

# In Seop Chang

List of Publications by Year  
in descending order

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146  
papers

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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. | 3.3 | 1,629     |
| 2  | Operational parameters affecting the performance of a mediator-less microbial fuel cell. <i>Biosensors and Bioelectronics</i> , 2003, 18, 327-334.  | 5.3 | 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.  | 1.6 | 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.   | 1.4 | 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.   | 1.0 | 485       |
| 6  | Construction and operation of a novel mediator- and membrane-less microbial fuel cell. <i>Process Biochemistry</i> , 2004, 39, 1007-1012.   | 1.8 | 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.  | 1.7 | 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.                       | 0.7 | 381       |
| 9  | Mass Transport through a Proton Exchange Membrane (Nafion) in Microbial Fuel Cells. <i>Energy &amp; Fuels</i> , 2008, 22, 169-176.  | 2.5 | 376       |
| 10 | Continuous determination of biochemical oxygen demand using microbial fuel cell type biosensor. <i>Biosensors and Bioelectronics</i> , 2004, 19, 607-613.   | 5.3 | 359       |
| 11 | Challenges in microbial fuel cell development and operation. <i>Applied Microbiology and Biotechnology</i> , 2007, 76, 485-494.   | 1.7 | 358       |
| 12 | Novel BOD (biological oxygen demand) sensor using mediator-less microbial fuel cell. <i>Biotechnology Letters</i> , 2003, 25, 541-545.  | 1.1 | 327       |
| 13 | Continuous electricity production from artificial wastewater using a mediator-less microbial fuel cell. <i>Bioresource Technology</i> , 2006, 97, 621-627.  | 4.8 | 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.  | 5.3 | 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.   | 5.3 | 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.  | 0.7 | 189       |
| 17 | Analysis of microbial diversity in oligotrophic microbial fuel cells using 16S rDNA sequences. <i>FEMS Microbiology Letters</i> , 2004, 233, 77-82.   | 0.7 | 170       |
| 18 | Enrichment, Performance, and Microbial Diversity of a Thermophilic Mediatorless Microbial Fuel Cell. <i>Environmental Science &amp; Technology</i> , 2006, 40, 6449-6454.   | 4.6 | 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.                               | 3.8 | 146       |
| 20 | Experimental evaluation of influential factors for electricity harvesting from sediment using microbial fuel cell. <i>Bioresource Technology</i> , 2009, 100, 3029-3035.  | 4.8 | 130       |
| 21 | A Solar-Powered Microbial Electrolysis Cell with a Platinum Catalyst-Free Cathode To Produce Hydrogen. <i>Environmental Science &amp; Technology</i> , 2009, 43, 9525-9530.   | 4.6 | 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.  | 4.8 | 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.                    | 1.7 | 113       |
| 24 | Bifunctional Silver Nanoparticle Cathode in Microbial Fuel Cells for Microbial Growth Inhibition with Comparable Oxygen Reduction Reaction Activity. <i>Environmental Science &amp; Technology</i> , 2011, 45, 5441-5446. | 4.6 | 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.  | 1.1 | 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.   | 1.1 | 99        |
| 27 | Treatment of Alcohol Distillery Wastewater Using a Bacteroidetes-Dominant Thermophilic Microbial Fuel Cell. <i>Environmental Science &amp; Technology</i> , 2012, 46, 3022-3030.  | 4.6 | 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.               | 8.2 | 94        |
| 29 | Microbial synthesis gas utilization and ways to resolve kinetic and mass-transfer limitations. <i>Bioresource Technology</i> , 2015, 177, 361-374.  | 4.8 | 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.   | 1.8 | 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.                     | 5.3 | 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.  | 1.8 | 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.   | 3.6 | 76        |
| 34 | Coupling of anaerobic digester and microbial fuel cell for COD removal and ammonia recovery. <i>Bioresource Technology</i> , 2015, 195, 217-222.  | 4.8 | 76        |
| 35 | Comparison in performance of sediment microbial fuel cells according to depth of embedded anode. <i>Bioresource Technology</i> , 2013, 127, 138-142.  | 4.8 | 75        |
| 36 | Performance and Bacterial Consortium of Microbial Fuel Cell Fed with Formate. <i>Energy &amp; Fuels</i> , 2008, 22, 164-168.  | 2.5 | 73        |

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|----|--|-----|-----------|
| 37 | Controlling Voltage Reversal in Microbial Fuel Cells. Trends in Biotechnology, 2020, 38, 667-678.  | 4.9 | 70        |
| 38 | Energy Conservation Model Based on Genomic and Experimental Analyses of a Carbon Monoxide-Utilizing, Butyrate-Forming Acetogen, <i>Eubacterium limosum</i> KIST612. Applied and Environmental Microbiology, 2015, 81, 4782-4790.                       | 1.4 | 69        |
| 39 | The biocathode of microbial electrochemical systems and microbially-influenced corrosion. Bioresource Technology, 2015, 190, 395-401.  | 4.8 | 69        |
| 40 | Complete Genome Sequence of a Carbon Monoxide-Utilizing Acetogen, <i>Eubacterium limosum</i> KIST612. Journal of Bacteriology, 2011, 193, 307-308.   | 1.0 | 68        |
| 41 | Dissimilatory Fe(III) reduction by an electrochemically active lactic acid bacterium phylogenetically related to <i>Enterococcus gallinarum</i> isolated from submerged soil. Journal of Applied Microbiology, 2005, 99, 978-987.                      | 1.4 | 67        |
| 42 | Biocatalytic Conversion of Methane to Methanol as a Key Step for Development of Methane-Based Biorefineries. Journal of Microbiology and Biotechnology, 2014, 24, 1597-1605.   | 0.9 | 67        |
| 43 | Responses from freshwater sediment during electricity generation using microbial fuel cells. Bioprocess and Biosystems Engineering, 2009, 32, 389-395.   | 1.7 | 64        |
| 44 | Batch Conversion of Methane to Methanol Using <i>Methylosinus trichosporium</i> OB3b as Biocatalyst. Journal of Microbiology and Biotechnology, 2015, 25, 375-380.   | 0.9 | 63        |
| 45 | A comparison of membranes and enrichment strategies for microbial fuel cells. Bioresource Technology, 2011, 102, 6291-6294.  | 4.8 | 61        |
| 46 | Metabolically engineered glucose-utilizing <i>Shewanella</i> strains under anaerobic conditions. Bioresource Technology, 2014, 154, 59-66.   | 4.8 | 60        |
| 47 | T-RFLP reveals high $\beta$ -Proteobacteria diversity in microbial fuel cells enriched with domestic wastewater. Journal of Applied Microbiology, 2010, 109, 839-850.  | 1.4 | 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. Electrochimica Acta, 2018, 259, 365-376.                                   | 2.6 | 58        |
| 49 | Effect of sulfate reduction activity on biological treatment of hexavalent chromium [Cr(VI)] contaminated electroplating wastewater under sulfate-rich condition. Chemosphere, 2007, 68, 218-226.  | 4.2 | 57        |
| 50 | Characterization of uncharged and sulfonated porous poly(vinylidene fluoride) membranes and their performance in microbial fuel cells. Journal of Membrane Science, 2014, 463, 205-214.  | 4.1 | 55        |
| 51 | Shift of voltage reversal in stacked microbial fuel cells. Journal of Power Sources, 2015, 278, 534-539.   | 4.0 | 53        |
| 52 | Full-loop operation and cathodic acidification of a microbial fuel cell operated on domestic wastewater. Bioresource Technology, 2011, 102, 5841-5848.   | 4.8 | 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. Bioresource Technology, 2014, 169, 637-643. | 4.8 | 51        |
| 54 | pH-dependent ammonia removal pathways in microbial fuel cell system. Bioresource Technology, 2016, 215, 290-295.   | 4.8 | 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. Atmospheric Environment, 2018, 194, 82-92.  | 1.9 | 46        |
| 56 | Floating-Type Microbial Fuel Cell (FT-MFC) for Treating Organic-Contaminated Water. Environmental Science & Technology, 2009, 43, 1642-1647.  | 4.6 | 44        |
| 57 | Study of hydrogen production in light assisted microbial electrolysis cell operated with dye sensitized solar cell. International Journal of Hydrogen Energy, 2009, 34, 9297-9304.  | 3.8 | 43        |
| 58 | Interface resistances of anion exchange membranes in microbial fuel cells with low ionic strength. Biosensors and Bioelectronics, 2011, 26, 3266-3271.  | 5.3 | 37        |
| 59 | New architecture for modulization of membraneless and single-chambered microbial fuel cell using a bipolar plate-electrode assembly (BEA). Biosensors and Bioelectronics, 2014, 59, 28-34.  | 5.3 | 37        |
| 60 | Development of anode zone using dual-anode system to reduce organic matter crossover in membraneless microbial fuel cells. Bioresource Technology, 2016, 213, 140-145.  | 4.8 | 37        |
| 61 | Acetate-assisted increase of butyrate production by Eubacterium limosum KIST612 during carbon monoxide fermentation. Bioresource Technology, 2017, 245, 560-566.  | 4.8 | 36        |
| 62 | Accurate measurement of internal resistance in microbial fuel cells by improved scanning electrochemical impedance spectroscopy. Electrochimica Acta, 2021, 366, 137388.  | 2.6 | 35        |
| 63 | Electricity generation from synthesis gas by microbial processes: CO fermentation and microbial fuel cell technology. Bioresource Technology, 2009, 100, 4527-4530.   | 4.8 | 34        |
| 64 | Elimination of Power Overshoot at Bioanode through Assistance Current in Microbial Fuel Cells. ChemSusChem, 2017, 10, 612-617.  | 3.6 | 34        |
| 65 | Microbial community differences between propionate-fed microbial fuel cell systems under open and closed circuit conditions. Applied Microbiology and Biotechnology, 2011, 89, 605-612.   | 1.7 | 33        |
| 66 | Assistance Current Effect for Prevention of Voltage Reversal in Stacked Microbial Fuel Cell Systems. ChemElectroChem, 2015, 2, 755-760.   | 1.7 | 33        |
| 67 | Bioelectronic platforms for optimal bio-anode of bio-electrochemical systems: From nano- to macro scopes. Bioresource Technology, 2015, 195, 2-13.  | 4.8 | 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. ACS Applied Materials & Interfaces, 2018, 10, 28615-28626. | 4.0 | 32        |
| 69 | Decadal and seasonal scale changes of an artificial lake environment after blocking tidal flows in the Yeongsan Estuary region, Korea. Science of the Total Environment, 2009, 407, 6063-6072.  | 3.9 | 31        |
| 70 | Voltage increase of microbial fuel cells with multiple membrane electrode assemblies by in series connection. Electrochemistry Communications, 2013, 28, 131-134.   | 2.3 | 31        |
| 71 | Emerging trends in microbial fuel cell diversification-Critical analysis. Bioresource Technology, 2021, 326, 124676.  | 4.8 | 30        |
| 72 | Selection of the most problematic biofoulant in fouled RO membrane and the seawater intake to develop biosensors for membrane biofouling. Desalination, 2009, 247, 125-136.   | 4.0 | 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.   | 1.6 | 29        |
| 74 | Proof-of-concept experiments of an acid-base junction flow battery by reverse bipolar electrodialysis for an energy conversion system. <i>Electrochemistry Communications</i> , 2016, 72, 157-161.  | 2.3 | 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.                                 | 4.8 | 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.  | 4.0 | 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.   | 1.4 | 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.   | 4.8 | 26        |
| 79 | Gas-liquid mass transfer coefficient of methane in bubble column reactor. <i>Korean Journal of Chemical Engineering</i> , 2015, 32, 1060-1063.  | 1.2 | 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.                    | 4.8 | 24        |
| 81 | Nitrilotriacetic acid degradation under microbial fuel cell environment. <i>Biotechnology and Bioengineering</i> , 2006, 95, 772-774.   | 1.7 | 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.   | 4.8 | 23        |
| 83 | Bioreactors, gas delivery systems and supporting technologies for microbial synthesis gas conversion process. <i>Bioresource Technology Reports</i> , 2019, 7, 100207.  | 1.5 | 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.   | 5.3 | 21        |
| 85 | Ammonia Nitrogen Removal and Recovery from Swine Wastewater by Microwave Radiation. <i>Environmental Engineering Research</i> , 2014, 19, 381-385.  | 1.5 | 21        |
| 86 | High performance enzyme fuel cells using a genetically expressed FAD-dependent glucose dehydrogenase $\Gamma$ -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. | 1.3 | 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.  | 4.8 | 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.   | 4.8 | 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.   | 1.4 | 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.  | 1.4 | 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.   | 1.0 | 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.   | 2.9 | 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.   | 1.8 | 18        |
| 94  | Construction of bacterial artificial chromosome library from electrochemical microorganisms. <i>FEMS Microbiology Letters</i> , 2004, 238, 65-70.  | 0.7 | 17        |
| 95  | Electricity generation coupled to oxidation of propionate in a microbial fuel cell. <i>Biotechnology Letters</i> , 2010, 32, 79-85.  | 1.1 | 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.  | 4.0 | 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.  | 2.3 | 17        |
| 98  | Self-recoverable voltage reversal in stacked microbial fuel cells due to biofilm capacitance. <i>Bioresource Technology</i> , 2017, 245, 1286-1289.  | 4.8 | 17        |
| 99  | Genetic engineering system for syngas-utilizing acetogen, <i>Eubacterium limosum</i> KIST612. <i>Bioresource Technology Reports</i> , 2020, 11, 100452.  | 1.5 | 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.  | 3.8 | 16        |
| 101 | Multiphase Electrode Microbial Fuel Cell System that Simultaneously Converts Organics Coexisting in Water and Sediment phases into Electricity. <i>Environmental Science &amp; Technology</i> , 2010, 44, 7145-7150.   | 4.6 | 16        |
| 102 | Effects of azide on electron transport of exoelectrogens in air-cathode microbial fuel cells. <i>Bioresource Technology</i> , 2014, 169, 265-270.  | 4.8 | 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.                    | 4.8 | 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.   | 1.1 | 15        |
| 105 | Enhanced mass transfer rate of methane via hollow fiber membrane modules for <i>Methylosinus trichosporium</i> OB3b fermentation. <i>Journal of Industrial and Engineering Chemistry</i> , 2016, 39, 149-152.  | 2.9 | 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. | 5.3 | 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.  | 4.8 | 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.   | 4.8 | 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.   | 0.9 | 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.   | 1.1 | 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. | 1.7 | 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.  | 5.3 | 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.  | 1.1 | 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.  | 4.8 | 10        |
| 115 | Preparation and electrochemical properties of polyaniline nanofibers using ultrasonication. <i>Materials Research Bulletin</i> , 2014, 58, 213-217.  | 2.7 | 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.   | 4.8 | 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.   | 4.8 | 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.  | 0.4 | 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.                              | 0.4 | 7         |
| 121 | Serially Connectable Sediment Microbial Fuel Cells using Dipole Graphite Solids and Voltage Reversal Suppression. <i>Energy Technology</i> , 2017, 5, 1946-1952.   | 1.8 | 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.   | 4.8 | 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.   | 5.2 | 6         |
| 124 | Microbial fuel cells: Current trends and emerging applications. <i>Bioresource Technology</i> , 2021, 324, 124687.   | 4.8 | 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.  | 2.0 | 6         |
| 126 | Functionalized Polyacrylonitrile Nanofibrous Membranes for Covalent Immobilization of Glucose Oxidase. <i>Journal of Biomedical Nanotechnology</i> , 2015, 11, 143-149.  | 0.5 | 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. Electroanalysis, 2019, 31, 1635-1640.    | 1.5 | 5         |
| 128 | Functional Expression of a Moâ€Cu-Dependent Carbon Monoxide Dehydrogenase (CODH) and Its Use as a Dissolved CO Bio-microsensor. ACS Sensors, 2021, 6, 2772-2782.  | 4.0 | 5         |
| 129 | Peptide sequence-driven direct electron transfer properties and binding behaviors of gold-binding peptide-fused glucose dehydrogenase on electrode. IScience, 2021, 24, 103373.   | 1.9 | 5         |
| 130 | Construction of bacterial artificial chromosome library from electrochemical microorganisms. FEMS Microbiology Letters, 2004, 238, 65-70.   | 0.7 | 5         |
| 131 | Evidence for chimeric sequences formed during random arbitrarily primed PCR. Journal of Microbiological Methods, 2003, 54, 427-431.   | 0.7 | 4         |
| 132 | Fluorescence spectrum-based biofouling prediction method for RO membrane systems. Desalination and Water Treatment, 2012, 43, 238-245.  | 1.0 | 4         |
| 133 | Fluorescence imaging for biofoulants detection and monitoring of biofouled strength in reverse osmosis membrane. Analytical Methods, 2014, 6, 993-1000.   | 1.3 | 4         |
| 134 | Structural heterogeneity yet high similarity of the microbial community on reverse osmosis membrane-driven biofilms during seawater desalination. Environmental Science: Water Research and Technology, 2020, 6, 3066-3079. | 1.2 | 4         |
| 135 | Effect of the Application of Microbubbles and/or Catalyst on the Sludge Reduction and Organic matter of Livestock Wastewater. Daehan Hwan'gyeong Gonghag Hoeji, 2015, 37, 558-562.  | 0.4 | 4         |
| 136 | Geneâ€Centric Metagenome Analysis Reveals Gene Clusters for Carbon Monoxide Conversion and Validates Isolation of a Clostridial Acetogen for C2 Chemical Production. Biotechnology Journal, 2019, 14, 1800471.              | 1.8 | 3         |
| 137 | Gas circulation rate and medium exchange ratio as influential factors affecting ethanol production in carbon monoxide fermentation using a packed-bed reactor. Sustainable Energy and Fuels, 2020, 4, 1963-1973.            | 2.5 | 3         |
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