Ia Ieropoulos

List of Publications by Year
in descending order

196 papers	9,719 citations	31902 53 h-index	45213 90 g-index
199 all docs	199 docs citations	199 times ranked	4964 citing authors

#	ARTICLE	IF	CITATIONS
1	Microbial fuel cells: From fundamentals to applications. A review. Journal of Power Sources, 2017, 356, 225-244.	4.0	1,264
2	Microbial fuel cells based on carbon veil electrodes: Stack configuration and scalability. International Journal of Energy Research, 2008, 32, 1228-1240.	2.2	293
3	Comparative study of three types of microbial fuel cell. Enzyme and Microbial Technology, 2005, 37, 238-245.	1.6	247
4	Urine utilisation by microbial fuel cells; energy fuel for the future. Physical Chemistry Chemical Physics, 2012, 14, 94-98.	1.3	205
5	A small-scale air-cathode microbial fuel cell for on-line monitoring of water quality. Biosensors and Bioelectronics, 2014, 62, 182-188.	5.3	196
6	Effects of flow-rate, inoculum and time on the internal resistance of microbial fuel cells. Bioresource Technology, 2010, 101, 3520-3525.	4.8	192
7	Self-sustainable electricity production from algae grown in a microbial fuel cell system. Biomass and Bioenergy, 2015, 82, 87-93.	2.9	176
8	Electricity from landfill leachate using microbial fuel cells: Comparison with a biological aerated filter. Enzyme and Microbial Technology, 2009, 44, 112-119.	1.6	172
9	Waste to real energy: the first MFC powered mobile phone. Physical Chemistry Chemical Physics, 2013, 15, 15312.	1.3	158
10	Pee power urinal â€" microbial fuel cell technology field trials in the context of sanitation. Environmental Science: Water Research and Technology, 2016, 2, 336-343.	1.2	147
11	Recent advancements in real-world microbial fuel cell applications. Current Opinion in Electrochemistry, 2018, 11, 78-83.	2.5	146
12	A review into the use of ceramics in microbial fuel cells. Bioresource Technology, 2016, 215, 296-303.	4.8	142
13	Improved energy output levels from small-scale Microbial Fuel Cells. Bioelectrochemistry, 2010, 78, 44-50.	2.4	137
14	Energetically autonomous robots: Food for thought. Autonomous Robots, 2006, 21, 187-198.	3.2	122
15	Landfill leachate treatment with microbial fuel cells; scale-up through plurality. Bioresource Technology, 2009, 100, 5085-5091.	4.8	121
16	Towards effective small scale microbial fuel cells for energy generation from urine. Electrochimica Acta, 2016, 192, 89-98.	2.6	120
17	Comprehensive Study on Ceramic Membranes for Lowâ€Cost Microbial Fuel Cells. ChemSusChem, 2016, 9, 88-96.	3.6	111
18	PEE POWERÂ® urinal II â€" Urinal scale-up with microbial fuel cell scale-down for improved lighting. Journal of Power Sources, 2018, 392, 150-158.	4.0	106

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19	Simultaneous electricity generation and microbially-assisted electrosynthesis in ceramic MFCs. Bioelectrochemistry, 2015, 104, 58-64.	2.4	105
20	The overshoot phenomenon as a function of internal resistance in microbial fuel cells. Bioelectrochemistry, 2011, 81, 22-27.	2.4	104
21	Parameters characterization and optimization of activated carbon (AC) cathodes for microbial fuel cell application. Bioresource Technology, 2014, 163, 54-63.	4.8	102
22	Urine transduction to usable energy: A modular MFC approach for smartphone and remote system charging. Applied Energy, 2017, 192, 575-581.	5.1	102
23	MFC-cascade stacks maximise COD reduction and avoid voltage reversal under adverse conditions. Bioresource Technology, 2013, 134, 158-165.	4.8	98
24	Self-powered, autonomous Biological Oxygen Demand biosensor for online water quality monitoring. Sensors and Actuators B: Chemical, 2017, 244, 815-822.	4.0	96
25	Miniature microbial fuel cells and stacks for urine utilisation. International Journal of Hydrogen Energy, 2013, 38, 492-496.	3.8	86
26	Power generation in microbial fuel cells using platinum group metal-free cathode catalyst: Effect of the catalyst loading on performance and costs. Journal of Power Sources, 2018, 378, 169-175.	4.0	85
27	Enhanced MFC power production and struvite recovery by the addition of sea salts to urine. Water Research, 2017, 109, 46-53.	5.3	82
28	The first self-sustainable microbial fuel cell stack. Physical Chemistry Chemical Physics, 2013, 15, 2278.	1.3	80
29	Electricity generation and struvite recovery from human urine using microbial fuel cells. Journal of Chemical Technology and Biotechnology, 2016, 91, 647-654.	1.6	80
30	Enhancement of microbial fuel cell performance by introducing a nano-composite cathode catalyst. Electrochimica Acta, 2018, 265, 56-64.	2.6	79
31	Power generation and contaminant removal in single chamber microbial fuel cells (SCMFCs) treating human urine. International Journal of Hydrogen Energy, 2013, 38, 11543-11551.	3.8	78
32	Comparing the short and long term stability of biodegradable, ceramic and cation exchange membranes in microbial fuel cells. Bioresource Technology, 2013, 148, 480-486.	4.8	78
33	Energy accumulation and improved performance in microbial fuel cells. Journal of Power Sources, 2005, 145, 253-256.	4.0	75
34	Photosynthetic cathodes for Microbial Fuel Cells. International Journal of Hydrogen Energy, 2013, 38, 11559-11564.	3.8	72
35	Comparing terracotta and earthenware for multiple functionalities in microbial fuel cells. Bioprocess and Biosystems Engineering, 2013, 36, 1913-1921.	1.7	71
36	Improved power and long term performance of microbial fuel cell with Fe-N-C catalyst in air-breathing cathode. Energy, 2018, 144, 1073-1079.	4.5	71

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37	Electricity and disinfectant production from wastewater: Microbial Fuel Cell as a self-powered electrolyser. Scientific Reports, 2016, 6, 25571.	1.6	69
38	Supercapacitive microbial fuel cell: Characterization and analysis for improved charge storage/delivery performance. Bioresource Technology, 2016, 218, 552-560.	4.8	67
39	Scaling-up of a novel, simplified MFC stack based on a self-stratifying urine column. Biotechnology for Biofuels, 2016, 9, 93.	6.2	67
40	Current generation in membraneless single chamber microbial fuel cells (MFCs) treating urine. Journal of Power Sources, 2013, 238, 190-196.	4.0	63
41	A novel small scale Microbial Fuel Cell design for increased electricity generation and waste water treatment. International Journal of Hydrogen Energy, 2015, 40, 4263-4268.	3.8	61
42	Water formation at the cathode and sodium recovery using Microbial Fuel Cells (MFCs). Sustainable Energy Technologies and Assessments, 2014, 7, 187-194.	1.7	60
43	Microbial fuel cell â€" A novel self-powered wastewater electrolyser for electrocoagulation of heavy metals. International Journal of Hydrogen Energy, 2017, 42, 1813-1819.	3.8	60
44	Urine-activated origami microbial fuel cells to signal proof of life. Journal of Materials Chemistry A, 2015, 3, 7058-7065.	5.2	59
45	Carbon-Based Air-Breathing Cathodes for Microbial Fuel Cells. Catalysts, 2016, 6, 127.	1.6	58
46	Dynamic evolution of anodic biofilm when maturing under different external resistive loads in microbial fuel cells. Electrochemical perspective. Journal of Power Sources, 2018, 400, 392-401.	4.0	58
47	Cast and 3D printed ion exchange membranes for monolithic microbial fuel cell fabrication. Journal of Power Sources, 2015, 289, 91-99.	4.0	57
48	3D printed components of microbial fuel cells: Towards monolithic microbial fuel cell fabrication using additive layer manufacturing. Sustainable Energy Technologies and Assessments, 2017, 19, 94-101.	1.7	57
49	Investigating a cascade of seven hydraulically connected microbial fuel cells. Bioresource Technology, 2012, 110, 245-250.	4.8	56
50	Controlling for peak power extraction from microbial fuel cells can increase stack voltage and avoid cell reversal. Journal of Power Sources, 2014, 269, 363-369.	4.0	56
51	Regeneration of the power performance of cathodes affected by biofouling. Applied Energy, 2016, 173, 431-437.	5.1	56
52	Biodegradation and proton exchange using natural rubber in microbial fuel cells. Biodegradation, 2013, 24, 733-739.	1.5	55
53	Allometric scaling of microbial fuel cells and stacks: The lifeform case for scale-up. Journal of Power Sources, 2017, 356, 365-370.	4.0	55
54	Ceramic Microbial Fuel Cells Stack: power generation in standard and supercapacitive mode. Scientific Reports, 2018, 8, 3281.	1.6	55

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55	Combination of bioelectrochemical systems and electrochemical capacitors: Principles, analysis and opportunities. Biotechnology Advances, 2020, 39, 107456.	6.0	55
56	Microbial Fuel Cell stack performance enhancement through carbon veil anode modification with activated carbon powder. Applied Energy, 2020, 262, 114475.	5.1	54
57	Power for Robotic Artificial Muscles. IEEE/ASME Transactions on Mechatronics, 2011, 16, 107-111.	3.7	53
58	Cathode materials for ceramic based microbial fuel cells (MFCs). International Journal of Hydrogen Energy, 2015, 40, 14706-14715.	3.8	53
59	Miniaturized Ceramic-Based Microbial Fuel Cell for Efficient Power Generation From Urine and Stack Development. Frontiers in Energy Research, 2018, 6, 84.	1.2	53
60	Microbial fuel cells directly powering a microcomputer. Journal of Power Sources, 2020, 446, 227328.	4.0	53
61	From single MFC to cascade configuration: The relationship between size, hydraulic retention time and power density. Sustainable Energy Technologies and Assessments, 2016, 14, 74-79.	1.7	52
62	Microbial fuel cells and their electrified biofilms. Biofilm, 2021, 3, 100057.	1.5	52
63	Oxygenic phototrophic biofilms for improved cathode performance in microbial fuel cells. Algal Research, 2013, 2, 183-187.	2.4	51
64	Microbial Fuel Cells for Robotics: Energy Autonomy through Artificial Symbiosis. ChemSusChem, 2012, 5, 1020-1026.	3.6	50
65	Electricity and catholyte production from ceramic MFCs treating urine. International Journal of Hydrogen Energy, 2017, 42, 1791-1799.	3.8	50
66	Maximising electricity production by controlling the biofilm specific growth rate in microbial fuel cells. Bioresource Technology, 2012, 118, 615-618.	4.8	49
67	Ceramic MFCs with internal cathode producing sufficient power for practical applications. International Journal of Hydrogen Energy, 2015, 40, 14627-14631.	3.8	49
68	Increased power output from micro porous layer (MPL) cathode microbial fuel cells (MFC). International Journal of Hydrogen Energy, 2013, 38, 11552-11558.	3.8	48
69	The power of glove: Soft microbial fuel cell for low-power electronics. Journal of Power Sources, 2014, 249, 327-332.	4.0	48
70	Microbial fuel cells continuously fuelled by untreated fresh algal biomass. Algal Research, 2015, 11, 103-107.	2.4	46
71	Investigation of ceramic MFC stacks for urine energy extraction. Bioelectrochemistry, 2018, 123, 19-25.	2.4	46
72	EcoBot-II: An Artificial Agent with a Natural Metabolism. International Journal of Advanced Robotic Systems, 2005, 2, 31.	1.3	45

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73	High Power Generation by a Membraneless Single Chamber Microbial Fuel Cell (SCMFC) Using Enzymatic Bilirubin Oxidase (BOx) Air-Breathing Cathode. Journal of the Electrochemical Society, 2013, 160, H720-H726.	1.3	44
74	Urine disinfection and in situ pathogen killing using a Microbial Fuel Cell cascade system. PLoS ONE, 2017, 12, e0176475.	1.1	44
75	Microbial fuel cells (MFC) and microalgae; photo microbial fuel cell (PMFC) as complete recycling machines. Sustainable Energy and Fuels, 2019, 3, 2546-2560.	2.5	44
76	Urine in Bioelectrochemical Systems: An Overall Review. ChemElectroChem, 2020, 7, 1312-1331.	1.7	43
77	Electro-osmotic-based catholyte production by Microbial Fuel Cells for carbon capture. Water Research, 2015, 86, 108-115.	5.3	42
78	Urine microbial fuel cells in a semi-controlled environment for onsite urine pre-treatment and electricity production. Journal of Power Sources, 2018, 400, 441-448.	4.0	42
79	Increased power generation in supercapacitive microbial fuel cell stack using Fe N C cathode catalyst. Journal of Power Sources, 2019, 412, 416-424.	4.0	42
80	From the lab to the field: Self-stratifying microbial fuel cells stacks directly powering lights. Applied Energy, 2020, 277, 115514.	5.1	42
81	Artificial neural network simulating microbial fuel cells with different membrane materials and electrode configurations. Journal of Power Sources, 2019, 436, 226832.	4.0	41
82	Long-term bio-power of ceramic microbial fuel cells in individual and stacked configurations. Bioelectrochemistry, 2020, 133, 107459.	2.4	41
83	Intermittent load implementation in microbial fuel cells improves power performance. Bioresource Technology, 2014, 172, 365-372.	4.8	40
84	Micro-porous layer (MPL)-based anode for microbial fuel cells. International Journal of Hydrogen Energy, 2014, 39, 21811-21818.	3.8	40
85	Microbial Desalination Cells with Efficient Platinumâ€Groupâ€Metalâ€Free Cathode Catalysts. ChemElectroChem, 2017, 4, 3322-3330.	1.7	40
86	Self-stratifying microbial fuel cell: The importance of the cathode electrode immersion height. International Journal of Hydrogen Energy, 2019, 44, 4524-4532.	3.8	40
87	Development of efficient electroactive biofilm in urine-fed microbial fuel cell cascades for bioelectricity generation. Journal of Environmental Management, 2020, 258, 109992.	3.8	39
88	Microalgae as substrate in low cost terracotta-based microbial fuel cells: Novel application of the catholyte produced. Bioresource Technology, 2016, 209, 380-385.	4.8	38
89	Self-stratified and self-powered micro-supercapacitor integrated into a microbial fuel cell operating in human urine. Electrochimica Acta, 2019, 307, 241-252.	2.6	38
90	Dynamic electrical reconfiguration for improved capacitor charging in microbial fuel cell stacks. Journal of Power Sources, 2014, 272, 34-38.	4.0	36

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91	Evaluation of artificial neural network algorithms for predicting the effect of the urine flow rate on the power performance of microbial fuel cells. Energy, 2020, 213, 118806.	4.5	32
92	Scalability and stacking of self-stratifying microbial fuel cells treating urine. Bioelectrochemistry, 2020, 133, 107491.	2.4	31
93	Stability and reliability of anodic biofilms under different feedstock conditions: Towards microbial fuel cell sensors. Sensing and Bio-Sensing Research, 2015, 6, 43-50.	2.2	30
94	Autonomous Energy Harvesting and Prevention of Cell Reversal in MFC Stacks. Journal of the Electrochemical Society, 2017, 164, H3047-H3051.	1.3	30
95	Towards the optimisation of ceramic-based microbial fuel cells: A three-factor three-level response surface analysis design. Biochemical Engineering Journal, 2019, 144, 119-124.	1.8	30
96	Microbial fuel cell scale-up options: Performance evaluation of membrane (c-MFC) and membrane-less (s-MFC) systems under different feeding regimes. Journal of Power Sources, 2022, 520, 230875.	4.0	30
97	Artificial Metabolism: Towards True Energetic Autonomy in Artificial Life. Lecture Notes in Computer Science, 2003, , 792-799.	1.0	29
98	Iron-streptomycin derived catalyst for efficient oxygen reduction reaction in ceramic microbial fuel cells operating with urine. Journal of Power Sources, 2019, 425, 50-59.	4.0	29
99	The effects of wastewater types on power generation and phosphorus removal of microbial fuel cells (MFCs) with activated carbon (AC) cathodes. International Journal of Hydrogen Energy, 2014, 39, 21796-21802.	3.8	28
100	Optimisation of the internal structure of ceramic membranes for electricity production in urine-fed microbial fuel cells. Journal of Power Sources, 2020, 451, 227741.	4.0	28
101	Study of the effects of ionic liquid-modified cathodes and ceramic separators on MFC performance. Chemical Engineering Journal, 2016, 291, 317-324.	6.6	27
102	Effect of the ceramic membrane properties on the microbial fuel cell power output and catholyte generation. Journal of Power Sources, 2019, 429, 30-37.	4.0	27
103	Artificial gills for robots: MFC behaviour in water. Bioinspiration and Biomimetics, 2007, 2, S83-S93.	1.5	26
104	Binder materials for the cathodes applied to self-stratifying membraneless microbial fuel cell. Bioelectrochemistry, 2018, 123, 119-124.	2.4	26
105	Investigating the effects of fluidic connection between microbial fuel cells. Bioprocess and Biosystems Engineering, 2011, 34, 477-484.	1.7	25
106	Fade to Green: A Biodegradable Stack of Microbial Fuel Cells. ChemSusChem, 2015, 8, 2705-2712.	3.6	25
107	Here today, gone tomorrow: biodegradable soft robots. Proceedings of SPIE, 2016, , .	0.8	25
108	Supercapacitive paper based microbial fuel cell: High current/power production within a low cost design. Bioresource Technology Reports, 2019, 7, 100297.	1.5	24

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109	Improving the power performance of urine-fed microbial fuel cells using PEDOT-PSS modified anodes. Applied Energy, 2020, 278, 115528.	5.1	24
110	Towards disposable microbial fuel cells: Natural rubber glove membranes. International Journal of Hydrogen Energy, 2014, 39, 21803-21810.	3.8	23
111	A Comprehensive Study of Custom-Made Ceramic Separators for Microbial Fuel Cells: Towards â€œLivingâ€•Bricks. Energies, 2019, 12, 4071.	1.6	23
112	Resilience and limitations of MFC anodic community when exposed to antibacterial agents. Bioelectrochemistry, 2020, 134, 107500.	2.4	23
113	Self sufficient wireless transmitter powered by foot-pumped urine operating wearable MFC. Bioinspiration and Biomimetics, 2016, 11, 016001.	1.5	22
114	Scalability of self-stratifying microbial fuel cell: Towards height miniaturisation. Bioelectrochemistry, 2019, 127, 68-75.	2.4	22
115	Highâ€Performance, Totally Flexible, Tubular Microbial Fuel Cell. ChemElectroChem, 2014, 1, 1994-1999.	1.7	21
116	Multiâ€functional microbial fuel cells for power, treatment and electroâ€osmotic purification of urine. Journal of Chemical Technology and Biotechnology, 2019, 94, 2098-2106.	1.6	21
117	Small Scale Microbial Fuel Cells and Different Ways of Reporting Output. ECS Transactions, 2010, 28, 1-9.	0.3	20
118	Algal â€˜lagoonâ€™ effect for oxygenating MFC cathodes. International Journal of Hydrogen Energy, 2014, 39, 21857-21863.	3.8	20
119	Electricity production from human urine in ceramic microbial fuel cells with alternative non-fluorinated polymer binders for cathode construction. Separation and Purification Technology, 2017, 187, 436-442.	3.9	20
120	Effect of iron oxide content and microstructural porosity on the performance of ceramic membranes as microbial fuel cell separators. Electrochimica Acta, 2021, 367, 137385.	2.6	20
121	A new method for urine electrofiltration and long term power enhancement using surface modified anodes with activated carbon in ceramic microbial fuel cells. Electrochimica Acta, 2020, 353, 136388.	2.6	20
122	Row-bot: An energetically autonomous artificial water boatman. , 2015, , .		19
123	Long Term Feasibility Study of In-field Floating Microbial Fuel Cells for Monitoring Anoxic Wastewater and Energy Harvesting. Frontiers in Energy Research, 2019, 7, .	1.2	19
124	Towards monolithically printed Mfcs: Development of a 3d-printable membrane electrode assembly (mea). International Journal of Hydrogen Energy, 2019, 44, 4450-4462.	3.8	19
125	Toward Energetically Autonomous Foraging Soft Robots. Soft Robotics, 2016, 3, 186-197.	4.6	18
126	Impact of Inoculum Type on the Microbial Community and Power Performance of Urine-Fed Microbial Fuel Cells. Microorganisms, 2020, 8, 1921.	1.6	18

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127	Novel Analytical Microbial Fuel Cell Design for Rapid in Situ Optimisation of Dilution Rate and Substrate Supply Rate, by Flow, Volume Control and Anode Placement. Energies, 2018, 11, 2377.	1.6	17
128	Developing 3D-Printable Cathode Electrode for Monolithically Printed Microbial Fuel Cells (MFCs). Molecules, 2020, 25, 3635.	1.7	17
129	Electroosmotically generated disinfectant from urine as a by-product of electricity in microbial fuel cell for the inactivation of pathogenic species. Scientific Reports, 2020, 10, 5533.	1.6	17
130	Microbial Fuel Cell-driven caustic potash production from wastewater for carbon sequestration. Bioresource Technology, 2016, 215, 285-289.	4.8	16
131	Transport of Live Cells Under Sterile Conditions Using a Chemotactic Droplet. Scientific Reports, 2018, 8, 8408.	1.6	16
132	Complete Microbial Fuel Cell Fabrication Using Additive Layer Manufacturing. Molecules, 2020, 25, 3051.	1.7	16
133	Prevention and removal of membrane and separator biofouling in bioelectrochemical systems: a comprehensive review. IScience, 2022, 25, 104510.	1.9	16
134	Dynamic polarisation reveals differential steady-state stabilisation and capacitive-like behaviour in microbial fuel cells. Sustainable Energy Technologies and Assessments, 2014, 5, 1-6.	1.7	15
135	Neural Networks Predicting Microbial Fuel Cells Output for Soft Robotics Applications. Frontiers in Robotics and AI, 2021, 8, 633414.	2.0	15
136	Response of ceramic microbial fuel cells to direct anodic airflow and novel hydrogel cathodes. International Journal of Hydrogen Energy, 2019, 44, 15344-15354.	3.8	14
137	Effects of sulphate addition and sulphide inhibition on microbial fuel cells. Enzyme and Microbial Technology, 2013, 52, 32-37.	1.6	13
138	Biodegradable and edible gelatine actuators for use as artificial muscles. Proceedings of SPIE, 2014, , .	0.8	13
139	Cellular non-linear network model of microbial fuel cell. BioSystems, 2017, 156-157, 53-62.	0.9	13
140	Modelling the energy harvesting from ceramic-based microbial fuel cells by using a fuzzy logic approach. Applied Energy, 2019, 251, 113321.	5.1	13
141	Towards implementation of cellular automata in Microbial Fuel Cells. PLoS ONE, 2017, 12, e0177528.	1.1	13
142	Bi-directional electrical characterisation of microbial fuel cell. Bioresource Technology, 2013, 128, 769-773.	4.8	12
143	Artificial heartbeat: design and fabrication of a biologically inspired pump. Bioinspiration and Biomimetics, 2013, 8, 046012.	1.5	12
144	A New Method for Modulation, Control and Power Boosting in Microbial Fuel Cells. Fuel Cells, 2018, 18, 663-668.	1.5	12

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145	Fate of three bioluminescent pathogenic bacteria fed through a cascade of urine microbial fuel cells. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 587-599.	1.4	12
146	Scaling up self-stratifying supercapacitive microbial fuel cell. International Journal of Hydrogen Energy, 2020, 45, 25240-25248.	3.8	12
147	Multidimensional Benefits of Improved Sanitation: Evaluating â€˜PEE POWERÂ®â€™ in Kisoro, Uganda. International Journal of Environmental Research and Public Health, 2020, 17, 2175.	1.2	12
148	Energy production and sanitation improvement using microbial fuel cells. Journal of Water Sanitation and Hygiene for Development, 2013, 3, 383-391.	0.7	11
149	Removal of Hepatitis B virus surface HBsAg and core HBcAg antigens using microbial fuel cells producing electricity from human urine. Scientific Reports, 2019, 9, 11787.	1.6	11
150	Living Architecture: Toward Energy Generating Buildings Powered by Microbial Fuel Cells. Frontiers in Energy Research, 2019, 7, .	1.2	11
151	Effect of microbial fuel cell operation time on the disinfection efficacy of electrochemically synthesised catholyte from urine. Process Biochemistry, 2021, 101, 294-303.	1.8	11
152	Microbial fuel cell compared to a chemostat. Chemosphere, 2022, 296, 133967.	4.2	11
153	Gelatin as a promising printable feedstock for microbial fuel cells (MFC). International Journal of Hydrogen Energy, 2017, 42, 1783-1790.	3.8	10
154	Air-breathing cathode self-powered supercapacitive microbial fuel cell with human urine as electrolyte. Electrochimica Acta, 2020, 353, 136530.	2.6	10
155	Analysis of microbial fuel cell operation in acidic conditions using the flocculating agent ferric chloride. Journal of Chemical Technology and Biotechnology, 2016, 91, 138-143.	1.6	9
156	Microbial Fuel Cells â€“ Scalability and their Use in Robotics. Modern Aspects of Electrochemistry, 2011, , 239-290.	0.2	9
157	Dielectric elastomer pump for artificial organisms. Proceedings of SPIE, 2011, , .	0.8	8
158	Design mining microbial fuel cell cascades. Soft Computing, 2019, 23, 4673-4683.	2.1	8
159	Microbial fuel cells in the house: A study on real household wastewater samples for treatment and power. Sustainable Energy Technologies and Assessments, 2021, 48, 101618.	1.7	8
160	Physarum polycephalum: Towards a biological controller. BioSystems, 2015, 127, 42-46.	0.9	7
161	The practical implementation of microbial fuel cell technology. , 2016, , 357-380.		7
162	Microbial-powered artificial muscles for autonomous robots. , 2009, , .		6

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163	Optimization of bio-inspired multi-segment IPMC cilia. Proceedings of SPIE, 2010, , .	0.8	6
164	Electrosynthesis, modulation, and self-driven electroseparation in microbial fuel cells. IScience, 2021, 24, 102805.	1.9	6
165	Electronic faucet powered by low cost ceramic microbial fuel cells treating urine. Journal of Power Sources, 2021, 506, 230004.	4.0	6
166	Urineâ€"Waste or Resource? The Economic and Social Aspects. Reviews in Advanced Sciences and Engineering, 2013, 2, 192-199.	0.6	6
167	Comparative analysis of different polymer materials for the construction of microbial fuel cell stacks. Journal of Biotechnology, 2010, 150, 143-143.	1.9	5
168	Small-scale microbial fuel cells utilising uric salts. Sustainable Energy Technologies and Assessments, 2014, 6, 60-63.	1.7	5
169	On hybrid circuits exploiting thermistive properties of slime mould. Scientific Reports, 2016, 6, 23924.	1.6	5
170	Effect of simple interventions on the performance of a miniature MFC fed with fresh urine. International Journal of Hydrogen Energy, 2021, 46, 33594-33600.	3.8	5
171	A hybrid microbial dielectric elastomer generator for autonomous robots. Proceedings of SPIE, 2010, , .	0.8	4
172	MFCs and Algae. ECS Transactions, 2010, 28, 23-30.	0.3	4
173	An Energetically-Autonomous Robotic Tadpole with Single Membrane Stomach and Tail. Lecture Notes in Computer Science, 2015, , 366-378.	1.0	4
174	Passive Feeding in Paper-Based Microbial Fuel Cells. ECS Transactions, 2018, 85, 1193-1200.	0.3	4
175	Modelling Microbial Fuel Cells Using Lattice Boltzmann Methods. IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2019, 16, 2035-2045.	1.9	4
176	Wearable Self Sufficient MFC Communication System Powered by Urine. Lecture Notes in Computer Science, 2014, , 131-138.	1.0	4
177	EvoBot: An Open-Source, Modular Liquid Handling Robot for Nurturing Microbial Fuel Cells. , 2016, , .		4
178	Microbial Fuel Cell Based Thermosensor for Robotic Applications. Frontiers in Robotics and AI, 2021, 8, 558953.	2.0	4
179	Eating, Drinking, Living, Dying and Decaying Soft Robots. Biosystems and Biorobotics, 2017, , 95-101.	0.2	3
180	Living Architecture (Liar): Metabolically Engineered Building Units. , 2017, , 168-175.		3

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181	EvoBot: Towards a Robot-Chemostat for Culturing and Maintaining Microbial Fuel Cells (MFCs). Lecture Notes in Computer Science, 2017, , 453-464.	1.0	3
182	Development of a Bio-Digital Interface Powered by Microbial Fuel Cells. Sustainability, 2022, 14, 1735.	1.6	3
183	Nutrients Removal from Aquaculture Wastewater by Biofilter/Antibiotic-Resistant Bacteria Systems. Water (Switzerland), 2022, 14, 607.	1.2	3
184	An iTRAQ characterisation of the role of TolC during electron transfer from <i>Shewanella oneidensis</i> MRâ€•1. Proteomics, 2016, 16, 2764-2775.	1.3	1
185	Towards a Self-powered Biosensors for Environmental Applications in Remote, Off-grid Areas. Procedia Technology, 2017, 27, 8-9.	1.1	1
186	Sub-millilitre Microbial Fuel Cell Power for Soft Robots. Lecture Notes in Computer Science, 2013, , 424-426.	1.0	1
187	Integration of Cost-Efficient Carbon Electrodes into the Development of Microbial Fuel Cells. Carbon Materials, 2022, , 43-57.	0.2	1
188	Slime Mould Controller for Microbial Fuel Cells. Emergence, Complexity and Computation, 2016, , 285-298.	0.2	0
189	Microbial Life for Robotics â€“ towards artificial life. , 2019, , .		0
190	Microbial Fuel Cells, Concept, and Applications. , 2022, , 875-909.		0
191	Artificial Symbiosis in EcoBots. , 2009, , 185-211.		0
192	Field Trial of Self-Stratifying Membrane-Less Microbial Fuel Cells Stacks in an Autonomous and Self-Powered Urinal. ECS Meeting Abstracts, 2018, , .	0.0	0
193	Energy and metabolism. , 2018, , .		0
194	Microbial Life for Robotics â€“ towards artificial life. , 2019, , .		0
195	Microbial Fuel Cells, Concept, and Applications. , 2020, , 1-35.		0
196	Phototrophic microbial fuel cells. , 2022, , 699-727.		0