for saline wastewater treatment. Bioresource Technology, 2022, 346, 126447.	9.6	8
3	Surface modification of polymeric media coated with conductive polyaniline to enhance methane production for anaerobic low-strength wastewater treatment. Applied Surface Science, 2022, 577, 151859.	6.1	4
4	Biochar as a catalyst in the production of syngas and biodiesel from peanut waste. International Journal of Energy Research, 2022, 46, 19287-19299.	4.5	1
5	Rejections and membrane fouling of submerged direct contact hollow-fiber membrane distillation as post-treatment for anaerobic fluidized bed bioreactor treating domestic sewage. Chemosphere, 2022, 296, 133964.	8.2	3
6	Membrane distillation bioreactor (MDBR) for wastewater treatment, water reuse, and resource recovery: A review. Journal of Water Process Engineering, 2022, 47, 102687.	5.6	29
7	Polyaniline-coated conductive media promotes direct interspecies electrons transfer (DIET) and kinetics enhancement of low-strength wastewater treatment in anaerobic fluidized bed membrane bioreactor (AFMBR). Chemical Engineering Journal, 2022, 446, 136711.	12.7	4
8	Hybrid forward osmosis/membrane distillation integrated with anaerobic fluidized bed bioreactor for advanced wastewater treatment. Journal of Hazardous Materials, 2021, 404, 124160.	12.4	16
9	Trends and progress in AnMBR for domestic wastewater treatment and their impacts on process efficiency and membrane fouling. Environmental Technology and Innovation, 2021, 21, 101204.	6.1	35
10	Improvement of Membrane Distillation Using PVDF Membrane Incorporated with TiO2 Modified by Silane and Optimization of Fabricating Conditions. Membranes, 2021, 11, 95.	3.0	12
11	Combined Effect of Activated Carbon Particles and Non-Adsorptive Spherical Beads as Fluidized Media on Fouling, Organic Removal and Microbial Communities in Anaerobic Membrane Bioreactor. Membranes, 2021, 11, 365.	3.0	8
12	Organic Fouling Impact in a Direct Contact Membrane Distillation System Treating Wastewater: Experimental Observations and Modeling Approach. Membranes, 2021, 11, 493.	3.0	7
13	Long-term performance evaluation of granular activated carbon fluidization and biogas sparging in anaerobic fluidized bed membrane bioreactor: Membrane fouling and micropollutant removal. Chemical Engineering Research and Design, 2021, 154, 425-432.	5.6	14
14	Effect of interactions between ammonium and organic fouling simulated by sodium alginate on performance of direct contact membrane distillation. Separation and Purification Technology, 2021, 278, 119551.	7.9	11
15	Alumina Membrane Bioreactor. , 2020, , 115-139.		0
16	Hybrid ceramic membrane reactor combined with fluidized adsorbents and scouring agents for hazardous metal-plating wastewater treatment. Journal of Hazardous Materials, 2020, 388, 121777.	12.4	13
17	Anaerobic Membrane Bioreactors for Nonpotable Water Reuse and Energy Recovery. Journal of Environmental Engineering, ASCE, 2020, 146, .	1.4	34
18	Partially coated TiO2 on Al2O3 membrane for high water flux and photodegradation by novel filtration strategy in photocatalytic membrane reactors. Chemical Engineering Research and Design, 2020, 163, 138-148.	5.6	20

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19	Fabrication of polymeric membranes for membrane distillation process and application for wastewater treatment: Critical review. Chemical Engineering Research and Design, 2020, 141, 190-201.	5.6	79
20	Permeate Flux and Rejection Behavior in Submerged Direct Contact Membrane Distillation Process Treating a Low-Strength Synthetic Wastewater. Applied Sciences (Switzerland), 2020, 10, 677.	2.5	8
21	Removal of organic micropollutants in anaerobic membrane bioreactors in wastewater treatment: critical review. Environmental Science: Water Research and Technology, 2020, 6, 1230-1243.	2.4	29
22	Alginate to simulate biofouling in submerged fluidized ceramic membrane reactor: Effect of solution pH and ionic strength. Bioresource Technology, 2020, 302, 122813.	9.6	13
23	Use of polymeric scouring agent as fluidized media in anaerobic fluidized bed membrane bioreactor for wastewater treatment: System performance and microbial community. Journal of Membrane Science, 2020, 606, 118121.	8.2	25
24	Feasibility of the highly-permselective forward osmosis membrane process for the post-treatment of the anaerobic fluidized bed bioreactor effluent. Desalination, 2020, 485, 114451.	8.2	8
25	Structural characteristics of hazardous organic dyes and relationship between membrane fouling and organic removal efficiency in fluidized ceramic membrane reactor. Journal of Cleaner Production, 2019, 232, 608-616.	9.3	28
26	Membrane distillation as post-treatment for anaerobic fluidized bed membrane bioreactor for organic and nitrogen removal. Chemosphere, 2019, 234, 756-762.	8.2	25
27	ZnS nanoparticles as new additive for polyethersulfone membrane in humic acid filtration. Journal of Industrial and Engineering Chemistry, 2019, 79, 71-78.	5.8	39
28	Removals of micropollutants in staged anaerobic fluidized bed membrane bioreactor for low-strength wastewater treatment. Chemical Engineering Research and Design, 2019, 127, 162-170.	5.6	32
29	Diethylene Glycol-Assisted Organized TiO2 Nanostructures for Photocatalytic Wastewater Treatment Ceramic Membranes. Water (Switzerland), 2019, 11, 750.	2.7	10
30	Anaerobic membrane bioreactors for wastewater treatment: Novel configurations, fouling control and energy considerations. Bioresource Technology, 2019, 283, 358-372.	9.6	183
31	Metatranscriptomic evidence for classical and RuBisCO-mediated CO2 reduction to methane facilitated by direct interspecies electron transfer in a methanogenic system. Scientific Reports, 2019, 9, 4116.	3.3	30
32	Membrane separation processes for dehydration of bioethanol from fermentation broths: Recent developments, challenges, and prospects. Renewable and Sustainable Energy Reviews, 2019, 105, 427-443.	16.4	94
33	Modelling tool to assess membrane regeneration by periodical hydraulic cleaning and fouling control in pressurized membrane process for surface water treatment. Environmental Earth Sciences, 2019, 78, 1.	2.7	7
34	Preparation and immobilization of zinc sulfide (ZnS) nanoparticles on polyvinylidene fluoride pellets for photocatalytic degradation of methylene blue in wastewater. Applied Surface Science, 2019, 473, 425-432.	6.1	28
35	Investigating membrane fouling associated with GAC fluidization on membrane with effluent from anaerobic fluidized bed bioreactor in domestic wastewater treatment. Environmental Science and Pollution Research, 2019, 26, 1170-1180.	5.3	29
36	Membrane scouring to control fouling under fluidization of non-adsorbing media for wastewater treatment. Environmental Science and Pollution Research, 2019, 26, 1061-1071.	5.3	19

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37	Particle-sparged anaerobic membrane bioreactor with fluidized polyethylene terephthalate beads for domestic wastewater treatment: Modelling approach and fouling control. Bioresource Technology, 2018, 258, 263-269.	9.6	46
38	Novel staged anaerobic fluidized bed ceramic membrane bioreactor: Energy reduction, fouling control and microbial characterization. Journal of Membrane Science, 2018, 553, 200-208.	8.2	84
39	Modelling approach to better control biofouling in fluidized bed membrane bioreactor for wastewater treatment. Chemosphere, 2018, 191, 136-144.	8.2	25
40	Effect of polymer template on structure and membrane fouling of TiO 2 /Al 2 O 3 composite membranes for wastewater treatment. Journal of Industrial and Engineering Chemistry, 2018, 57, 55-63.	5.8	20
41	A review on anaerobic membrane bioreactors (AnMBRs) focused on modelling and control aspects. Bioresource Technology, 2018, 270, 612-626.	9.6	106
42	Recent developments in biofouling control in membrane bioreactors for domestic wastewater treatment. Separation and Purification Technology, 2018, 206, 297-315.	7.9	134
43	Water sustainability: a spectrum of innovative technology and remediation methods. Environmental Earth Sciences, 2018, 77, 1.	2.7	0
44	Submerged low-cost pyrophyllite ceramic membrane filtration combined with GAC as fluidized particles for industrial wastewater treatment. Chemosphere, 2018, 206, 784-792.	8.2	51
45	Anaerobic membrane bioreactors for biohydrogen production: Recent developments, challenges and perspectives. Bioresource Technology, 2018, 269, 452-464.	9.6	100
46	Well-organized, mesoporous nanocrystalline TiO2 on alumina membranes with hierarchical architecture: Antifouling and photocatalytic activities. Catalysis Today, 2017, 282, 2-12.	4.4	34
47	Macroscopic approach to develop fouling model under GAC fluidization in anaerobic fluidized bed membrane bioreactor. Journal of Industrial and Engineering Chemistry, 2017, 49, 219-229.	5.8	44
48	Low energy single-staged anaerobic fluidized bed ceramic membrane bioreactor (AFCMBR) for wastewater treatment. Bioresource Technology, 2017, 240, 33-41.	9.6	107
49	Membrane fouling by sodium alginate in high salinity conditions to simulate biofouling during seawater desalination. Bioresource Technology, 2017, 240, 106-114.	9.6	47
50	Modifications of polyethersulfone membrane by doping sulfated-TiO₂ nanoparticles for improving anti-fouling property in wastewater treatment. RSC Advances, 2017, 7, 33822-33828.	3.6	46
51	A modelling approach to study the fouling of an anaerobic membrane bioreactor for industrial wastewater treatment. Bioresource Technology, 2017, 245, 207-215.	9.6	51
52	Biologically induced mineralization in anaerobic membrane bioreactors: Assessment of membrane scaling mechanisms in a long-term pilot study. Journal of Membrane Science, 2017, 543, 342-350.	8.2	29
53	Membrane bioreactors for wastewater treatment: A review of mechanical cleaning by scouring agents to control membrane fouling. Chemical Engineering Journal, 2017, 307, 897-913.	12.7	254
54	Preparation and characterization of polyethersulfone mixed matrix membranes embedded with Ti- or Zr-incorporated SBA-15 materials. Journal of Industrial and Engineering Chemistry, 2017, 45, 257-265.	5.8	25

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55	Nanostructured Ceramic Photocatalytic Membrane Modified with a Polymer Template for Textile Wastewater Treatment. Applied Sciences (Switzerland), 2017, 7, 1284.	2.5	33
56	In-situ TiO2 Formation and Performance on Ceramic Membranes in Photocatalytic Membrane Reactor. Membrane Journal, 2017, 27, 328-335.	0.4	6
57	Effects of FeCl3 addition on the operation of a staged anaerobic fluidized membrane bioreactor (SAF-MBR). Water Science and Technology, 2016, 74, 130-137.	2.5	12
58	Development and application of a procedure for evaluating the long-term integrity of membranes for the anaerobic fluidized membrane bioreactor (AFMBR). Water Science and Technology, 2016, 74, 457-465.	2.5	17
59	Photocatalytic systems as an advanced environmental remediation: Recent developments, limitations and new avenues for applications. Journal of Environmental Chemical Engineering, 2016, 4, 4143-4164.	6.7	211
60	Fouling behavior and system performance in membrane bioreactor introduced by granular media as a mechanical cleaning effect on membranes. Desalination and Water Treatment, 2016, 57, 9018-9026.	1.0	8
61	Integrity of hollow-fiber membranes in a pilot-scale anaerobic fluidized membrane bioreactor (AFMBR) after two-years of operation. Separation and Purification Technology, 2016, 162, 101-105.	7.9	60
62	Anaerobic fluidized membrane bioreactor polishing of baffled reactor effluent during treatment of dilute wastewater. Journal of Chemical Technology and Biotechnology, 2015, 90, 391-397.	3.2	21
63	Analysis of membrane fouling with porous membrane filters by microbial suspensions for autotrophic nitrogen transformations. Separation and Purification Technology, 2015, 146, 284-293.	7.9	44
64	Anaerobic Fluidized Bed Membrane Bioreactors for the Treatment of Domestic Wastewater. , 2015, , 211-242.		5
65	Humic acid fouling in a submerged photocatalytic membrane reactor with binary TiO 2 â€"ZrO 2 particles. Journal of Industrial and Engineering Chemistry, 2015, 21, 779-786.	5.8	44
66	The effect of fluidized media characteristics on membrane fouling and energy consumption in anaerobic fluidized membrane bioreactors. Separation and Purification Technology, 2014, 132, 10-15.	7.9	110
67	Anaerobic treatment of low-strength wastewater: A comparison between single and staged anaerobic fluidized bed membrane bioreactors. Bioresource Technology, 2014, 165, 75-80.	9.6	87
68	Pilot-scale temperate-climate treatment of domestic wastewater with a staged anaerobic fluidized membrane bioreactor (SAF-MBR). Bioresource Technology, 2014, 159, 95-103.	9.6	221
69	Embedding TiO2 nanoparticles versus surface coating by layer-by-layer deposition on nanoporous polymeric films. Microporous and Mesoporous Materials, 2013, 173, 121-128.	4.4	33
70	Analysis of local fouling in a pilot-scale submerged hollow-fiber membrane system for drinking water treatment by membrane autopsy. Separation and Purification Technology, 2012, 95, 227-234.	7.9	19
71	Anaerobic treatment of municipal wastewater with a staged anaerobic fluidized membrane bioreactor (SAF-MBR) system. Bioresource Technology, 2012, 120, 133-139.	9.6	157
72	Electrochemical denitrification of metal-finishing wastewater: Influence of operational parameters. Korean Journal of Chemical Engineering, 2012, 29, 483-488.	2.7	10

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73	A new outlook on membrane enhancement with nanoparticles: The alternative of ZnO. Journal of Membrane Science, 2012, 389, 155-161.	8.2	355
74	Anaerobic Fluidized Bed Membrane Bioreactor for Wastewater Treatment. Environmental Science & Technology, 2011, 45, 576-581.	10.0	414
75	Domestic Wastewater Treatment as a Net Energy Producerâ€"Can This be Achieved?. Environmental Science & Technology, 2011, 45, 7100-7106.	10.0	1,406
76	Nanofiltration membranes enhanced with TiO₂nanoparticles: a comprehensive study. Desalination and Water Treatment, 2011, 34, 179-183.	1.0	21
77	Doping of polyethersulfone nanofiltration membranes: antifouling effect observed at ultralow concentrations of TiO2 nanoparticles. Journal of Materials Chemistry, 2011, 21, 10311.	6.7	139
78	Effect of nanoparticle aggregation at low concentrations of TiO2 on the hydrophilicity, morphology, and fouling resistance of PESâ€"TiO2 membranes. Journal of Colloid and Interface Science, 2011, 363, 540-550.	9.4	185
79	Mesophilic anaerobic digestion of corn thin stillage: a technical and energetic assessment of the cornâ€toâ€ethanol industry integrated with anaerobic digestion. Journal of Chemical Technology and Biotechnology, 2011, 86, 1514-1520.	3.2	36
80	The use of nanoparticles in polymeric and ceramic membrane structures: Review of manufacturing procedures and performance improvement for water treatment. Environmental Pollution, 2010, 158, 2335-2349.	7.5	706
81	Direct observations of membrane scale in membrane bioreactor for wastewater treatment application. Water Science and Technology, 2010, 61, 2267-2272.	2.5	5
82	Membrane autopsy to investigate CaCO₃ scale formation in pilotâ€scale, submerged membrane bioreactor treating calciumâ€rich wastewater. Journal of Chemical Technology and Biotechnology, 2009, 84, 1397-1404.	3.2	26
83	Fouling models for low-pressure membrane systems. Separation and Purification Technology, 2009, 68, 293-304.	7.9	65
84	Interactions of Aqueous NOM with Nanoscale TiO₂: Implications for Ceramic Membrane Filtration-Ozonation Hybrid Process. Environmental Science & Technology, 2009, 43, 5488-5494.	10.0	67
85	Autopsy of high-pressure membranes to compare effectiveness of MF and UF pretreatment in water reclamation. Water Research, 2008, 42, 697-706.	11.3	37
86	Particle fouling in submerged microfiltration membranes: effects of hollow-fiber length and aeration rate. Journal of Water Supply: Research and Technology - AQUA, 2006, 55, 535-547.	1.4	9
87	Defining critical flux in submerged membranes: Influence of length-distributed flux. Journal of Membrane Science, 2006, 280, 752-761.	8.2	36
88	A two-fiber, bench-scale test of ultrafiltration (UF) for investigation of fouling rate and characteristics. Journal of Membrane Science, 2006, 271, 196-204.	8.2	30
89	Combined effect of periodic backwashing and forward flushing on fouling mitigation in a pressurized UF membrane process for high turbid surface water treatment. , 0, 101, 24-30.		3