

Sunil A Patil

List of Publications by Year in descending order

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64
papers

4,592
citations

136885

32
h-index

155592

55
g-index

66
all docs

66
docs citations

66
times ranked

3886
citing authors

#	ARTICLE	IF	CITATIONS
1	Performance evaluation of the integrated hydroponics-microbial electrochemical technology (iHydroMET) for decentralized domestic wastewater treatment. <i>Chemosphere</i> , 2022, 288, 132514.	4.2	6
2	Extremophilic electroactive microorganisms: Promising biocatalysts for bioprocessing applications. <i>Bioresource Technology</i> , 2022, 347, 126663.	4.8	14
3	Protocol for bioelectrochemical enrichment, cultivation, and characterization of extreme electroactive microorganisms. <i>STAR Protocols</i> , 2022, 3, 101114.	0.5	9
4	Technological progress and readiness level of microbial electrosynthesis and electrofermentation for carbon dioxide and organic wastes valorization. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2022, 35, 100605.	3.2	12
5	Electricity-driven bioproduction from CO ₂ and N ₂ feedstocks using enriched mixed microbial culture. <i>Journal of CO₂ Utilization</i> , 2022, 60, 101997.	3.3	3
6	Bioelectrocatalytic sulfide oxidation by a haloalkaliphilic electroactive microbial community dominated by <i>Desulfobulbaceae</i> . <i>Electrochimica Acta</i> , 2022, 423, 140576.	2.6	4
7	A comprehensive review on emerging constructed wetland coupled microbial fuel cell technology: Potential applications and challenges. <i>Bioresource Technology</i> , 2021, 320, 124376.	4.8	102
8	Direct utilization of industrial carbon dioxide with low impurities for acetate production via microbial electrosynthesis. <i>Bioresource Technology</i> , 2021, 320, 124289.	4.8	55
9	Reactive coating modification of metal material with strong bonding strength and enhanced corrosion resistance for high-performance bioelectrode of microbial electrochemical technologies. <i>Journal of Power Sources</i> , 2021, 491, 229595.	4.0	7
10	Electrochemical enrichment of haloalkaliphilic nitrate-reducing microbial biofilm at the cathode of bioelectrochemical systems. <i>IScience</i> , 2021, 24, 102682.	1.9	6
11	<i>Epipremnum aureum</i> is a promising plant candidate for developing nature-based technologies for nutrients removal from wastewaters. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 106134.	3.3	10
12	Biogas Upgradation Through CO ₂ Conversion Into Acetic Acid via Microbial Electrosynthesis. <i>Frontiers in Energy Research</i> , 2021, 9, .	1.2	8
13	Strategies for improving the electroactivity and specific metabolic functionality of microorganisms for various microbial electrochemical technologies. <i>Biotechnology Advances</i> , 2020, 39, 107468.	6.0	84
14	High-capacitance bioanode circumvents bioelectrochemical reaction transition in the voltage-reversed serially-stacked air-cathode microbial fuel cell. <i>Journal of Power Sources</i> , 2020, 468, 228402.	4.0	5
15	Microbial electroactive biofilms dominated by <i>Geoalkalibacter</i> spp. from a highly saline "alkaline environment. <i>Npj Biofilms and Microbiomes</i> , 2020, 6, 38.	2.9	19
16	Bioanode-Assisted Removal of Hg ²⁺ at the Cathode of Microbial Fuel Cells. <i>Journal of Hazardous, Toxic, and Radioactive Waste</i> , 2020, 24, .	1.2	6
17	Integrated drip hydroponics-microbial fuel cell system for wastewater treatment and resource recovery. <i>Bioresource Technology Reports</i> , 2020, 9, 100392.	1.5	26
18	Review "Microbial Electrosynthesis: A Way Towards The Production of Electro-Commodities Through Carbon Sequestration with Microbes as Biocatalysts. <i>Journal of the Electrochemical Society</i> , 2020, 167, 155510.	1.3	57

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19	Removal of heavy metals using bioelectrochemical systems. , 2020, , 49-71.		1
20	Microbial fuel cell coupled with microalgae cultivation for wastewater treatment and energy recovery. , 2020, , 213-227.		6
21	Aerobic microbial electrochemical technology based on the coexistence and interactions of aerobes and exoelectrogens for synergistic pollutant removal from wastewater. Environmental Science: Water Research and Technology, 2019, 5, 60-69.	1.2	8
22	Microbial Electroactive Biofilms. ACS Symposium Series, 2019, , 159-186.	0.5	23
23	Scratching the Surface—How Decisive Are Microscopic Surface Structures on Growth and Performance of Electrochemically Active Bacteria?. Frontiers in Energy Research, 2019, 7, .	1.2	17
24	Current trends in enzymatic electrosynthesis for CO2 reduction. Current Opinion in Green and Sustainable Chemistry, 2019, 16, 65-70.	3.2	37
25	Microbial Electrochemical Technologies for CO2 and Its Derived Products Valorization. , 2019, , 777-796.		13
26	Microbial Electrolysis for Biohydrogen Production. , 2019, , 871-898.		10
27	Strategies for optimizing the power output of microbial fuel cells: Transitioning from fundamental studies to practical implementation. Applied Energy, 2019, 233-234, 15-28.	5.1	122
28	Low-cost stainless-steel wool anodes modified with polyaniline and polypyrrole for high-performance microbial fuel cells. Journal of Power Sources, 2018, 379, 103-114.	4.0	97
29	A high-performance rotating graphite fiber brush air-cathode for microbial fuel cells. Applied Energy, 2018, 211, 1089-1094.	5.1	62
30	Substrate Crossover Effect and Performance Regeneration of the Biofouled Rotating Air-Cathode in Microbial Fuel Cell. Frontiers in Energy Research, 2018, 6, .	1.2	7
31	Auto-feeding microbial fuel cell inspired by transpiration of plants. Applied Energy, 2018, 225, 934-939.	5.1	9
32	Resource Recovery From Wastes and Wastewaters Using Bioelectrochemical Systems. , 2018, , 535-570.		5
33	Microbial Fuel Cells: Electrode Materials. , 2018, , 309-318.		30
34	Electrospun Carbon Nanofibers. , 2018, , 287-307.		0
35	Continuous long-term electricity-driven bioproduction of carboxylates and isopropanol from CO 2 with a mixed microbial community. Journal of CO2 Utilization, 2017, 20, 141-149.	3.3	138
36	An overview of cathode materials for microbial electrosynthesis of chemicals from carbon dioxide. Green Chemistry, 2017, 19, 5748-5760.	4.6	179

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37	Materials and Their Surface Modification for Use as Anode in Microbial Bioelectrochemical Systems. , 2017, , 403-427.		5
38	Enhanced Product Recovery from Glycerol Fermentation into 3-Carbon Compounds in a Bioelectrochemical System Combined with In Situ Extraction. Frontiers in Bioengineering and Biotechnology, 2016, 4, 73.	2.0	19
39	Recent advances in the use of different substrates in microbial fuel cells toward wastewater treatment and simultaneous energy recovery. Applied Energy, 2016, 168, 706-723.	5.1	599
40	Anodes Stimulate Anaerobic Toluene Degradation via Sulfur Cycling in Marine Sediments. Applied and Environmental Microbiology, 2016, 82, 297-307.	1.4	74
41	Biological Electricity Production from Wastes and Wastewaters. , 2015, , 155-183.		6
42	A logical data representation framework for electricity-driven bioproduction processes. Biotechnology Advances, 2015, 33, 736-744.	6.0	174
43	Selective Enrichment Establishes a Stable Performing Community for Microbial Electrosynthesis of Acetate from CO ₂ . Environmental Science & Technology, 2015, 49, 8833-8843.	4.6	243
44	Heat-treated stainless steel felt as scalable anode material for bioelectrochemical systems. Bioresource Technology, 2015, 195, 46-50.	4.8	69
45	Engineering electrodes for microbial electrocatalysis. Current Opinion in Biotechnology, 2015, 33, 149-156.	3.3	248
46	Flame Oxidation of Stainless Steel Felt Enhances Anodic Biofilm Formation and Current Output in Bioelectrochemical Systems. Environmental Science & Technology, 2014, 48, 7151-7156.	4.6	131
47	Surfactant treatment of carbon felt enhances anodic microbial electrocatalysis in bioelectrochemical systems. Electrochemistry Communications, 2014, 39, 1-4.	2.3	46
48	A critical revisit of the key parameters used to describe microbial electrochemical systems. Electrochimica Acta, 2014, 140, 191-208.	2.6	148
49	Cisplatin-induced elongation of Shewanella oneidensis MR-1 cells improves microbe-electrode interactions for use in microbial fuel cells. Energy and Environmental Science, 2013, 6, 2626.	15.6	27
50	Electrospun carbon nanofibers from polyacrylonitrile blended with activated or graphitized carbonaceous materials for improving anodic bioelectrocatalysis. Bioresource Technology, 2013, 132, 121-126.	4.8	46
51	Electrochemical communication between heterotrophically grown Rhodobacter capsulatus with electrodes mediated by an osmium redox polymer. Bioelectrochemistry, 2013, 93, 30-36.	2.4	46
52	Electron transfer mechanisms between microorganisms and electrodes in bioelectrochemical systems. Bioanalytical Reviews, 2012, , 71-129.	0.1	16
53	Electrochemical communication between microbial cells and electrodes via osmium redox systems. Biochemical Society Transactions, 2012, 40, 1330-1335.	1.6	44
54	Improved microbial electrocatalysis with osmium polymer modified electrodes. Chemical Communications, 2012, 48, 10183.	2.2	41

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55	Electron transfer mechanisms between microorganisms and electrodes in bioelectrochemical systems. <i>Bioanalytical Reviews</i> , 2012, 4, 159-192.	0.1	171
56	Revealing the electrochemically driven selection in natural community derived microbial biofilms using flow-cytometry. <i>Energy and Environmental Science</i> , 2011, 4, 1265.	15.6	74
57	Electroactive mixed culture derived biofilms in microbial bioelectrochemical systems: The role of pH on biofilm formation, performance and composition. <i>Bioresource Technology</i> , 2011, 102, 9683-9690.	4.8	203
58	Electrospun and solution blown three-dimensional carbon fiber nonwovens for application as electrodes in microbial fuel cells. <i>Energy and Environmental Science</i> , 2011, 4, 1417.	15.6	289
59	In Situ Spectroelectrochemical Investigation of Electrocatalytic Microbial Biofilms by Surface-Enhanced Resonance Raman Spectroscopy. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 2625-2627.	7.2	114
60	Toxicity Response of Electroactive Microbial Biofilms—A Decisive Feature for Potential Biosensor and Power Source Applications. <i>ChemPhysChem</i> , 2010, 11, 2834-2837.	1.0	91
61	Electroactive mixed culture biofilms in microbial bioelectrochemical systems: The role of temperature for biofilm formation and performance. <i>Biosensors and Bioelectronics</i> , 2010, 26, 803-808.	5.3	165
62	Electricity generation using chocolate industry wastewater and its treatment in activated sludge based microbial fuel cell and analysis of developed microbial community in the anode chamber. <i>Bioresource Technology</i> , 2009, 100, 5132-5139.	4.8	242
63	Metabolomics. <i>Current Drug Metabolism</i> , 2008, 9, 89-98.	0.7	50
64	DNA Electronics: A Nanotechnology Approach. <i>Current Nanoscience</i> , 2007, 3, 161-165.	0.7	0