

In Seop Chang

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Electrically conductive bacterial nanowires produced by <i>Shewanella oneidensis</i> strain MR-1 and other microorganisms. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 11358-11363.	7.1	1,629
2	Operational parameters affecting the performance of a mediator-less microbial fuel cell. <i>Biosensors and Bioelectronics</i> , 2003, 18, 327-334.	10.1	891
3	A mediator-less microbial fuel cell using a metal reducing bacterium, <i>Shewanella putrefaciens</i> . <i>Enzyme and Microbial Technology</i> , 2002, 30, 145-152.	3.2	815
4	Current Production and Metal Oxide Reduction by <i>Shewanella oneidensis</i> MR-1 Wild Type and Mutants. <i>Applied and Environmental Microbiology</i> , 2007, 73, 7003-7012.	3.1	513
5	A Novel Electrochemically Active and Fe(III)-reducing Bacterium Phylogenetically Related to <i>Clostridium butyricum</i> Isolated from a Microbial Fuel Cell. <i>Anaerobe</i> , 2001, 7, 297-306.	2.1	485
6	Construction and operation of a novel mediator- and membrane-less microbial fuel cell. <i>Process Biochemistry</i> , 2004, 39, 1007-1012.	3.7	423
7	Enrichment of microbial community generating electricity using a fuel-cell-type electrochemical cell. <i>Applied Microbiology and Biotechnology</i> , 2004, 63, 672-681.	3.6	392
8	A novel electrochemically active and Fe(III)-reducing bacterium phylogenetically related to <i>Aeromonas hydrophila</i> , isolated from a microbial fuel cell. <i>FEMS Microbiology Letters</i> , 2003, 223, 129-134.	1.8	381
9	Mass Transport through a Proton Exchange Membrane (Nafion) in Microbial Fuel Cells. <i>Energy & Fuels</i> , 2008, 22, 169-176.	5.1	376
10	Continuous determination of biochemical oxygen demand using microbial fuel cell type biosensor. <i>Biosensors and Bioelectronics</i> , 2004, 19, 607-613.	10.1	359
11	Challenges in microbial fuel cell development and operation. <i>Applied Microbiology and Biotechnology</i> , 2007, 76, 485-494.	3.6	358
12	Novel BOD (biological oxygen demand) sensor using mediator-less microbial fuel cell. <i>Biotechnology Letters</i> , 2003, 25, 541-545.	2.2	327
13	Continuous electricity production from artificial wastewater using a mediator-less microbial fuel cell. <i>Bioresource Technology</i> , 2006, 97, 621-627.	9.6	262
14	Improvement of a microbial fuel cell performance as a BOD sensor using respiratory inhibitors. <i>Biosensors and Bioelectronics</i> , 2005, 20, 1856-1859.	10.1	220
15	Biological treatment of acid mine drainage under sulphate-reducing conditions with solid waste materials as substrate. <i>Water Research</i> , 2000, 34, 1269-1277.	11.3	216
16	Use of acetate for enrichment of electrochemically active microorganisms and their 16S rDNA analyses. <i>FEMS Microbiology Letters</i> , 2003, 223, 185-191.	1.8	189
17	Analysis of microbial diversity in oligotrophic microbial fuel cells using 16S rDNA sequences. <i>FEMS Microbiology Letters</i> , 2004, 233, 77-82.	1.8	170
18	Enrichment, Performance, and Microbial Diversity of a Thermophilic Mediatorless Microbial Fuel Cell. <i>Environmental Science & Technology</i> , 2006, 40, 6449-6454.	10.0	151

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19	Selective inhibition of methanogens for the improvement of biohydrogen production in microbial electrolysis cells. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 13379-13386.	7.1	146
20	Experimental evaluation of influential factors for electricity harvesting from sediment using microbial fuel cell. <i>Bioresource Technology</i> , 2009, 100, 3029-3035.	9.6	130
21	A Solar-Powered Microbial Electrolysis Cell with a Platinum Catalyst-Free Cathode To Produce Hydrogen. <i>Environmental Science & Technology</i> , 2009, 43, 9525-9530.	10.0	119
22	Effect of shear rate on the response of microbial fuel cell toxicity sensor to Cu(II). <i>Bioresource Technology</i> , 2013, 136, 707-710.	9.6	117
23	Microbial fuel cells for energy self-sufficient domestic wastewater treatment—a review and discussion from energetic consideration. <i>Applied Microbiology and Biotechnology</i> , 2011, 89, 259-270.	3.6	113
24	Bifunctional Silver Nanoparticle Cathode in Microbial Fuel Cells for Microbial Growth Inhibition with Comparable Oxygen Reduction Reaction Activity. <i>Environmental Science & Technology</i> , 2011, 45, 5441-5446.	10.0	109
25	Improving the dynamic response of a mediator-less microbial fuel cell as a biochemical oxygen demand (BOD) sensor. <i>Biotechnology Letters</i> , 2004, 26, 1717-1721.	2.2	105
26	A microbial fuel cell with improved cathode reaction as a low biochemical oxygen demand sensor. <i>Biotechnology Letters</i> , 2003, 25, 1357-1361.	2.2	99
27	Treatment of Alcohol Distillery Wastewater Using a Bacteroidetes-Dominant Thermophilic Microbial Fuel Cell. <i>Environmental Science & Technology</i> , 2012, 46, 3022-3030.	10.0	97
28	Membrane separation processes for dehydration of bioethanol from fermentation broths: Recent developments, challenges, and prospects. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 105, 427-443.	16.4	94
29	Microbial synthesis gas utilization and ways to resolve kinetic and mass-transfer limitations. <i>Bioresource Technology</i> , 2015, 177, 361-374.	9.6	91
30	Effect of CO partial pressure on cell-recycled continuous CO fermentation by <i>Eubacterium limosum</i> KIST612. <i>Process Biochemistry</i> , 2001, 37, 411-421.	3.7	90
31	Determination of charge transfer resistance and capacitance of microbial fuel cell through a transient response analysis of cell voltage. <i>Biosensors and Bioelectronics</i> , 2010, 25, 1629-1634.	10.1	83
32	Residence time distribution in microbial fuel cell and its influence on COD removal with electricity generation. <i>Biochemical Engineering Journal</i> , 2005, 27, 59-65.	3.6	79
33	Scaling-Up Microbial Fuel Cells: Configuration and Potential Drop Phenomenon at Series Connection of Unit Cells in Shared Anolyte. <i>ChemSusChem</i> , 2012, 5, 1086-1091.	6.8	76
34	Coupling of anaerobic digester and microbial fuel cell for COD removal and ammonia recovery. <i>Bioresource Technology</i> , 2015, 195, 217-222.	9.6	76
35	Comparison in performance of sediment microbial fuel cells according to depth of embedded anode. <i>Bioresource Technology</i> , 2013, 127, 138-142.	9.6	75
36	Performance and Bacterial Consortium of Microbial Fuel Cell Fed with Formate. <i>Energy & Fuels</i> , 2008, 22, 164-168.	5.1	73

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37	Controlling Voltage Reversal in Microbial Fuel Cells. <i>Trends in Biotechnology</i> , 2020, 38, 667-678.	9.3	70
38	Energy Conservation Model Based on Genomic and Experimental Analyses of a Carbon Monoxide-Utilizing, Butyrate-Forming Acetogen, <i>Eubacterium limosum</i> KIST612. <i>Applied and Environmental Microbiology</i> , 2015, 81, 4782-4790.	3.1	69
39	The biocathode of microbial electrochemical systems and microbially-influenced corrosion. <i>Bioresource Technology</i> , 2015, 190, 395-401.	9.6	69
40	Complete Genome Sequence of a Carbon Monoxide-Utilizing Acetogen, <i>Eubacterium limosum</i> KIST612. <i>Journal of Bacteriology</i> , 2011, 193, 307-308.	2.2	68
41	Dissimilatory Fe(III) reduction by an electrochemically active lactic acid bacterium phylogenetically related to <i>Enterococcus gallinarum</i> isolated from submerged soil. <i>Journal of Applied Microbiology</i> , 2005, 99, 978-987.	3.1	67
42	Biocatalytic Conversion of Methane to Methanol as a Key Step for Development of Methane-Based Biorefineries. <i>Journal of Microbiology and Biotechnology</i> , 2014, 24, 1597-1605.	2.1	67
43	Responses from freshwater sediment during electricity generation using microbial fuel cells. <i>Bioprocess and Biosystems Engineering</i> , 2009, 32, 389-395.	3.4	64
44	Batch Conversion of Methane to Methanol Using <i>Methylosinus trichosporium</i> OB3b as Biocatalyst. <i>Journal of Microbiology and Biotechnology</i> , 2015, 25, 375-380.	2.1	63
45	A comparison of membranes and enrichment strategies for microbial fuel cells. <i>Bioresource Technology</i> , 2011, 102, 6291-6294.	9.6	61
46	Metabolically engineered glucose-utilizing <i>Shewanella</i> strains under anaerobic conditions. <i>Bioresource Technology</i> , 2014, 154, 59-66.	9.6	60
47	T-RFLP reveals high β -Proteobacteria diversity in microbial fuel cells enriched with domestic wastewater. <i>Journal of Applied Microbiology</i> , 2010, 109, 839-850.	3.1	59
48	Comparison of performance and ionic concentration gradient of two-chamber microbial fuel cell using ceramic membrane (CM) and cation exchange membrane (CEM) as separators. <i>Electrochimica Acta</i> , 2018, 259, 365-376.	5.2	58
49	Effect of sulfate reduction activity on biological treatment of hexavalent chromium [Cr(VI)] contaminated electroplating wastewater under sulfate-rich condition. <i>Chemosphere</i> , 2007, 68, 218-226.	8.2	57
50	Characterization of uncharged and sulfonated porous poly(vinylidene fluoride) membranes and their performance in microbial fuel cells. <i>Journal of Membrane Science</i> , 2014, 463, 205-214.	8.2	55
51	Shift of voltage reversal in stacked microbial fuel cells. <i>Journal of Power Sources</i> , 2015, 278, 534-539.	7.8	53
52	Full-loop operation and cathodic acidification of a microbial fuel cell operated on domestic wastewater. <i>Bioresource Technology</i> , 2011, 102, 5841-5848.	9.6	51
53	Effect of internal pressure and gas/liquid interface area on the CO mass transfer coefficient using hollow fibre membranes as a high mass transfer gas diffusing system for microbial syngas fermentation. <i>Bioresource Technology</i> , 2014, 169, 637-643.	9.6	51
54	pH-dependent ammonia removal pathways in microbial fuel cell system. <i>Bioresource Technology</i> , 2016, 215, 290-295.	9.6	46

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55	Comparative study of the airborne microbial communities and their functional composition in fine particulate matter (PM2.5) under non-extreme and extreme PM2.5 conditions. <i>Atmospheric Environment</i> , 2018, 194, 82-92.	4.1	46
56	Floating-Type Microbial Fuel Cell (FT-MFC) for Treating Organic-Contaminated Water. <i>Environmental Science & Technology</i> , 2009, 43, 1642-1647.	10.0	44
57	Study of hydrogen production in light assisted microbial electrolysis cell operated with dye sensitized solar cell. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 9297-9304.	7.1	43
58	Interface resistances of anion exchange membranes in microbial fuel cells with low ionic strength. <i>Biosensors and Bioelectronics</i> , 2011, 26, 3266-3271.	10.1	37
59	New architecture for modulization of membraneless and single-chambered microbial fuel cell using a bipolar plate-electrode assembly (BEA). <i>Biosensors and Bioelectronics</i> , 2014, 59, 28-34.	10.1	37
60	Development of anode zone using dual-anode system to reduce organic matter crossover in membraneless microbial fuel cells. <i>Bioresource Technology</i> , 2016, 213, 140-145.	9.6	37
61	Acetate-assisted increase of butyrate production by <i>Eubacterium limosum</i> KIST612 during carbon monoxide fermentation. <i>Bioresource Technology</i> , 2017, 245, 560-566.	9.6	36
62	Accurate measurement of internal resistance in microbial fuel cells by improved scanning electrochemical impedance spectroscopy. <i>Electrochimica Acta</i> , 2021, 366, 137388.	5.2	35
63	Electricity generation from synthesis gas by microbial processes: CO fermentation and microbial fuel cell technology. <i>Bioresource Technology</i> , 2009, 100, 4527-4530.	9.6	34
64	Elimination of Power Overshoot at Bioanode through Assistance Current in Microbial Fuel Cells. <i>ChemSusChem</i> , 2017, 10, 612-617.	6.8	34
65	Microbial community differences between propionate-fed microbial fuel cell systems under open and closed circuit conditions. <i>Applied Microbiology and Biotechnology</i> , 2011, 89, 605-612.	3.6	33
66	Assistance Current Effect for Prevention of Voltage Reversal in Stacked Microbial Fuel Cell Systems. <i>ChemElectroChem</i> , 2015, 2, 755-760.	3.4	33
67	Bioelectronic platforms for optimal bio-anode of bio-electrochemical systems: From nano- to macro scopes. <i>Bioresource Technology</i> , 2015, 195, 2-13.	9.6	33
68	Construction of Uniform Monolayer- and Orientation-Tunable Enzyme Electrode by a Synthetic Glucose Dehydrogenase without Electron-Transfer Subunit via Optimized Site-Specific Gold-Binding Peptide Capable of Direct Electron Transfer. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 28615-28626.	8.0	32
69	Decadal and seasonal scale changes of an artificial lake environment after blocking tidal flows in the Yeongsan Estuary region, Korea. <i>Science of the Total Environment</i> , 2009, 407, 6063-6072.	8.0	31
70	Voltage increase of microbial fuel cells with multiple membrane electrode assemblies by in series connection. <i>Electrochemistry Communications</i> , 2013, 28, 131-134.	4.7	31
71	Emerging trends in microbial fuel cell diversification-Critical analysis. <i>Bioresource Technology</i> , 2021, 326, 124676.	9.6	30
72	Selection of the most problematic biofoulant in fouled RO membrane and the seawater intake to develop biosensors for membrane biofouling. <i>Desalination</i> , 2009, 247, 125-136.	8.2	29

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73	Optimization studies of bio-hydrogen production in a coupled microbial electrolysis-dye sensitized solar cell system. <i>Photochemical and Photobiological Sciences</i> , 2010, 9, 349-356.	2.9	29
74	Proof-of-concept experiments of an acid-base junction flow battery by reverse bipolar electro dialysis for an energy conversion system. <i>Electrochemistry Communications</i> , 2016, 72, 157-161.	4.7	29
75	Bubble coalescence suppression driven carbon monoxide (CO)-water mass transfer increase by electrolyte addition in a hollow fiber membrane bioreactor (HFMBR) for microbial CO conversion to ethanol. <i>Bioresource Technology</i> , 2018, 263, 375-384.	9.6	29
76	Exploring microbial communities and differences of cartridge filters (CFs) and reverse osmosis (RO) membranes for seawater desalination processes. <i>Desalination</i> , 2012, 298, 85-92.	8.2	28
77	Rapid enrichment of (homo)acetogenic consortia from animal feces using a high mass-transfer gas-lift reactor fed with syngas. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2013, 40, 995-1003.	3.0	26
78	Elimination of voltage reversal in multiple membrane electrode assembly installed microbial fuel cells (mMEA-MFCs) stacking system by resistor control. <i>Bioresource Technology</i> , 2018, 262, 338-341.	9.6	26
79	Gas-liquid mass transfer coefficient of methane in bubble column reactor. <i>Korean Journal of Chemical Engineering</i> , 2015, 32, 1060-1063.	2.7	25
80	Determination of optimum electrical connection mode for multi-electrode-embedded microbial fuel cells coupled with anaerobic digester for enhancement of swine wastewater treatment efficiency and energy recovery. <i>Bioresource Technology</i> , 2020, 297, 122464.	9.6	24
81	Nitrilotriacetic acid degradation under microbial fuel cell environment. <i>Biotechnology and Bioengineering</i> , 2006, 95, 772-774.	3.3	23
82	Tracking of <i>Shewanella oneidensis</i> MR-1 biofilm formation of a microbial electrochemical system via differential pulse voltammetry. <i>Bioresource Technology</i> , 2018, 254, 357-361.	9.6	23
83	Bioreactors, gas delivery systems and supporting technologies for microbial synthesis gas conversion process. <i>Bioresource Technology Reports</i> , 2019, 7, 100207.	2.7	23
84	Biosensing and electrochemical properties of flavin adenine dinucleotide (FAD)-Dependent glucose dehydrogenase (GDH) fused to a gold binding peptide. <i>Biosensors and Bioelectronics</i> , 2020, 165, 112427.	10.1	21
85	Ammonia Nitrogen Removal and Recovery from Swine Wastewater by Microwave Radiation. <i>Environmental Engineering Research</i> , 2014, 19, 381-385.	2.5	21
86	High performance enzyme fuel cells using a genetically expressed FAD-dependent glucose dehydrogenase β -subunit of <i>Burkholderia cepacia</i> immobilized in a carbon nanotube electrode for low glucose conditions. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 9508.	2.8	20
87	Performance variation according to anode-embedded orientation in a sediment microbial fuel cell employing a chessboard-like hundred-piece anode. <i>Bioresource Technology</i> , 2015, 190, 175-181.	9.6	20
88	Methanol supply speeds up synthesis gas fermentation by methylotrophic-acetogenic bacterium, <i>Eubacterium limosum</i> KIST612. <i>Bioresource Technology</i> , 2021, 321, 124521.	9.6	20
89	Current Production and Metal Oxide Reduction by <i>Shewanella oneidensis</i> MR-1 Wild Type and Mutants. <i>Applied and Environmental Microbiology</i> , 2008, 74, 553-553.	3.1	19
90	Differential Expression of <i>Desulfovibrio vulgaris</i> Genes in Response to Cu(II) and Hg(II) Toxicity. <i>Applied and Environmental Microbiology</i> , 2004, 70, 1847-1851.	3.1	18

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91	Complete Genome Sequencing of <i>Lactobacillus acidophilus</i> 30SC, Isolated from Swine Intestine. <i>Journal of Bacteriology</i> , 2011, 193, 2882-2883.	2.2	18
92	Use of red algae, Ceylon moss (<i>Gelidium amansii</i>), hydrolyzate for clostridial fermentation. <i>Biomass and Bioenergy</i> , 2013, 56, 38-42.	5.7	18
93	Concurrent Control of Power Overshoot and Voltage Reversal with Series Connection of Parallel-Connected Microbial Fuel Cells. <i>Energy Technology</i> , 2016, 4, 729-736.	3.8	18
94	Construction of bacterial artificial chromosome library from electrochemical microorganisms. <i>FEMS Microbiology Letters</i> , 2004, 238, 65-70.	1.8	17
95	Electricity generation coupled to oxidation of propionate in a microbial fuel cell. <i>Biotechnology Letters</i> , 2010, 32, 79-85.	2.2	17
96	Significance of maximum current for voltage boosting of microbial fuel cells in series. <i>Journal of Power Sources</i> , 2016, 323, 23-28.	7.8	17
97	Enhanced mass transfer rate of methane in aqueous phase via methyl-functionalized SBA-15. <i>Journal of Molecular Liquids</i> , 2016, 215, 154-160.	4.9	17
98	Self-recoverable voltage reversal in stacked microbial fuel cells due to biofilm capacitance. <i>Bioresource Technology</i> , 2017, 245, 1286-1289.	9.6	17
99	Genetic engineering system for syngas-utilizing acetogen, <i>Eubacterium limosum</i> KIST612. <i>Bioresource Technology Reports</i> , 2020, 11, 100452.	2.7	17
100	Determination of effects of turbulence flow in a cathode environment on electricity generation using a tidal mud-based cylindrical-type sediment microbial fuel cell. <i>Journal of Environmental Management</i> , 2010, 91, 2478-2482.	7.8	16
101	Multiphase Electrode Microbial Fuel Cell System that Simultaneously Converts Organics Coexisting in Water and Sediment phases into Electricity. <i>Environmental Science & Technology</i> , 2010, 44, 7145-7150.	10.0	16
102	Effects of azide on electron transport of exoelectrogens in air-cathode microbial fuel cells. <i>Bioresource Technology</i> , 2014, 169, 265-270.	9.6	15
103	Metabolism perturbation Caused by the overexpression of carbon monoxide dehydrogenase/Acetyl-CoA synthase gene complex accelerated gas to acetate conversion rate of <i>Eubacterium limosum</i> KIST612. <i>Bioresource Technology</i> , 2021, 341, 125879.	9.6	15
104	Increased Power in Sediment Microbial Fuel Cell: Facilitated Mass Transfer via a Water-Layer Anode Embedded in Sediment. <i>PLoS ONE</i> , 2015, 10, e0145430.	2.5	15
105	Enhanced mass transfer rate of methane via hollow fiber membrane modules for <i>Methylophilus trichosporium</i> OB3b fermentation. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 39, 149-152.	5.8	14
106	Significant enhancement of direct electric communication across enzyme-electrode interface via nano-patterning of synthetic glucose dehydrogenase on spatially tunable gold nanoparticle (AuNP)-modified electrode. <i>Biosensors and Bioelectronics</i> , 2019, 126, 170-177.	10.1	14
107	Microbial fuel cell driven mineral rich wastewater treatment process for circular economy by creating virtuous cycles. <i>Bioresource Technology</i> , 2021, 320, 124254.	9.6	14
108	Intrinsic kinetic parameters of <i>Thermococcus onnurineus</i> NA1 strains and prediction of optimum carbon monoxide level for ideal bioreactor operation. <i>Bioresource Technology</i> , 2016, 201, 74-79.	9.6	13

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109	Power Density Enhancement of Anion-Exchange Membrane-Installed Microbial Fuel Cell Under Bicarbonate-Buffered Cathode Condition. <i>Journal of Microbiology and Biotechnology</i> , 2013, 23, 36-39.	2.1	13
110	Use of an industrial grade medium and medium enhancing effects on high cell density CO fermentation by <i>Eubacterium limosum</i> KIST612. <i>Biotechnology Letters</i> , 2007, 29, 1183-1187.	2.2	12
111	Immobilisation of Flavinâ€Adenineâ€Dinucleotideâ€Dependent Glucose Dehydrogenase Î±â€Subunit in Freeâ€Standing Graphitised Carbon Nanofiber Paper Using a Bifunctional Crossâ€Linker for an Enzymatic Biofuel Cell. <i>ChemElectroChem</i> , 2014, 1, 1844-1848.	3.4	12
112	Electrical performance of low cost cathodes prepared by plasma sputtering deposition in microbial fuel cells. <i>Biosensors and Bioelectronics</i> , 2012, 31, 164-169.	10.1	11
113	Purification and Characterization of Complement-activating Acidic Polysaccharides from the Fruits of <i>Capsicum annuum</i> . <i>BMB Reports</i> , 2003, 36, 230-236.	2.4	11
114	Determination of volumetric gasâ€liquid mass transfer coefficient of carbon monoxide in a batch cultivation system using kinetic simulations. <i>Bioresource Technology</i> , 2017, 239, 387-393.	9.6	10
115	Preparation and electrochemical properties of polyaniline nanofibers using ultrasonication. <i>Materials Research Bulletin</i> , 2014, 58, 213-217.	5.2	9
116	Syngas Fermentation Into Biofuels and Biochemicals. , 2019, , 301-327.		9
117	A simultaneous gas feeding and cell-recycled reaction (SGCR) system to achieve biomass boosting and high acetate titer in microbial carbon monoxide fermentation. <i>Bioresource Technology</i> , 2020, 298, 122549.	9.6	9
118	Behavior of CO-water mass transfer coefficient in membrane sparger-integrated bubble column for synthesis gas fermentation. <i>Bioresource Technology</i> , 2020, 311, 123594.	9.6	8
119	Current Generation from Microbial Fuel Cell Using Stainless Steel Wire as Anode Electrode. <i>Daehan Hwan'gyeong Gonghag Hoeji</i> , 2014, 36, 753-757.	1.1	7
120	Prevention of Power Overshoot and Reduction of Cathodic Overpotential by Increasing Cathode Flow Rate in Microbial Fuel Cells used Stainless Steel Scrubber Electrode. <i>Daehan Hwan'gyeong Gonghag Hoeji</i> , 2017, 39, 591-598.	1.1	7
121	Serially Connectable Sediment Microbial Fuel Cells using Dipole Graphite Solids and Voltage Reversal Suppression. <i>Energy Technology</i> , 2017, 5, 1946-1952.	3.8	6
122	Dissolved carbon monoxide concentration monitoring platform based on direct electrical connection of CO dehydrogenase with electrically accessible surface structure. <i>Bioresource Technology</i> , 2020, 297, 122436.	9.6	6
123	High performance acidâ€base junction flow batteries using an asymmetric bipolar membrane with an ion-channel aligned anion exchange layer. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7955-7966.	10.3	6
124	Microbial fuel cells: Current trends and emerging applications. <i>Bioresource Technology</i> , 2021, 324, 124687.	9.6	6
125	Control of carbon monoxide dehydrogenase orientation by site-specific immobilization enables direct electrical contact between enzyme cofactor and solid surface. <i>Communications Biology</i> , 2022, 5, 390.	4.4	6
126	Functionalized Polyacrylonitrile Nanofibrous Membranes for Covalent Immobilization of Glucose Oxidase. <i>Journal of Biomedical Nanotechnology</i> , 2015, 11, 143-149.	1.1	5

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127	Electrocatalytic and Biosensing Properties of Aerobic Carbon Monoxide Dehydrogenase from Hydrogenophaga Pseudoflava Immobilized on Au Electrode towards Carbon Monoxide Oxidation. <i>Electroanalysis</i> , 2019, 31, 1635-1640.	2.9	5
128	Functional Expression of a Mo-Cu-Dependent Carbon Monoxide Dehydrogenase (CODH) and Its Use as a Dissolved CO Bio-microsensor. <i>ACS Sensors</i> , 2021, 6, 2772-2782.	7.8	5
129	Peptide sequence-driven direct electron transfer properties and binding behaviors of gold-binding peptide-fused glucose dehydrogenase on electrode. <i>IScience</i> , 2021, 24, 103373.	4.1	5
130	Construction of bacterial artificial chromosome library from electrochemical microorganisms. <i>FEMS Microbiology Letters</i> , 2004, 238, 65-70.	1.8	5
131	Evidence for chimeric sequences formed during random arbitrarily primed PCR. <i>Journal of Microbiological Methods</i> , 2003, 54, 427-431.	1.6	4
132	Fluorescence spectrum-based biofouling prediction method for RO membrane systems. <i>Desalination and Water Treatment</i> , 2012, 43, 238-245.	1.0	4
133	Fluorescence imaging for biofoulants detection and monitoring of biofouled strength in reverse osmosis membrane. <i>Analytical Methods</i> , 2014, 6, 993-1000.	2.7	4
134	Structural heterogeneity yet high similarity of the microbial community on reverse osmosis membrane-driven biofilms during seawater desalination. <i>Environmental Science: Water Research and Technology</i> , 2020, 6, 3066-3079.	2.4	4
135	Effect of the Application of Microbubbles and/or Catalyst on the Sludge Reduction and Organic matter of Livestock Wastewater. <i>Daehan Hwan'gyeong Gonghag Hoeji</i> , 2015, 37, 558-562.	1.1	4
136	Gene-Centric Metagenome Analysis Reveals Gene Clusters for Carbon Monoxide Conversion and Validates Isolation of a Clostridial Acetogen for C2 Chemical Production. <i>Biotechnology Journal</i> , 2019, 14, 1800471.	3.5	3
137	Gas circulation rate and medium exchange ratio as influential factors affecting ethanol production in carbon monoxide fermentation using a packed-bed reactor. <i>Sustainable Energy and Fuels</i> , 2020, 4, 1963-1973.	4.9	3
138	Graphitized-Carbon-Nanofiber Paper-Enzyme Electrode Fabrication Through Non-Covalent Modification for Enzyme Biofuel Cell Application. <i>Journal of Biomedical Nanotechnology</i> , 2015, 11, 137-142.	1.1	2
139	Microbial Communities of the Microbial Fuel Cell Using Swine Wastewater in the Enrichment Step with the Lapse of Time. <i>Daehan Hwan'gyeong Gonghag Hoeji</i> , 2013, 35, 973-977.	1.1	2
140	Direct electrical contact of NAD ⁺ /NADH-dependent dehydrogenase on electrode surface enabled by non-native solid-binding peptide as a molecular binder. <i>Electrochimica Acta</i> , 2022, 421, 140480.	5.2	2
141	Adhesion potential of bacteria retrieved from intake seawater and membrane biofilms on full-scale reverse osmosis desalination process. <i>Desalination and Water Treatment</i> , 2016, 57, 26629-26640.	1.0	1
142	Correlation of Overvoltages and Current Densities to Estimate Optimal Electrode Size for Sediment Microbial Fuel Cells. <i>Energy Technology</i> , 2016, 4, 369-374.	3.8	1
143	Microbial Carbon Substrate Utilization in Microbial Fuel Cell using Livestock Wastewater. <i>Journal of Korea Society of Waste Management</i> , 2012, 29, 712-719.	0.2	1
144	Preface. <i>Bioresource Technology</i> , 2015, 195, 1.	9.6	0

#	ARTICLE	IF	CITATIONS
145	On Creating Multimedia Interfaces for Hybrid Biological-Digital Art Installations. Lecture Notes in Computer Science, 2020, , 139-150.	1.3	0
146	Protocol for construction and characterization of direct electron transfer-based enzyme-electrode using gold binding peptide as molecular binder. STAR Protocols, 2022, 3, 101466.	1.2	0