

Bruce E Rittmann

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4156966/publications.pdf>

Version: 2024-02-01

250
papers

13,414
citations

22099

59
h-index

31759

101
g-index

279
all docs

279
docs citations

279
times ranked

11552
citing authors

#	ARTICLE	IF	CITATIONS
1	Reductive destruction of multiple nitrated energetics over palladium nanoparticles in the H ₂ -based membrane catalyst-film reactor (MCFR). <i>Journal of Hazardous Materials</i> , 2022, 423, 127055.	6.5	2
2	Co-removal of 2,4-dichlorophenol and nitrate using a palladized biofilm: Denitrification-promoted microbial mineralization following catalytic dechlorination. <i>Journal of Hazardous Materials</i> , 2022, 422, 126916.	6.5	24
3	The influent COD/N ratio controlled the linear alkylbenzene sulfonate biodegradation and extracellular polymeric substances accumulation in an oxygen-based membrane biofilm reactor. <i>Journal of Hazardous Materials</i> , 2022, 422, 126862.	6.5	18
4	Selective acceleration of 2-hydroxyl pyridine mono-oxygenation using specially acclimated biomass. <i>Journal of Environmental Management</i> , 2022, 301, 113887.	3.8	1
5	A novel biotechnology based on periphytic biofilms with N-acyl-homoserine-lactones stimulation and lanthanum loading for phosphorus recovery. <i>Bioresource Technology</i> , 2022, 347, 126421.	4.8	7
6	Enhanced antifouling and flux performances of a composite membrane via incorporating TiO ₂ functionalized with hydrophilic groups of L-cysteine for nanofiltration. <i>Polymers for Advanced Technologies</i> , 2022, 33, 1544-1560.	1.6	5
7	Achieving superior carbon transfer efficiency and pH control using membrane carbonation with a wide range of CO ₂ contents for the coccolithophore <i>Emiliana huxleyi</i> . <i>Science of the Total Environment</i> , 2022, 822, 153592.	3.9	1
8	Determining global trends in syngas fermentation research through a bibliometric analysis. <i>Journal of Environmental Management</i> , 2022, 307, 114522.	3.8	9
9	Electrochemically Driven Photosynthetic Electron Transport in Cyanobacteria Lacking Photosystem II. <i>Journal of the American Chemical Society</i> , 2022, 144, 2933-2942.	6.6	20
10	Palladium (Pd ⁰) Loading-Controlled Catalytic Activity and Selectivity for Chlorophenol Hydrodechlorination and Hydrosaturation. <i>Environmental Science & Technology</i> , 2022, 56, 4447-4456.	4.6	22
11	A kinetic model for 2,4-dichlorophenol adsorption and hydrodechlorination over a palladized biofilm. <i>Water Research</i> , 2022, 214, 118201.	5.3	19
12	Microbial transformations by sulfur bacteria can recover value from phosphogypsum: A global problem and a possible solution. <i>Biotechnology Advances</i> , 2022, 57, 107949.	6.0	15
13	Anoxic/oxic treatment without biomass recycle. <i>Science of the Total Environment</i> , 2022, 834, 155166.	3.9	4
14	Synergistic Inorganic Carbon and Denitrification Genes Contributed to Nitrite Accumulation in a Hydrogen-Based Membrane Biofilm Reactor. <i>Bioengineering</i> , 2022, 9, 222.	1.6	9
15	Recent progress in treatment of dyes wastewater using microbial-electro-Fenton technology. <i>RSC Advances</i> , 2022, 12, 17104-17137.	1.7	45
16	Novel perspective for urban water resource management: 5R generation. <i>Frontiers of Environmental Science and Engineering</i> , 2021, 15, 1.	3.3	19
17	Dechlorination of 2,4-dichlorophenol in a hydrogen-based membrane palladium-film reactor: Performance, mechanisms, and model development. <i>Water Research</i> , 2021, 188, 116465.	5.3	33
18	Benzoic and salicylic acid are the signaling molecules of <i>Chlorella</i> cells for improving cell growth. <i>Chemosphere</i> , 2021, 265, 129084.	4.2	15

#	ARTICLE	IF	CITATIONS
19	How bioaugmentation with <i>Comamonas testosteroni</i> accelerates pyridine mono-oxygenation and mineralization. <i>Environmental Research</i> , 2021, 193, 110553.	3.7	12
20	Long-Term Continuous Co-reduction of 1,1,1-Trichloroethane and Trichloroethene over Palladium Nanoparticles Spontaneously Deposited on H ₂ -Transfer Membranes. <i>Environmental Science & Technology</i> , 2021, 55, 2057-2066.	4.6	34
21	Chemical Oxygen Demand Can Be Converted to Gross Energy for Food Items Using a Linear Regression Model. <i>Journal of Nutrition</i> , 2021, 151, 445-453.	1.3	7
22	Carboxylates and alcohols production in an autotrophic hydrogen ² -based membrane biofilm reactor. <i>Biotechnology and Bioengineering</i> , 2021, 118, 2338-2347.	1.7	11
23	Microbial ecology in selenate ²⁻ -reducing biofilm communities: Rare biosphere and their interactions with abundant phylotypes. <i>Biotechnology and Bioengineering</i> , 2021, 118, 2460-2471.	1.7	4
24	Stable dechlorination of Trichloroacetic Acid (TCAA) to acetic acid catalyzed by palladium nanoparticles deposited on H ₂ -transfer membranes. <i>Water Research</i> , 2021, 192, 116841.	5.3	34
25	Biodegradation of tetracycline using hybrid material (UCPs-TiO ₂) coupled with biofilms under visible light. <i>Bioresource Technology</i> , 2021, 323, 124638.	4.8	15
26	More rapid dechlorination of 2,4-dichlorophenol using acclimated bacteria. <i>Bioresource Technology</i> , 2021, 326, 124738.	4.8	19
27	Increased expression of antibiotic-resistance genes in biofilm communities upon exposure to cetyltrimethylammonium bromide (CTAB) and other stress conditions. <i>Science of the Total Environment</i> , 2021, 765, 144264.	3.9	19
28	H ₂ -Based Membrane Catalyst-Film Reactor (H ₂ -MCfR) Loaded with Palladium for Removing Oxidized Contaminants in Water. <i>Environmental Science & Technology</i> , 2021, 55, 7082-7093.	4.6	27
29	<i>p</i> -Chlorophenol (4-CP) Removal by a Palladium-Coated Biofilm: Coupling Catalytic Dechlorination and Microbial Mineralization via Denitrification. <i>Environmental Science & Technology</i> , 2021, 55, 6309-6319.	4.6	45
30	A Synergistic Platform for Continuous Co-removal of 1,1,1-Trichloroethane, Trichloroethene, and 1,4-Dioxane via Catalytic Dechlorination Followed by Biodegradation. <i>Environmental Science & Technology</i> , 2021, 55, 6363-6372.	4.6	23
31	Synergy of strains that accelerate biodegradation of pyridine and quinoline. <i>Journal of Environmental Management</i> , 2021, 285, 112119.	3.8	15
32	Evaluation of co-culturing a diatom and a coccolithophore using different silicate concentrations. <i>Science of the Total Environment</i> , 2021, 769, 145217.	3.9	7
33	Characteristics of denitrification in a vertical baffled bioreactor. <i>Environmental Research</i> , 2021, 197, 111046.	3.7	10
34	Making good use of methane to remove oxidized contaminants from wastewater. <i>Water Research</i> , 2021, 197, 117082.	5.3	26
35	Developing a model for estimating the activity of colonic microbes after intestinal surgeries. <i>PLoS ONE</i> , 2021, 16, e0253542.	1.1	2
36	Recovery of the nitrifying ability of acclimated biomass exposed to para-nitrophenol. <i>Science of the Total Environment</i> , 2021, 781, 146697.	3.9	8

#	ARTICLE	IF	CITATIONS
37	Adsorption and Reductive Defluorination of Perfluorooctanoic Acid over Palladium Nanoparticles. <i>Environmental Science & Technology</i> , 2021, 55, 14836-14843.	4.6	26
38	N-acyl-homoserine-lactones signaling as a critical control point for phosphorus entrapment by multi-species microbial aggregates. <i>Water Research</i> , 2021, 204, 117627.	5.3	19
39	Intimately coupling photocatalysis with phenolics biodegradation and photosynthesis. <i>Chemical Engineering Journal</i> , 2021, 425, 130666.	6.6	40
40	Hydrodefluorination of Perfluorooctanoic Acid in the H ₂ -Based Membrane Catalyst-Film Reactor with Platinum Group Metal Nanoparticles: Pathways and Optimal Conditions. <i>Environmental Science & Technology</i> , 2021, 55, 16699-16707.	4.6	13
41	How nitrate affects perchlorate reduction in a methane-based biofilm batch reactor. <i>Water Research</i> , 2020, 171, 115397.	5.3	48
42	Bioreduction of nitrate in high-sulfate water using a hydrogen-based membrane biofilm reactor equipped with a separate carbon dioxide module. <i>Chemical Engineering Journal</i> , 2020, 385, 123831.	6.6	17
43	Influence of operating conditions on sulfate reduction from real mining process water by membrane biofilm reactors. <i>Chemosphere</i> , 2020, 244, 125508.	4.2	18
44	Integrative and quantitative bioenergetics: Design of a study to assess the impact of the gut microbiome on host energy balance. <i>Contemporary Clinical Trials Communications</i> , 2020, 19, 100646.	0.5	15
45	The Nature and Oxidative Reactivity of Urban Magnetic Nanoparticle Dust Provide New Insights into Potential Neurotoxicity Studies. <i>Environmental Science & Technology</i> , 2020, 54, 10599-10609.	4.6	7
46	Nitrifying biomass can retain its acclimation to 2,4,6-trichlorophenol. <i>Water Research</i> , 2020, 185, 116285.	5.3	12
47	Effects of solids retention times on electro-selective fermentation using <i>Scenedesmus acutus</i> biomass. <i>Sustainable Energy and Fuels</i> , 2020, 4, 5352-5360.	2.5	2
48	A membrane-biofilm system for sulfate conversion to elemental sulfur in mining-influenced waters. <i>Science of the Total Environment</i> , 2020, 740, 140088.	3.9	22
49	Temporospatial shifts in the human gut microbiome and metabolome after gastric bypass surgery. <i>Npj Biofilms and Microbiomes</i> , 2020, 6, 12.	2.9	57
50	Towards a simultaneous combination of ozonation and biodegradation for enhancing tetracycline decomposition and toxicity elimination. <i>Bioresource Technology</i> , 2020, 304, 123009.	4.8	64
51	The complex puzzle of dietary silver nanoparticles, mucus and microbiota in the gut. <i>Journal of Toxicology and Environmental Health - Part B: Critical Reviews</i> , 2020, 23, 69-89.	2.9	19
52	Using Microbial Aggregates to Entrap Aqueous Phosphorus. <i>Trends in Biotechnology</i> , 2020, 38, 1292-1303.	4.9	54
53	Eliminating partial-transformation products and mitigating residual toxicity of amoxicillin through intimately coupled photocatalysis and biodegradation. <i>Chemosphere</i> , 2019, 237, 124491.	4.2	33
54	Acclimation of nitrifying biomass to phenol leads to persistent resistance to inhibition. <i>Science of the Total Environment</i> , 2019, 693, 133622.	3.9	22

#	ARTICLE	IF	CITATIONS
55	Bioavailable electron donors from ultrasound-treated biomass for stimulating denitrification. <i>Journal of Environmental Management</i> , 2019, 250, 109533.	3.8	4
56	Kinetics of anaerobic methane oxidation coupled to denitrification in the membrane biofilm reactor. <i>Biotechnology and Bioengineering</i> , 2019, 116, 2550-2560.	1.7	6
57	Anaerobic biodegradation of catechol by sediment microorganisms: Interactive roles of N reduction and S cycling. <i>Journal of Cleaner Production</i> , 2019, 230, 80-89.	4.6	14
58	Global diversity and biogeography of bacterial communities in wastewater treatment plants. <i>Nature Microbiology</i> , 2019, 4, 1183-1195.	5.9	491
59	Phosphate depletion controls lipid content and accumulation of heterotrophic bacteria during growth of <i>Synechocystis</i> sp. PCC 6803. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 5007-5014.	1.7	6
60	Factors Controlling Microbially Induced Desaturation and Precipitation (MIDP) via Denitrification during Continuous Flow. <i>Geomicrobiology Journal</i> , 2019, 36, 543-558.	1.0	20
61	Role of hydrogen (H ₂) mass transfer in microbiological H ₂ -threshold studies. <i>Biodegradation</i> , 2019, 30, 113-125.	1.5	9
62	Electron acceptor loadings affect chloroform dechlorination in a hydrogen-based membrane biofilm reactor. <i>Biotechnology and Bioengineering</i> , 2019, 116, 1439-1448.	1.7	13
63	Axenic Biofilm Formation and Aggregation by <i>Synechocystis</i> sp. Strain PCC 6803 Are Induced by Changes in Nutrient Concentration and Require Cell Surface Structures. <i>Applied and Environmental Microbiology</i> , 2019, 85, .	1.4	41
64	Methane oxidation coupled to perchlorate reduction in a membrane biofilm batch reactor. <i>Science of the Total Environment</i> , 2019, 667, 9-15.	3.9	46
65	Promoting <i>Synechocystis</i> sp. PCC 6803 Harvesting by Cationic Surfactants: Alkyl-Chain Length and Dose Control for the Release of Extracellular Polymeric Substances and Biomass Aggregation. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 2127-2133.	3.2	18
66	Bioavailable electron donors leached from leaves accelerate biodegradation of pyridine and quinoline. <i>Science of the Total Environment</i> , 2019, 654, 473-479.	3.9	10
67	Growth kinetics and mathematical modeling of <i>Synechocystis</i> sp. PCC 6803 under flashing light. <i>Biotechnology and Bioengineering</i> , 2019, 116, 469-474.	1.7	6
68	Uptake of phosphate by <i>Synechocystis</i> sp. PCC 6803 in dark conditions: Removal driving force and modeling. <i>Chemosphere</i> , 2019, 218, 147-156.	4.2	16
69	The role of ultrasound-treated sludge for accelerating quinoline mono-oxygenation. <i>Journal of Environmental Management</i> , 2019, 233, 561-566.	3.8	7
70	pH-dependent speciation and hydrogen (H ₂) control U(VI) respiration by <i>Desulfovibrio vulgaris</i> . <i>Biotechnology and Bioengineering</i> , 2018, 115, 1465-1474.	1.7	14
71	Roles of an easily biodegradable co-substrate in enhancing tetracycline treatment in an intimately coupled photocatalytic-biological reactor. <i>Water Research</i> , 2018, 136, 75-83.	5.3	124
72	Direct solid-state evidence of H ₂ -induced partial U(VI) reduction concomitant with adsorption by extracellular polymeric substances (EPS). <i>Biotechnology and Bioengineering</i> , 2018, 115, 1685-1693.	1.7	31

#	ARTICLE	IF	CITATIONS
73	A framework for good biofilm reactor modeling practice (GBRMP). <i>Water Science and Technology</i> , 2018, 77, 1149-1164.	1.2	32
74	Biofilms, active substrata, and me. <i>Water Research</i> , 2018, 132, 135-145.	5.3	135
75	Impacts of moisture content during ozonation of soils containing residual petroleum. <i>Journal of Hazardous Materials</i> , 2018, 344, 1101-1108.	6.5	12
76	Accurate O ₂ delivery enabled benzene biodegradation through aerobic activation followed by denitrification-coupled mineralization. <i>Biotechnology and Bioengineering</i> , 2018, 115, 1988-1999.	1.7	30
77	Climate Change and Energy Technologies in Undergraduate Introductory Science Textbooks. <i>Environmental Communication</i> , 2018, 12, 731-743.	1.2	12
78	Enhancing anaerobic digestion of food waste through biochemical methane potential assays at different substrate: inoculum ratios. <i>Waste Management</i> , 2018, 71, 612-617.	3.7	105
79	Simultaneous fermentation of cellulose and current production with an enriched mixed culture of thermophilic bacteria in a microbial electrolysis cell. <i>Microbial Biotechnology</i> , 2018, 11, 63-73.	2.0	26
80	Effect of culture density on biomass production and light utilization efficiency of <i>Synechocystis</i> sp. PCC 6803. <i>Biotechnology and Bioengineering</i> , 2018, 115, 507-511.	1.7	22
81	Anaerobic oxidation of methane coupled to denitrification: fundamentals, challenges, and potential. <i>Critical Reviews in Environmental Science and Technology</i> , 2018, 48, 1067-1093.	6.6	35
82	Managing Diffuse Phosphorus at the Source versus at the Sink. <i>Environmental Science & Technology</i> , 2018, 52, 11995-12009.	4.6	78
83	Bromate and Nitrate Bioreduction Coupled with Poly- β -hydroxybutyrate Production in a Methane-Based Membrane Biofilm Reactor. <i>Environmental Science & Technology</i> , 2018, 52, 7024-7031.	4.6	54
84	Competition for electrons between mono-oxygenations of pyridine and 2-hydroxypyridine. <i>Biodegradation</i> , 2018, 29, 419-427.	1.5	4
85	Complete dechlorination and mineralization of pentachlorophenol (PCP) in a hydrogen-based membrane biofilm reactor (MBfR). <i>Water Research</i> , 2018, 144, 134-144.	5.3	71
86	Excessive phosphorus caused inhibition and cell damage during heterotrophic growth of <i>Chlorella regularis</i> . <i>Bioresource Technology</i> , 2018, 268, 266-270.	4.8	51
87	How Microbial Aggregates Protect against Nanoparticle Toxicity. <i>Trends in Biotechnology</i> , 2018, 36, 1171-1182.	4.9	127
88	Bioreduction of Antimonate by Anaerobic Methane Oxidation in a Membrane Biofilm Batch Reactor. <i>Environmental Science & Technology</i> , 2018, 52, 8693-8700.	4.6	59
89	Simultaneous anaerobic and aerobic transformations of nitrobenzene. <i>Journal of Environmental Management</i> , 2018, 226, 264-269.	3.8	22
90	Hydrogenotrophic Microbial Reduction of Oxyanions With the Membrane Biofilm Reactor. <i>Frontiers in Microbiology</i> , 2018, 9, 3268.	1.5	49

#	ARTICLE	IF	CITATIONS
91	Carbonate Mineral Precipitation for Soil Improvement Through Microbial Denitrification. <i>Geomicrobiology Journal</i> , 2017, 34, 139-146.	1.0	84
92	Maximizing Coulombic recovery and solids reduction from primary sludge by controlling retention time and pH in a flat-plate microbial electrolysis cell. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 333-339.	1.2	13
93	Electrochemical techniques reveal that total ammonium stress increases electron flow to anode respiration in mixed-species bacterial anode biofilms. <i>Biotechnology and Bioengineering</i> , 2017, 114, 1151-1159.	1.7	21
94	Enhancing degradation and mineralization of tetracycline using intimately coupled photocatalysis and biodegradation (ICPB). <i>Chemical Engineering Journal</i> , 2017, 316, 7-14.	6.6	207
95	From biofilm ecology to reactors: a focused review. <i>Water Science and Technology</i> , 2017, 75, 1753-1760.	1.2	79
96	Coupling of Pd nanoparticles and denitrifying biofilm promotes H ₂ -based nitrate removal with greater selectivity towards N ₂ . <i>Applied Catalysis B: Environmental</i> , 2017, 206, 461-470.	10.8	60
97	Simultaneous di-oxygenation and denitrification in an internal circulation baffled bioreactor. <i>Biodegradation</i> , 2017, 28, 195-203.	1.5	3
98	The role of heterotrophic bacteria in assessing phosphorus stress to <i>Synechocystis</i> sp. PCC6803. <i>Journal of Applied Phycology</i> , 2017, 29, 1877-1882.	1.5	4
99	Nitrate effects on chromate reduction in a methane-based biofilm. <i>Water Research</i> , 2017, 115, 130-137.	5.3	69
100	Reductive precipitation of sulfate and soluble Fe(III) by <i>Desulfovibrio vulgaris</i> : Electron donor regulates intracellular electron flow and nano-FeS crystallization. <i>Water Research</i> , 2017, 119, 91-101.	5.3	60
101	pH-Mediated Microbial and Metabolic Interactions in Fecal Enrichment Cultures. <i>MSphere</i> , 2017, 2, .	1.3	105
102	H ₂ O ₂ Production in Microbial Electrochemical Cells Fed with Primary Sludge. <i>Environmental Science & Technology</i> , 2017, 51, 6139-6145.	4.6	44
103	Enhancing denitrification using a novel in situ membrane biofilm reactor (isMBfR). <i>Water Research</i> , 2017, 119, 234-241.	5.3	18
104	Two-stage cultivation of <i>Nannochloropsis oculata</i> for lipid production using reversible alkaline flocculation. <i>Bioresource Technology</i> , 2017, 226, 18-23.	4.8	29
105	Synergistic Integration of C12-C16 Cationic Surfactants for Flocculation and Lipid Extraction from <i>Chlorella</i> Biomass. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 752-757.	3.2	31
106	Quantification of the methane concentration using anaerobic oxidation of methane coupled to extracellular electron transfer. <i>Bioresource Technology</i> , 2017, 241, 979-984.	4.8	15
107	The distribution of phosphorus and its transformations during batch growth of <i>Synechocystis</i> . <i>Water Research</i> , 2017, 122, 355-362.	5.3	67
108	Distinctive microbiomes and metabolites linked with weight loss after gastric bypass, but not gastric banding. <i>ISME Journal</i> , 2017, 11, 2047-2058.	4.4	121

#	ARTICLE	IF	CITATIONS
109	Comparison of sequential with intimate coupling of photolysis and biodegradation for benzotriazole. <i>Frontiers of Environmental Science and Engineering</i> , 2017, 11, 1.	3.3	5
110	Advanced nutrient removal from surface water by a consortium of attached microalgae and bacteria: A review. <i>Bioresource Technology</i> , 2017, 241, 1127-1137.	4.8	234
111	The dechlorination of TCE by a perchlorate reducing consortium. <i>Chemical Engineering Journal</i> , 2017, 313, 1215-1221.	6.6	25
112	Interpreting Interactions between Ozone and Residual Petroleum Hydrocarbons in Soil. <i>Environmental Science & Technology</i> , 2017, 51, 506-513.	4.6	38
113	How myristyltrimethylammonium bromide enhances biomass harvesting and pigments extraction from <i>Synechocystis</i> sp. PCC 6803. <i>Water Research</i> , 2017, 126, 189-196.	5.3	23
114	Changes in Glucose Fermentation Pathways as a Response to the Free Ammonia Concentration in Microbial Electrolysis Cells. <i>Environmental Science & Technology</i> , 2017, 51, 13461-13470.	4.6	34
115	Enhanced dimethyl phthalate biodegradation by accelerating phthalic acid di-oxygenation. <i>Biodegradation</i> , 2017, 28, 413-421.	1.5	10
116	Total electron acceptor loading and composition affect hexavalent uranium reduction and microbial community structure in a membrane biofilm reactor. <i>Water Research</i> , 2017, 125, 341-349.	5.3	28
117	Competition for electrons between pyridine and quinoline during their simultaneous biodegradation. <i>Environmental Science and Pollution Research</i> , 2017, 24, 25082-25091.	2.7	17
118	Enhancing biodegradation of C16-alkyl quaternary ammonium compounds using an oxygen-based membrane biofilm reactor. <i>Water Research</i> , 2017, 123, 825-833.	5.3	57
119	Anaerobic oxidation of methane coupled with extracellular electron transfer to electrodes. <i>Scientific Reports</i> , 2017, 7, 5099.	1.6	49
120	Competition for electrons between reductive dechlorination and denitrification. <i>Frontiers of Environmental Science and Engineering</i> , 2017, 11, 1.	3.3	15
121	The effects of CO ₂ and H ₂ on CO metabolism by pure and mixed microbial cultures. <i>Biotechnology for Biofuels</i> , 2017, 10, 220.	6.2	40
122	Archaea and Bacteria Acclimate to High Total Ammonia in a Methanogenic Reactor Treating Swine Waste. <i>Archaea</i> , 2016, 2016, 1-10.	2.3	26
123	The role of exogenous electron donors for accelerating 2,4,6-trichlorophenol biotransformation and mineralization. <i>Biodegradation</i> , 2016, 27, 145-154.	1.5	3
124	Bioreduction of Chromate in a Methane-Based Membrane Biofilm Reactor. <i>Environmental Science & Technology</i> , 2016, 50, 5832-5839.	4.6	120
125	Total Value of Phosphorus Recovery. <i>Environmental Science & Technology</i> , 2016, 50, 6606-6620.	4.6	452
126	Biofilm-enhanced continuous synthesis and stabilization of palladium nanoparticles (PdNPs). <i>Environmental Science: Nano</i> , 2016, 3, 1396-1404.	2.2	25

#	ARTICLE	IF	CITATIONS
127	The effect of pH and buffer concentration on anode biofilms of <i>Thermincola ferriacetica</i> . <i>Bioelectrochemistry</i> , 2016, 112, 47-52.	2.4	34
128	Selenate and Nitrate Bioreductions Using Methane as the Electron Donor in a Membrane Biofilm Reactor. <i>Environmental Science & Technology</i> , 2016, 50, 10179-10186.	4.6	119
129	A Stoichiometric Model for Biogeotechnical Soil Improvement. , 2016, , .		5
130	Tailoring Microbial Electrochemical Cells for Production of Hydrogen Peroxide at High Concentrations and Efficiencies. <i>ChemSusChem</i> , 2016, 9, 3345-3352.	3.6	60
131	Evolution of the microbial community of the biofilm in a methane-based membrane biofilm reactor reducing multiple electron acceptors. <i>Environmental Science and Pollution Research</i> , 2016, 23, 9540-9548.	2.7	38
132	The Roles of Biofilm Conductivity and Donor Substrate Kinetics in a Mixed-Culture Biofilm Anode. <i>Environmental Science & Technology</i> , 2016, 50, 12799-12807.	4.6	52
133	UV photolysis for enhanced phenol biodegradation in the presence of 2,4,6-trichlorophenol (TCP). <i>Biodegradation</i> , 2016, 27, 59-67.	1.5	6
134	Selective fermentation of carbohydrate and protein fractions of <i>Scenedesmus</i> , and biohydrogenation of its lipid fraction for enhanced recovery of saturated fatty acids. <i>Biotechnology and Bioengineering</i> , 2016, 113, 320-329.	1.7	26
135	Hydrogenated biofilm reactors reducing selenate and sulfate: Community structure and capture of elemental selenium within the biofilm. <i>Biotechnology and Bioengineering</i> , 2016, 113, 1736-1744.	1.7	36
136	Direct delivery of CO ₂ into a hydrogen-based membrane biofilm reactor and model development. <i>Chemical Engineering Journal</i> , 2016, 290, 154-160.	6.6	35
137	Relieving the fermentation inhibition enables high electron recovery from landfill leachate in a microbial electrolysis cell. <i>RSC Advances</i> , 2016, 6, 6658-6664.	1.7	23
138	Palladium Recovery in a H ₂ -Based Membrane Biofilm Reactor: Formation of Pd(0) Nanoparticles through Enzymatic and Autocatalytic Reductions. <i>Environmental Science & Technology</i> , 2016, 50, 2546-2555.	4.6	72
139	Direct membrane-carbonation photobioreactor producing photoautotrophic biomass via carbon dioxide transfer and nutrient removal. <i>Bioresource Technology</i> , 2016, 204, 32-37.	4.8	18
140	Effect of substrate characteristics on microbial community structure, function, resistance, and resilience; application to coupled photocatalytic-biological treatment. <i>Water Research</i> , 2016, 90, 1-8.	5.3	20
141	Role of self-assembly coated Er ³⁺ : YAlO ₃ /TiO ₂ in intimate coupling of visible-light-responsive photocatalysis and biodegradation reactions. <i>Journal of Hazardous Materials</i> , 2016, 302, 386-394.	6.5	62
142	Autotrophic antimonate bio-reduction using hydrogen as the electron donor. <i>Water Research</i> , 2016, 88, 467-474.	5.3	71
143	Improving lipid recovery from <i>Scenedesmus</i> wet biomass by surfactant-assisted disruption. <i>Green Chemistry</i> , 2016, 18, 1319-1326.	4.6	70
144	The role of electron donors generated from UV photolysis for accelerating pyridine biodegradation. <i>Biotechnology and Bioengineering</i> , 2015, 112, 1792-1800.	1.7	32

#	ARTICLE	IF	CITATIONS
145	Chemistry: Reuse water pollutants. <i>Nature</i> , 2015, 528, 29-31.	13.7	296
146	Sun-to-Wheels Exergy Efficiencies for Bio-Ethanol and Photovoltaics. <i>Environmental Science & Technology</i> , 2015, 49, 6394-6401.	4.6	5
147	Removal of Natural Estrogens and Their Conjugates in Municipal Wastewater Treatment Plants: A Critical Review. <i>Environmental Science & Technology</i> , 2015, 49, 5288-5300.	4.6	137
148	Characterization of Electrical Current-Generation Capabilities from Thermophilic Bacterium <i>Thermoanaerobacter pseudethanolicus</i> Using Xylose, Glucose, Cellobiose, or Acetate with Fixed Anode Potentials. <i>Environmental Science & Technology</i> , 2015, 49, 14725-14731.	4.6	42
149	Intimately coupling of photolysis accelerates nitrobenzene biodegradation, but sequential coupling slows biodegradation. <i>Journal of Hazardous Materials</i> , 2015, 287, 252-258.	6.5	40
150	Gut microbial and short-chain fatty acid profiles in adults with chronic constipation before and after treatment with lubiprostone. <i>Anaerobe</i> , 2015, 33, 33-41.	1.0	49
151	Complete Perchlorate Reduction Using Methane as the Sole Electron Donor and Carbon Source. <i>Environmental Science & Technology</i> , 2015, 49, 2341-2349.	4.6	96
152	Bioreduction of vanadium (V) in groundwater by autohydrogentrophic bacteria: Mechanisms and microorganisms. <i>Journal of Environmental Sciences</i> , 2015, 30, 122-128.	3.2	50
153	Modelling combined effect of chloramine and copper on ammonia-oxidizing microbial activity using a biostability approach. <i>Water Research</i> , 2015, 84, 190-197.	5.3	16
154	Predicting Dissolved Inorganic Carbon in Photoautotrophic Microalgae Culture via the Nitrogen Source. <i>Environmental Science & Technology</i> , 2015, 49, 9826-9831.	4.6	34
155	Scientists Raise Alarms about Fast Tracking of Transoceanic Canal through Nicaragua. <i>Environmental Science & Technology</i> , 2015, 49, 3989-3996.	4.6	15
156	Effects of phosphate limitation on soluble microbial products and microbial community structure in semi-continuous <i>Synechocystis</i> -based photobioreactors. <i>Biotechnology and Bioengineering</i> , 2015, 112, 1761-1769.	1.7	23
157	Contribution of Liquid/Gas Mass-Transfer Limitations to Dissolved Methane Oversaturation in Anaerobic Treatment of Dilute Wastewater. <i>Environmental Science & Technology</i> , 2015, 49, 10366-10372.	4.6	62
158	Effects of pre-fermentation and pulsed-electric-field treatment of primary sludge in microbial electrochemical cells. <i>Bioresource Technology</i> , 2015, 195, 83-88.	4.8	46
159	Accelerating Quinoline Biodegradation and Oxidation with Endogenous Electron Donors. <i>Environmental Science & Technology</i> , 2015, 49, 11536-11542.	4.6	47
160	Coupling UV-H ₂ O ₂ to accelerate dimethyl phthalate (DMP) biodegradation and oxidation. <i>Biodegradation</i> , 2015, 26, 431-441.	1.5	13
161	Biogenic nano-particulate iron-sulfide produced through sulfate and Fe(III)-(hydr)oxide reductions was enhanced by pyruvate as the electron donor. <i>RSC Advances</i> , 2015, 5, 100750-100761.	1.7	8
162	Phosphorus recovery from microbial biofuel residual using microwave peroxide digestion and anion exchange. <i>Water Research</i> , 2015, 70, 130-137.	5.3	28

#	ARTICLE	IF	CITATIONS
163	Coupled aerobic and anoxic biodegradation for quinoline and nitrogen removals. <i>Frontiers of Environmental Science and Engineering</i> , 2015, 9, 738-744.	3.3	7
164	Continuous hydrogen peroxide production in microbial electrochemical cells. <i>Proceedings of the Water Environment Federation</i> , 2015, 2015, 1-5.	0.0	0
165	Uranium removal and microbial community in a H_2 -based membrane biofilm reactor. <i>Water Research</i> , 2014, 48, 255-264.	5.3	86
166	Effects of pulsed electric field treatment on enhancing lipid recovery from the microalga, <i>Scenedesmus</i> . <i>Bioresource Technology</i> , 2014, 173, 457-461.	4.8	67
167	Effect of growth conditions on microbial activity and iron-sulfide production by <i>Desulfovibrio vulgaris</i> . <i>Journal of Hazardous Materials</i> , 2014, 272, 28-35.	6.5	48
168	Coupled photocatalytic-biodegradation of 2,4,5-trichlorophenol: Effects of photolytic and photocatalytic effluent composition on bioreactor process performance, community diversity, and resistance and resilience to perturbation. <i>Water Research</i> , 2014, 50, 59-69.	5.3	42
169	UV Photolysis for Accelerating Pyridine Biodegradation. <i>Environmental Science & Technology</i> , 2014, 48, 649-655.	4.6	65
170	Nitrate Shaped the Selenate-Reducing Microbial Community in a Hydrogen-Based Biofilm Reactor. <i>Environmental Science & Technology</i> , 2014, 48, 3395-3402.	4.6	106
171	Buffer Capacity and Transport Govern the Concentration Overpotential in Electrochemical Oxygen Reduction at Neutral pH. <i>ChemElectroChem</i> , 2014, 1, 1909-1915.	1.7	32
172	Removal of multiple electron acceptors by pilot-scale, two-stage membrane biofilm reactors. <i>Water Research</i> , 2014, 54, 115-122.	5.3	45
173	Managing the interactions between sulfate- and perchlorate-reducing bacteria when using hydrogen-fed biofilms to treat a groundwater with a high perchlorate concentration. <i>Water Research</i> , 2014, 55, 215-224.	5.3	57
174	Improved current and power density with a micro-scale microbial fuel cell due to a small characteristic length. <i>Biosensors and Bioelectronics</i> , 2014, 61, 587-592.	5.3	59
175	UV photolysis for accelerated quinoline biodegradation and mineralization. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 10555-10561.	1.7	25
176	A biofilm model to understand the onset of sulfate reduction in denitrifying membrane biofilm reactors. <i>Biotechnology and Bioengineering</i> , 2013, 110, 763-772.	1.7	43
177	Phylogenetic analysis of nitrate- and sulfate-reducing bacteria in a hydrogen-fed biofilm. <i>FEMS Microbiology Ecology</i> , 2013, 85, 158-167.	1.3	43
178	Effects of Multiple Electron Acceptors on Microbial Interactions in a Hydrogen-Based Biofilm. <i>Environmental Science & Technology</i> , 2013, 47, 7396-7403.	4.6	48
179	Innovative Strategies to Achieve Low Total Phosphorus Concentrations in High Water Flows. <i>Critical Reviews in Environmental Science and Technology</i> , 2013, 43, 409-441.	6.6	64
180	Using a Two-Stage Hydrogen-Based Membrane Biofilm Reactor (MBfR) to Achieve Complete Perchlorate Reduction in the Presence of Nitrate and Sulfate. <i>Environmental Science & Technology</i> , 2013, 47, 1565-1572.	4.6	78

#	ARTICLE	IF	CITATIONS
181	Distribution systems as reservoirs of <i>Naegleria fowleri</i> and other amoebae. Journal - American Water Works Association, 2012, 104, E66.	0.2	11
182	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.	1.0	18
183	Developing an efficient TiO ₂ -coated biofilm carrier for intimate coupling of photocatalysis and biodegradation. Water Research, 2012, 46, 6489-6496.	5.3	65
184	Interactions between Nitrate-Reducing and Sulfate-Reducing Bacteria Coexisting in a Hydrogen-Fed Biofilm. Environmental Science & Technology, 2012, 46, 11289-11298.	4.6	82
185	A Steady-State Biofilm Model for Simultaneous Reduction of Nitrate and Perchlorate, Part 1: Model Development and Numerical Solution. Environmental Science & Technology, 2012, 46, 1598-1607.	4.6	45
186	A Steady-State Biofilm Model for Simultaneous Reduction of Nitrate and Perchlorate, Part 2: Parameter Optimization and Results and Discussion. Environmental Science & Technology, 2012, 46, 1608-1615.	4.6	45
187	Managing methanogens and homoacetogens to promote reductive dechlorination of trichloroethene with direct delivery of H ₂ in a membrane biofilm reactor. Biotechnology and Bioengineering, 2012, 109, 2200-2210.	1.7	49
188	Using electron balances and molecular techniques to assess trichloroethene-induced shifts to a dechlorinating microbial community. Biotechnology and Bioengineering, 2012, 109, 2230-2239.	1.7	27
189	Improved nitrogen removal in dual-contaminated surface water by photocatalysis. Frontiers of Environmental Science and Engineering, 2012, 6, 428-436.	3.3	4
190	2,4-DNT removal in intimately coupled photobiocatalysis: the roles of adsorption, photolysis, photocatalysis, and biotransformation. Applied Microbiology and Biotechnology, 2012, 95, 263-272.	1.7	47
191	2,4,6-trichlorophenol (TCP) photobiodegradation and its effect on community structure. Biodegradation, 2012, 23, 575-583.	1.5	24
192	Hydrogen permeability of the hollow fibers used in H ₂ -based membrane biofilm reactors. Journal of Membrane Science, 2012, 407-408, 176-183.	4.1	85
193	Degradation of reactive dyes in a photocatalytic circulating-bed biofilm reactor. Biotechnology and Bioengineering, 2012, 109, 884-893.	1.7	53
194	Advanced Control for Photoautotrophic Growth and CO ₂ -Utilization Efficiency Using a Membrane Carbonation Photobioreactor (MCPBR). Environmental Science & Technology, 2011, 45, 5032-5038.	4.6	57
195	2,4,5-Trichlorophenol Degradation Using a Novel TiO ₂ -Coated Biofilm Carrier: Roles of Adsorption, Photocatalysis, and Biodegradation. Environmental Science & Technology, 2011, 45, 8359-8367.	4.6	110
196	Interactions between Perchlorate and Nitrate Reductions in the Biofilm of a Hydrogen-Based Membrane Biofilm Reactor. Environmental Science & Technology, 2011, 45, 10155-10162.	4.6	136
197	Size Effects on Adsorption of Hematite Nanoparticles on <i>E. coli</i> cells. Environmental Science & Technology, 2011, 45, 2172-2178.	4.6	92
198	A pH-control model for heterotrophic and hydrogen-based autotrophic denitrification. Water Research, 2011, 45, 232-240.	5.3	73

#	ARTICLE	IF	CITATIONS
199	Soluble microbial products and their implications in mixed culture biotechnology. Trends in Biotechnology, 2011, 29, 454-463.	4.9	184
200	Capturing the lost phosphorus. Chemosphere, 2011, 84, 846-853.	4.2	397
201	Microbial community structure during nitrate and perchlorate reduction in ion-exchange brine using the hydrogen-based membrane biofilm reactor (MBfR). Bioresource Technology, 2010, 101, 3747-3750.	4.8	61
202	Integrated photocatalytic-biological reactor for accelerated phenol mineralization. Applied Microbiology and Biotechnology, 2010, 86, 1977-1985.	1.7	48
203	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
204	Integration of H ₂ -Based Membrane Biofilm Reactor with RO and NF Membranes for Removal of Chromate and Selenate. Water, Air, and Soil Pollution, 2010, 207, 29-37.	1.1	22
205	Biological hydrogen production: prospects and challenges. Trends in Biotechnology, 2010, 28, 262-271.	4.9	366
206	A kinetic perspective on extracellular electron transfer by anode-respiring bacteria. FEMS Microbiology Reviews, 2010, 34, 3-17.	3.9	506
207	Quantitatively Understanding the Performance of Membrane Bioreactors. Separation Science and Technology, 2010, 45, 1003-1013.	1.3	8
208	Surface Complexation of Neptunium(V) onto Whole Cells and Cell Components of <i>Shewanella alga</i> : Modeling and Experimental Study. Environmental Science & Technology, 2010, 44, 4930-4935.	4.6	38
209	Assessment of the Efficacy of Intermittent Ozone Disinfection. Ozone: Science and Engineering, 2009, 31, 436-444.	1.4	0
210	Modeling Microbial Products in Activated Sludge under Feast~Famine Conditions. Environmental Science & Technology, 2009, 43, 2489-2497.	4.6	57
211	Systematic evaluation of nitrate and perchlorate bioreduction kinetics in groundwater using a hydrogen-based membrane biofilm reactor. Water Research, 2009, 43, 173-181.	5.3	88
212	Opportunities for renewable bioenergy using microorganisms. Biotechnology and Bioengineering, 2008, 100, 203-212.	1.7	533
213	Intimate coupling of photocatalysis and biodegradation in a photocatalytic circulating~bed biofilm reactor. Biotechnology and Bioengineering, 2008, 101, 83-92.	1.7	111
214	Pre-genomic, genomic and post-genomic study of microbial communities involved in bioenergy. Nature Reviews Microbiology, 2008, 6, 604-612.	13.6	107
215	Bioreduction of Trichloroethene Using a Hydrogen-Based Membrane Biofilm Reactor. Environmental Science & Technology, 2008, 42, 477-483.	4.6	66
216	Full-scale application of focused-pulsed pre-treatment for improving biosolids digestion and conversion to methane. Water Science and Technology, 2008, 58, 1895-1901.	1.2	96

#	ARTICLE	IF	CITATIONS
217	Evaluation for Biological Reduction of Nitrate and Perchlorate in Brine Water Using the Hydrogen-Based Membrane Biofilm Reactor. <i>Journal of Environmental Engineering, ASCE</i> , 2007, 133, 157-164.	0.7	51
218	Engineering Away Lysosomal Junk: Medical Bioremediation. <i>Rejuvenation Research</i> , 2007, 10, 359-366.	0.9	21
219	Monitored natural attenuation forum: MNA of metals and radionuclides. <i>Remediation</i> , 2007, 18, 121-129.	1.1	2
220	A mathematical model for the kinetics of <i>Methanobacterium bryantii</i> M.o.H. considering hydrogen thresholds. <i>Biodegradation</i> , 2007, 18, 453-464.	1.5	8
221	A biogeochemical framework for metal detoxification in sulfidic systems. <i>Biodegradation</i> , 2007, 18, 675-692.	1.5	16
222	A Vista for Microbial Ecology and Environmental Biotechnology. <i>Environmental Science & Technology</i> , 2006, 40, 1096-1103.	4.6	118
223	Bioreduction of Selenate Using a Hydrogen-Based Membrane Biofilm Reactor. <i>Environmental Science & Technology</i> , 2006, 40, 1664-1671.	4.6	136
224	Microbial ecology to manage processes in environmental biotechnology. <i>Trends in Biotechnology</i> , 2006, 24, 261-266.	4.9	116
225	Effects of Endogenous Substrates on Adaptation of Anaerobic Microbial Communities to 3-Chlorobenzoate. <i>Applied and Environmental Microbiology</i> , 2006, 72, 449-456.	1.4	13
226	Critical Review on the Effects of Mixed Liquor Suspended Solids on Membrane Bioreactor Operation. <i>Separation Science and Technology</i> , 2006, 41, 1489-1511.	1.3	23
227	Perchlorate reduction in a HYDROGEN-BASED MEMBRANE-BIOFILM REACTOR. <i>Journal - American Water Works Association</i> , 2002, 94, 103-114.	0.2	147
228	Applying a novel autohydrogenotrophic hollow-fiber membrane biofilm reactor for denitrification of drinking water. <i>Water Research</i> , 2002, 36, 2040-2052.	5.3	284
229	The transient-state, multiple-species biofilm model for biofiltration processes. <i>Water Research</i> , 2002, 36, 2342-2356.	5.3	57
230	Natural attenuation strategy for groundwater cleanup focuses on demonstrating cause and effect. <i>Eos</i> , 2001, 82, 53-53.	0.1	32
231	Evaluation of the interaction between biodegradation and sorption of phenanthrene in soil-slurry systems. <i>Biotechnology and Bioengineering</i> , 2001, 73, 12-24.	1.7	49
232	The roles of intermediates in biodegradation of benzene, toluene, and p-xylene by <i>Pseudomonas putida</i> F1. <i>Biodegradation</i> , 2001, 12, 455-463.	1.5	70
233	A structured model of dual-limitation kinetics. , 2000, 49, 683-689.		68
234	Responses of intracellular cofactors to single and dual substrate limitations. , 2000, 49, 690-699.		24

#	ARTICLE	IF	CITATIONS
235	Mathematical description of microbiological reactions involving intermediates. <i>Biotechnology and Bioengineering</i> , 2000, 67, 35-52.	1.7	40
236	Mathematical description of microbiological reactions involving intermediates. , 2000, 68, 705-705.		1
237	Microbial energetics and stoichiometry for biodegradation of aromatic compounds involving oxygenation reactions. , 2000, 11, 213-227.		29
238	Simulation of multispecies biofilm development in three dimensions. <i>Water Science and Technology</i> , 1999, 39, 123-130.	1.2	41
239	Modeling speciation effects on biodegradation in mixed metal/chelate systems. <i>Biodegradation</i> , 1999, 10, 315-330.	1.5	35
240	Unexpected Population Distribution in a Microbial Mat Community: Sulfate-Reducing Bacteria Localized to the Highly Oxidic Chemocline in Contrast to a Eukaryotic Preference for Anoxia. <i>Applied and Environmental Microbiology</i> , 1999, 65, 4659-4665.	1.4	156
241	A unified model describing the role of hydrogen in the growth of <i>Desulfovibrio vulgaris</i> under different environmental conditions. , 1998, 59, 732-746.		80
242	A unified model describing the role of hydrogen in the growth of <i>Desulfovibrio vulgaris</i> under different environmental conditions. , 1998, 59, 732.		5
243	Evaluation of a model for the effects of substrate interactions on the kinetics of reductive dehalogenation. <i>Biodegradation</i> , 1996, 7, 49-64.	1.5	12
244	A structured model of dual-limitation kinetics. , 1996, 49, 683.		30
245	Responses of intracellular cofactors to single and dual substrate limitations. <i>Biotechnology and Bioengineering</i> , 1996, 49, 690-699.	1.7	12
246	A model for the effects of primary substrates on the kinetics of reductive dehalogenation. <i>Biodegradation</i> , 1995, 6, 295-308.	1.5	14
247	Modeling biofilm biodegradation requiring cosubstrates: the quinoline example. <i>Water Science and Technology</i> , 1995, 31, 71-84.	1.2	9
248	Influence of substrate C/N ratio on the structure of multi-species biofilms consisting of nitrifiers and heterotrophs. <i>Water Science and Technology</i> , 1995, 32, 75-84.	1.2	33
249	Modelling heterogeneity in biofilms: report of the discussion session. <i>Water Science and Technology</i> , 1995, 32, 263-265.	1.2	11
250	Nitrification as a source of soluble organic substrate in biological treatment. <i>Water Science and Technology</i> , 1994, 30, 1-8.	1.2	98