Chen Zhou

List of Publications by Year
in descending order

53	1,938	218677	265206
papers	citations	26 h-index	42 g-index

55	55	55	1516
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bioreduction of Chromate in a Methane-Based Membrane Biofilm Reactor. Environmental Science & Technology, 2016, 50, 5832-5839.	10.0	120
2	Selenate and Nitrate Bioreductions Using Methane as the Electron Donor in a Membrane Biofilm Reactor. Environmental Science & Technology, 2016, 50, 10179-10186.	10.0	119
3	Uranium removal and microbial community inÂaÂH 2 -based membrane biofilm reactor. Water Research, 2014, 64, 255-264.	11.3	86
4	Hydrogen permeability of the hollow fibers used in H2-based membrane biofilm reactors. Journal of Membrane Science, 2012, 407-408, 176-183.	8.2	85
5	Concomitant Cr(VI) reduction and Cr(III) precipitation with nitrate in a methane/oxygen-based membrane biofilm reactor. Chemical Engineering Journal, 2017, 315, 58-66.	12.7	83
6	A pH-control model for heterotrophic and hydrogen-based autotrophic denitrification. Water Research, 2011, 45, 232-240.	11.3	73
7	Palladium Recovery in a H₂-Based Membrane Biofilm Reactor: Formation of Pd(0) Nanoparticles through Enzymatic and Autocatalytic Reductions. Environmental Science & Technology, 2016, 50, 2546-2555.	10.0	72
8	Complete dechlorination and mineralization of pentachlorophenol (PCP) in a hydrogen-based membrane biofilm reactor (MBfR). Water Research, 2018, 144, 134-144.	11.3	71
9	The distribution of phosphorus and its transformations during batch growth of Synechocystis. Water Research, 2017, 122, 355-362.	11.3	67
10	Coupling of Pd nanoparticles and denitrifying biofilm promotes H2-based nitrate removal with greater selectivity towards N2. Applied Catalysis B: Environmental, 2017, 206, 461-470.	20.2	60
11	Reductive precipitation of sulfate and soluble Fe(III) by Desulfovibrio vulgaris: Electron donor regulates intracellular electron flow and nano-FeS crystallization. Water Research, 2017, 119, 91-101.	11.3	60
12	Enhanced biological stabilization of heavy metals in sediment using immobilized sulfate reducing bacteria beads with inner cohesive nutrient. Journal of Hazardous Materials, 2017, 324, 340-347.	12.4	56
13	The roles of methanogens and acetogens in dechlorination of trichloroethene using different electron donors. Environmental Science and Pollution Research, 2015, 22, 19039-19047.	5.3	49
14	Hydrogenotrophic Microbial Reduction of Oxyanions With the Membrane Biofilm Reactor. Frontiers in Microbiology, 2018, 9, 3268.	3.5	49
15	Effect of growth conditions on microbial activity and iron-sulfide production by Desulfovibrio vulgaris. Journal of Hazardous Materials, 2014, 272, 28-35.	12.4	48
16	Para-Chlorophenol (4-CP) Removal by a Palladium-Coated Biofilm: Coupling Catalytic Dechlorination and Microbial Mineralization via Denitrification. Environmental Science & Technology, 2021, 55, 6309-6319.	10.0	45
17	A biofilm model to understand the onset of sulfate reduction in denitrifying membrane biofilm reactors. Biotechnology and Bioengineering, 2013, 110, 763-772.	3.3	43
18	Bioreduction of nitrate in groundwater using a pilot-scale hydrogen-based membrane biofilm reactor. Frontiers of Environmental Science and Engineering in China, 2010, 4, 280-285.	0.8	37

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19	Direct delivery of CO 2 into a hydrogen-based membrane biofilm reactor and model development. Chemical Engineering Journal, 2016, 290, 154-160.	12.7	35
20	Long-Term Continuous Co-reduction of 1,1,1-Trichloroethane and Trichloroethene over Palladium Nanoparticles Spontaneously Deposited on H₂-Transfer Membranes. Environmental Science & Technology, 2021, 55, 2057-2066.	10.0	34
21	Stable dechlorination of Trichloroacetic Acid (TCAA) to acetic acid catalyzed by palladium nanoparticles deposited on H2-transfer membranes. Water Research, 2021, 192, 116841.	11.3	34
22	Dechlorination of 2,4-dichlorophenol in a hydrogen-based membrane palladium-film reactor: Performance, mechanisms, and model development. Water Research, 2021, 188, 116465.	11.3	33
23	Direct solidâ€state evidence of H₂â€induced partial U(VI) reduction concomitant with adsorption by extracellular polymeric substances (EPS). Biotechnology and Bioengineering, 2018, 115, 1685-1693.	3.3	31
24	Accurate O₂ delivery enabled benzene biodegradation through aerobic activation followed by denitrificationâ€coupled mineralization. Biotechnology and Bioengineering, 2018, 115, 1988-1999.	3.3	30
25	Enhanced performance of short-time aerobic digestion for waste activated sludge under the presence of cocoamidopropyl betaine. Chemical Engineering Journal, 2017, 320, 494-500.	12.7	28
26	Total electron acceptor loading and composition affect hexavalent uranium reduction and microbial community structure in a membrane biofilm reactor. Water Research, 2017, 125, 341-349.	11.3	28
27	Low concentrations of Al(III) accelerate the formation of biofilm: Multiple effects of hormesis and flocculation. Science of the Total Environment, 2018, 634, 516-524.	8.0	27
28	Complete dechlorination and mineralization of para-chlorophenol (4-CP) in a hydrogen-based membrane biofilm reactor (MBfR). Journal of Cleaner Production, 2020, 276, 123257.	9.3	27
29	H₂-Based Membrane Catalyst-Film Reactor (H₂-MCfR) Loaded with Palladium for Removing Oxidized Contaminants in Water. Environmental Science & Technology, 2021, 55, 7082-7093.	10.0	27
30	Growth of Desulfovibrio vulgaris When Respiring U(VI) and Characterization of Biogenic Uraninite. Environmental Science & Technology, 2014, 48, 6928-6937.	10.0	26
31	Adsorption and Reductive Defluorination of Perfluorooctanoic Acid over Palladium Nanoparticles. Environmental Science & Technology, 2021, 55, 14836-14843.	10.0	26
32	Biofilm-enhanced continuous synthesis and stabilization of palladium nanoparticles (PdNPs). Environmental Science: Nano, 2016, 3, 1396-1404.	4.3	25
33	Using flow cytometry to evaluate thermal extraction of EPS from Synechocystis sp. PCC 6803. Algal Research, 2016, 20, 276-281.	4.6	24
34	Co-removal of 2,4-dichlorophenol and nitrate using a palladized biofilm: Denitrification-promoted microbial mineralization following catalytic dechlorination. Journal of Hazardous Materials, 2022, 422, 126916.	12.4	24
35	How myristyltrimethylammonium bromide enhances biomass harvesting and pigments extraction from Synechocystis sp. PCC 6803. Water Research, 2017, 126, 189-196.	11.3	23
36	A Synergistic Platform for Continuous Co-removal of 1,1,1-Trichloroethane, Trichloroethene, and 1,4-Dioxane via Catalytic Dechlorination Followed by Biodegradation. Environmental Science & Technology, 2021, 55, 6363-6372.	10.0	23

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37	Palladium (Pd⁰) Loading-Controlled Catalytic Activity and Selectivity for Chlorophenol Hydrodechlorination and Hydrosaturation. Environmental Science & Technology, 2022, 56, 4447-4456.	10.0	22
38	A kinetic model for 2,4-dichlorophenol adsorption and hydrodechlorination over a palladized biofilm. Water Research, 2022, 214, 118201.	11.3	19
39	Comparing heterotrophic and hydrogen-based autotrophic denitrification reactors for effluent water quality and post-treatment. Water Science and Technology: Water Supply, 2012, 12, 227-233.	2.1	18
40	Enhancing denitrification using a novel in situ membrane biofilm reactor (isMBfR). Water Research, 2017, 119, 234-241.	11.3	18
41	Unsuccessful Urban Governance of Brownfield Land Redevelopment: A Lesson from the Toxic Soil Event in Changzhou, China. Sustainability, 2017, 9, 824.	3.2	16
42	Evaluation of Zinc Oxide Nanoparticles-Induced Effects on Nitrogen and Phosphorus Removal from Real and Synthetic Municipal Wastewater. Industrial & Engineering Chemistry Research, 2019, 58, 7929-7936.	3.7	16
43	Microbial transformations by sulfur bacteria can recover value from phosphogypsum: A global problem and a possible solution. Biotechnology Advances, 2022, 57, 107949.	11.7	15
44	Anaerobic biodegradation of catechol by sediment microorganisms: Interactive roles of N reduction and S cycling. Journal of Cleaner Production, 2019, 230, 80-89.	9.3	14
45	Hydrogen-Based Nitrate and Selenate Bioreductions in Flue-Gas Desulfurization Brine. Journal of Environmental Engineering, ASCE, 2011, 137, 63-68.	1.4	13
46	Electronâ€acceptor loadings affect chloroform dechlorination in a hydrogenâ€based membrane biofilm reactor. Biotechnology and Bioengineering, 2019, 116, 1439-1448.	3.3	13
47	Hydrodefluorination of Perfluorooctanoic Acid in the H₂-Based Membrane Catalyst-Film Reactor with Platinum Group Metal Nanoparticles: Pathways and Optimal Conditions. Environmental Science & Technology, 2021, 55, 16699-16707.	10.0	13
48	Locked post-fossil consumption of urban decentralized solar photovoltaic energy: A case study of an on-grid photovoltaic power supply community in Nanjing, China. Applied Energy, 2016, 172, 1-11.	10.1	9
49	Biogenic nano-particulate iron-sulfide produced through sulfate and Fe(<scp>iii</scp>)-(hydr)oxide reductions was enhanced by pyruvate as the electron donor. RSC Advances, 2015, 5, 100750-100761.	3.6	8
50	The Nature and Oxidative Reactivity of Urban Magnetic Nanoparticle Dust Provide New Insights into Potential Neurotoxicity Studies. Environmental Science & Technology, 2020, 54, 10599-10609.	10.0	7
51	Using carrier surface loading to design heterotrophic denitrification reactors. Journal - American Water Works Association, 2011, 103, 68-78.	0.3	4
52	Modeling Trichloroethene Reduction, Methanogenesis, and Homoacetogenesis in a H2-Based Biofilm. Journal of Environmental Engineering, ASCE, 2020, 146, .	1.4	3
53	Reductive destruction of multiple nitrated energetics over palladium nanoparticles in the H2-based membrane catalyst-film reactor (MCfR). Journal of Hazardous Materials, 2022, 423, 127055.	12.4	2