Sang-Eun Oh

List of Publications by Year
in descending order

73 papers	6,161 citations	117453 34 h-index	91712 69 g-index
73 all docs	73 docs citations	73 times ranked	5375 citing authors

#	Article	IF	Citations
1	Power Generation Using Different Cation, Anion, and Ultrafiltration Membranes in Microbial Fuel Cells. Environmental Science & Technology, 2007, 41, 1004-1009.	4.6	613
2	Microbial fuel cell as new technology for bioelectricity generation: A review. AEJ - Alexandria Engineering Journal, 2015, 54, 745-756.	3.4	580
3	Biological Hydrogen Production Measured in Batch Anaerobic Respirometers. Environmental Science & Technology, 2002, 36, 2530-2535.	4.6	477
4	The Relative Effectiveness of pH Control and Heat Treatment for Enhancing Biohydrogen Gas Production. Environmental Science & Technology, 2003, 37, 5186-5190.	4.6	427
5	Proton exchange membrane and electrode surface areas as factors that affect power generation in microbial fuel cells. Applied Microbiology and Biotechnology, 2006, 70, 162-169.	1.7	423
6	Biohydrogen gas production from food processing and domestic wastewaters. International Journal of Hydrogen Energy, 2005, 30, 1535-1542.	3.8	334
7	Hydrogen and methane production from swine wastewater using microbial electrolysis cells. Water Research, 2009, 43, 1480-1488.	5.3	257
8	Nano-structured carbon as electrode material in microbial fuel cells: A comprehensive review. Journal of Alloys and Compounds, 2013, 580, 245-255.	2.8	192
9	Effects of natural and calcined oyster shells on Cd and Pb immobilization in contaminated soils. Environmental Earth Sciences, 2010, 61, 1301-1308.	1.3	178
10	Biological hydrogen production using a membrane bioreactor. Biotechnology and Bioengineering, 2004, 87, 119-127.	1.7	175
11	Overview of Recent Advancements in the Microbial Fuel Cell from Fundamentals to Applications: Design, Major Elements, and Scalability. Energies, 2019, 12, 3390.	1.6	145
12	Carbon nanotube as an alternative cathode support and catalyst for microbial fuel cells. Applied Energy, 2013, 102, 1050-1056.	5.1	133
13	Removal of Headspace CO2Increases Biological Hydrogen Production. Environmental Science & Technology, 2005, 39, 4416-4420.	4.6	127
14	Application of eggshell waste for the immobilization of cadmium and lead in a contaminated soil. Environmental Geochemistry and Health, 2011, 33, 31-39.	1.8	119
15	Toxicity assessment using different bioassays and microbial biosensors. Environment International, 2016, 92-93, 106-118.	4.8	114
16	Electricity generation from rice straw using a microbial fuel cell. International Journal of Hydrogen Energy, 2014, 39, 9490-9496.	3.8	104
17	Power generation from cellulose using mixed and pure cultures of cellulose-degrading bacteria in a microbial fuel cell. Enzyme and Microbial Technology, 2012, 51, 269-273.	1.6	102
18	Application of Co-naphthalocyanine (CoNPc) as alternative cathode catalyst and support structure for microbial fuel cells. Bioresource Technology, 2011, 102, 342-347.	4.8	99

#	Article	IF	Citations
19	A review on the effect of proton exchange membranes in microbial fuel cells. Biofuel Research Journal, 2014, 01, 7-15.	7.2	97
20	Heavy metal immobilization in soil near abandoned mines using eggshell waste and rapeseed residue. Environmental Science and Pollution Research, 2013, 20, 1719-1726.	2.7	94
21	Modeling adsorption kinetics of trichloroethylene onto biochars derived from soybean stover and peanut shell wastes. Environmental Science and Pollution Research, 2013, 20, 8364-8373.	2.7	92
22	Thionine increases electricity generation from microbial fuel cell using Saccharomyces cerevisiae and exoelectrogenic mixed culture. Journal of Microbiology, 2012, 50, 575-580.	1.3	86
23	Whole conversion of microalgal biomass into biofuels through successive high-throughput fermentation. Chemical Engineering Journal, 2019, 360, 797-805.	6.6	74
24	The effect of Nafion membrane fouling on the power generation of a microbial fuel cell. International Journal of Hydrogen Energy, 2020, 45, 13643-13651.	3.8	74
25	Evaluation of marine biomass as a source of methane in batch tests: A lab-scale study. Energy, 2012, 43, 396-401.	4.5	70
26	Overview of electroactive microorganisms and electron transfer mechanisms in microbial electrochemistry. Bioresource Technology, 2022, 347, 126579.	4.8	58
27	Physical and hydrodynamic properties of flocs produced during biological hydrogen production. Biotechnology and Bioengineering, 2004, 88, 854-860.	1.7	56
28	A novel biosensor for detecting toxicity in water using sulfur-oxidizing bacteria. Sensors and Actuators B: Chemical, 2011, 154, 17-21.	4.0	56
29	Nickel nanorods over nickel foam as standalone anode for direct alkaline methanol and ethanol fuel cell. International Journal of Hydrogen Energy, 2020, 45, 5948-5959.	3.8	56
30	Hydrogen production by Clostridium acetobutylicum ATCC 824Âand megaplasmid-deficient mutant M5 evaluated using a large headspace volume technique. International Journal of Hydrogen Energy, 2009, 34, 9347-9353.	3.8	51
31	Utilization of Microalgal Biofractions for Bioethanol, Higher Alcohols, and Biodiesel Production: A Review. Energies, 2017, 10, 2110.	1.6	47
32	Impedance and Thermodynamic Analysis of Bioanode, Abiotic Anode, and Riboflavin-Amended Anode in Microbial Fuel Cells. Bulletin of the Korean Chemical Society, 2012, 33, 3349-3354.	1.0	47
33	Use of artificial neural network for the prediction of bioelectricity production in a membrane less microbial fuel cell. Fuel, 2014, 117, 697-703.	3.4	45
34	Improved structures of stainless steel current collector increase power generation of microbial fuel cells by decreasing cathodic charge transfer impedance. Environmental Engineering Research, 2018, 23, 383-389.	1.5	36
35	Effects of substrate concentrations on performance of serially connected microbial fuel cells (MFCs) operated in a continuous mode. Biotechnology Letters, 2012, 34, 1833-1839.	1.1	35
36	Transition metal/carbon nanoparticle composite catalysts as platinum substitutes for bioelectrochemical hydrogen production using microbial electrolysis cells. International Journal of Hydrogen Energy, 2019, 44, 2258-2265.	3.8	35

#	Article	IF	Citations
37	Isolation and characterization of Acidithiobacillus caldus from a sulfur-oxidizing bacterial biosensor and its role in detection of toxic chemicals. Journal of Microbiological Methods, 2010, 82, 151-155.	0.7	33
38	Nitrate-contaminated groundwater remediation by combined autotrophic and heterotrophic denitrification for sulfate and pH control: batch tests. Environmental Science and Pollution Research, 2013, 20, 9084-9091.	2.7	32
39	Detecting endocrine disrupting compounds in water using sulfur-oxidizing bacteria. Chemosphere, 2010, 81, 294-297.	4.2	27
40	Detection of Cr6+by the Sulfur Oxidizing Bacteria Biosensor: Effect of Different Physical Factors. Environmental Science & Technology, 2012, 46, 7844-7848.	4.6	23
41	Comparison of chromium III and VI toxicities in water using sulfur-oxidizing bacterial bioassays. Chemosphere, 2016, 160, 342-348.	4.2	22
42	Detecting Oxidized Contaminants in Water Using Sulfur-Oxidizing Bacteria. Environmental Science & Technology, 2011, 45, 3739-3745.	4.6	21
43	Fouling behavior of marine organic matter in reverse osmosis membranes of a real-scale seawater desalination plant in South Korea. Desalination, 2020, 485, 114305.	4.0	21
44	Effect of organics and alkalinity on the sulfur oxidizing bacteria (SOB) biosensor. Chemosphere, 2013, 90, 965-970.	4.2	20
45	Rapid detection of heavy metal-induced toxicity in water using a fed-batch sulfur-oxidizing bacteria (SOB) bioreactor. Journal of Microbiological Methods, 2019, 161, 35-42.	0.7	20
46	Assessment of benzene, toluene, ethyl-benzene, and xylene (BTEX) toxicity in soil using sulfur-oxidizing bacterial (SOB) bioassay. Chemosphere, 2019, 220, 651-657.	4.2	20
47	Sequential effects of cleaning protocols on desorption of reverse osmosis membrane foulants: Autopsy results from a full-scale desalination plant. Desalination, 2021, 500, 114830.	4.0	20
48	A solid-phase direct contact bioassay using sulfur-oxidizing bacteria (SOB) to evaluate toxicity of soil contaminated with heavy metals. Sensors and Actuators B: Chemical, 2020, 305, 127510.	4.0	19
49	Real-time monitoring of water quality of stream water using sulfur-oxidizing bacteria as bio-indicator. Chemosphere, 2019, 223, 58-63.	4.2	18
50	Semi-continuous detection of toxic hexavalent chromium using a sulfur-oxidizing bacteria biosensor. Journal of Environmental Management, 2012, 106, 110-112.	3.8	17
51	Highly active Ptâ€“Pd alloy catalyst for oxygen reduction reaction in buffer solution. Electrochemistry Communications, 2011, 13, 1300-1303.	2.3	15
52	Application of half-order kinetics to sulfur-utilizing autotrophic denitrification for groundwater remediation. Environmental Earth Sciences, 2015, 73, 3445-3450.	1.3	15
53	A simple and rapid algal assay kit to assess toxicity of heavy metal-contaminated water. Environmental Pollution, 2021, 269, 116135.	3.7	15
54	Toxicity assessment of selected heavy metals in water using a seven-chambered sulfur-oxidizing bacterial (SOB) bioassay reactor. Sensors and Actuators B: Chemical, 2018, 258, 1008-1014.	4.0	13

#	Article	IF	Citations
55	Effect of Dissolved Oxygen Tension and Agitation Rates on Sulfur-Utilizing Autotrophic Denitrification: Batch Tests. Applied Biochemistry and Biotechnology, 2013, 169, 181-191.	1.4	12
56	Assessing acute toxicity of effluent from a textile industry and nearby river waters using sulfurâ€oxidizing bacteria in continuous mode. Environmental Technology (United Kingdom), 2011, 32, 1597-1604.	1.2	10
57	Improved toxicity analysis of heavy metal-contaminated water via a novel fermentative bacteria-based test kit. Chemosphere, 2020, 258, 127412.	4.2	9
58	Development of an Online Sulfur-Oxidizing Bacteria Biosensor for the Monitoring of Water Toxicity. Applied Biochemistry and Biotechnology, 2014, 174, 2585-2593.	1.4	7
59	Rapid assessment of heavy metal-induced toxicity in water using micro-algal bioassay based on photosynthetic oxygen evolution. Environmental Engineering Research, 2021, 26, 200391-0.	1.5	7
60	Assessing toxicities of industrial effluents and 1,4â€dioxane using sulphurâ€oxidising bacteria in a batch test. Water and Environment Journal, 2012, 26, 224-234.	1.0	5
61	Assessment of chromium-contaminated groundwater using a thiosulfate-oxidizing bacteria (TOB) biosensor. Chemosphere, 2014, 104, 32-36.	4.2	5
62	A Non-Pt Catalyst for Improved Oxygen Reduction Reaction in Microbial Fuel Cells. Journal of the Korean Electrochemical Society, 2011, 14, 71-76.	0.1	5
63	A Microbial Bioassay for Direct Contact Assessment of Soil Toxicity Based on Oxygen Consumption of Sulfur Oxidizing Bacteria. Bio-protocol, 2020, 10, e3470.	0.2	4
64	A novel gas production bioassay of thiosulfate utilizing denitrifying bacteria (TUDB) for the toxicity assessment of heavy metals contaminated water. Chemosphere, 2022, 303, 134902.	4.2	4
65	A direct contact bioassay using sulfur-oxidizing bacteria (SOB) for toxicity assessment of contaminated field soils. Chemosphere, 2022, 286, 131599.	4.2	3
66	Influence of Reactive Media Composition and Chemical Oxygen Demand as Methanol on Autotrophic Sulfur Denitrification. Journal of Microbiology and Biotechnology, 2012, 22, 1155-1160.	0.9	3
67	Application of Biocathodes in Microbial Fuel Cells: Opportunities and Challenges. Han'guk T'oyang Piryo Hakhoe Chi Han'guk T'oyang Piryo Hakhoe, 2012, 45, 410-420.	0.1	3
68	Use of sulfur-oxidizing bacteria for assessment of chromium-contaminated soil. Environmental Earth Sciences, 2013, 70, 139-143.	1.3	2
69	Recovery of Sustainable Renewable Energy from Marine Biomass. Han'guk T'oyang Piryo Hakhoe Chi Han'guk T'oyang Piryo Hakhoe, 2012, 45, 156-161.	0.1	2
70	Effect of different air flow rate on operation of sulfur-oxidizing bacteria (SOB) biosensor. Geosystem Engineering, 2015, 18, 245-250.	0.7	1
71	Biological Toxicity Monitoring System using Sulfur Oxidizing Bacteria. , 2011, , .		0
72	Assessment of Biological Toxicity Monitoring in Water Using Sulfur Oxidizing Bacteria. Korean Journal of Environmental Agriculture, 2012, 31, 170-174.	0.0	0

#	Article	IF	Citations
73	Toxicity Response of Biosensor Using Sulfur-Oxidizing Bacteria to Various Nitrogenous Compounds. Korean Journal of Environmental Agriculture, 2014, 33, 314-320.	0.0	0