John Greenman

List of Publications by Year
in descending order

115 papers	5,826 citations	47006 47 h-index	82547 72 g-index
115 all docs	115 docs citations	115 times ranked	3240 citing authors

#	Article	IF	Citations
1	Microbial fuel cells based on carbon veil electrodes: Stack configuration and scalability. International Journal of Energy Research, 2008, 32, 1228-1240.	4.5	293
2	Urine utilisation by microbial fuel cells; energy fuel for the future. Physical Chemistry Chemical Physics, 2012, 14, 94-98.	2.8	205
3	Effects of flow-rate, inoculum and time on the internal resistance of microbial fuel cells. Bioresource Technology, 2010, 101, 3520-3525.	9.6	192
4	Self-sustainable electricity production from algae grown in a microbial fuel cell system. Biomass and Bioenergy, 2015, 82, 87-93.	5.7	176
5	Electricity from landfill leachate using microbial fuel cells: Comparison with a biological aerated filter. Enzyme and Microbial Technology, 2009, 44, 112-119.	3.2	172
6	Waste to real energy: the first MFC powered mobile phone. Physical Chemistry Chemical Physics, 2013, 15, 15312.	2.8	158
7	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.	2.4	147
8	Recent advancements in real-world microbial fuel cell applications. Current Opinion in Electrochemistry, 2018, 11, 78-83.	4.8	146
9	A review into the use of ceramics in microbial fuel cells. Bioresource Technology, 2016, 215, 296-303.	9.6	142
10	Energetically autonomous robots: Food for thought. Autonomous Robots, 2006, 21, 187-198.	4.8	122
11	Comprehensive Study on Ceramic Membranes for Lowâ€Cost Microbial Fuel Cells. ChemSusChem, 2016, 9, 88-96.	6.8	111
12	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.	7.8	106
13	Simultaneous electricity generation and microbially-assisted electrosynthesis in ceramic MFCs. Bioelectrochemistry, 2015, 104, 58-64.	4.6	105
14	The overshoot phenomenon as a function of internal resistance in microbial fuel cells. Bioelectrochemistry, 2011, 81, 22-27.	4.6	104
15	Urine transduction to usable energy: A modular MFC approach for smartphone and remote system charging. Applied Energy, 2017, 192, 575-581.	10.1	102
16	MFC-cascade stacks maximise COD reduction and avoid voltage reversal under adverse conditions. Bioresource Technology, 2013, 134, 158-165.	9.6	98
17	Microbial volatile compounds in health and disease conditions. Journal of Breath Research, 2012, 6, 024001.	3.0	96
18	Self-powered, autonomous Biological Oxygen Demand biosensor for online water quality monitoring. Sensors and Actuators B: Chemical, 2017, 244, 815-822.	7.8	96

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19	Miniature microbial fuel cells and stacks for urine utilisation. International Journal of Hydrogen Energy, 2013, 38, 492-496.	7.1	86
20	Enhanced MFC power production and struvite recovery by the addition of sea salts to urine. Water Research, 2017, 109, 46-53.	11.3	82
21	The first self-sustainable microbial fuel cell stack. Physical Chemistry Chemical Physics, 2013, 15, 2278.	2.8	80
22	Electricity generation and struvite recovery from human urine using microbial fuel cells. Journal of Chemical Technology and Biotechnology, 2016, 91, 647-654.	3.2	80
23	Energy accumulation and improved performance in microbial fuel cells. Journal of Power Sources, 2005, 145, 253-256.	7.8	75
24	Photosynthetic cathodes for Microbial Fuel Cells. International Journal of Hydrogen Energy, 2013, 38, 11559-11564.	7.1	72
25	Comparing terracotta and earthenware for multiple functionalities in microbial fuel cells. Bioprocess and Biosystems Engineering, 2013, 36, 1913-1921.	3.4	71
26	Improved power and long term performance of microbial fuel cell with Fe-N-C catalyst in air-breathing cathode. Energy, 2018, 144, 1073-1079.	8.8	71
27	Electricity and disinfectant production from wastewater: Microbial Fuel Cell as a self-powered electrolyser. Scientific Reports, 2016, 6, 25571.	3.3	69
28	Scaling-up of a novel, simplified MFC stack based on a self-stratifying urine column. Biotechnology for Biofuels, 2016, 9, 93.	6.2	67
29	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.	7.1	61
30	Assessing the relationship between concentrations of malodor compounds and odor scores from judges. Journal of the American Dental Association, 2005, 136, 749-757.	1.5	60
31	Water formation at the cathode and sodium recovery using Microbial Fuel Cells (MFCs). Sustainable Energy Technologies and Assessments, 2014, 7, 187-194.	2.7	60
32	Urine-activated origami microbial fuel cells to signal proof of life. Journal of Materials Chemistry A, 2015, 3, 7058-7065.	10.3	59
33	Carbon-Based Air-Breathing Cathodes for Microbial Fuel Cells. Catalysts, 2016, 6, 127.	3.5	58
34	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.	7.8	58
35	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.	2.7	57
36	Investigating a cascade of seven hydraulically connected microbial fuel cells. Bioresource Technology, 2012, 110, 245-250.	9.6	56

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37	Regeneration of the power performance of cathodes affected by biofouling. Applied Energy, 2016, 173, 431-437.	10.1	56
38	Allometric scaling of microbial fuel cells and stacks: The lifeform case for scale-up. Journal of Power Sources, 2017, 356, 365-370.	7.8	55
39	Ceramic Microbial Fuel Cells Stack: power generation in standard and supercapacitive mode. Scientific Reports, 2018, 8, 3281.	3.3	55
40	Microbial Fuel Cell stack performance enhancement through carbon veil anode modification with activated carbon powder. Applied Energy, 2020, 262, 114475.	10.1	54
41	Cathode materials for ceramic based microbial fuel cells (MFCs). International Journal of Hydrogen Energy, 2015, 40, 14706-14715.	7.1	53
42	Miniaturized Ceramic-Based Microbial Fuel Cell for Efficient Power Generation From Urine and Stack Development. Frontiers in Energy Research, 2018, 6, 84.	2.3	53
43	Microbial fuel cells directly powering a microcomputer. Journal of Power Sources, 2020, 446, 227328.	7.8	53
44	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.	2.7	52
45	Microbial fuel cells and their electrified biofilms. Biofilm, 2021, 3, 100057.	3.8	52
46	Microbial Fuel Cells for Robotics: Energy Autonomy through Artificial Symbiosis. ChemSusChem, 2012, 5, 1020-1026.	6.8	50
47	Electricity and catholyte production from ceramic MFCs treating urine. International Journal of Hydrogen Energy, 2017, 42, 1791-1799.	7.1	50
48	Maximising electricity production by controlling the biofilm specific growth rate in microbial fuel cells. Bioresource Technology, 2012, 118, 615-618.	9.6	49
49	Ceramic MFCs with internal cathode producing sufficient power for practical applications. International Journal of Hydrogen Energy, 2015, 40, 14627-14631.	7.1	49
50	Investigation of ceramic MFC stacks for urine energy extraction. Bioelectrochemistry, 2018, 123, 19-25.	4.6	46
51	EcoBot-II: An Artificial Agent with a Natural Metabolism. International Journal of Advanced Robotic Systems, 2005, 2, 31.	2.1	45
52	Urine disinfection and in situ pathogen killing using a Microbial Fuel Cell cascade system. PLoS ONE, 2017, 12, e0176475.	2.5	44
53	Microbial fuel cells (MFC) and microalgae; photo microbial fuel cell (PMFC) as complete recycling machines. Sustainable Energy and Fuels, 2019, 3, 2546-2560.	4.9	44
54	Urine in Bioelectrochemical Systems: An Overall Review. ChemElectroChem, 2020, 7, 1312-1331.	3.4	43

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55	Electro-osmotic-based catholyte production by Microbial Fuel Cells for carbon capture. Water Research, 2015, 86, 108-115.	11.3	42
56	Increased power generation in supercapacitive microbial fuel cell stack using Fe N C cathode catalyst. Journal of Power Sources, 2019, 412, 416-424.	7.8	42
57	From the lab to the field: Self-stratifying microbial fuel cells stacks directly powering lights. Applied Energy, 2020, 277, 115514.	10.1	42
58	Artificial neural network simulating microbial fuel cells with different membrane materials and electrode configurations. Journal of Power Sources, 2019, 436, 226832.	7.8	41
59	Long-term bio-power of ceramic microbial fuel cells in individual and stacked configurations. Bioelectrochemistry, 2020, 133, 107459.	4.6	41
60	Micro-porous layer (MPL)-based anode for microbial fuel cells. International Journal of Hydrogen Energy, 2014, 39, 21811-21818.	7.1	40
61	Self-stratifying microbial fuel cell: The importance of the cathode electrode immersion height. International Journal of Hydrogen Energy, 2019, 44, 4524-4532.	7.1	40
62	Development of efficient electroactive biofilm in urine-fed microbial fuel cell cascades for bioelectricity generation. Journal of Environmental Management, 2020, 258, 109992.	7.8	39
63	Self-stratified and self-powered micro-supercapacitor integrated into a microbial fuel cell operating in human urine. Electrochimica Acta, 2019, 307, 241-252.	5.2	38
64	Dynamic electrical reconfiguration for improved capacitor charging in microbial fuel cell stacks. Journal of Power Sources, 2014, 272, 34-38.	7.8	36
65	Scalability and stacking of self-stratifying microbial fuel cells treating urine. Bioelectrochemistry, 2020, 133, 107491.	4.6	31
66	Stability and reliability of anodic biofilms under different feedstock conditions: Towards microbial fuel cell sensors. Sensing and Bio-Sensing Research, 2015, 6, 43-50.	4.2	30
67	Autonomous Energy Harvesting and Prevention of Cell Reversal in MFC Stacks. Journal of the Electrochemical Society, 2017, 164, H3047-H3051.	2.9	30
68	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.	7.8	30
69	Artificial Metabolism: Towards True Energetic Autonomy in Artificial Life. Lecture Notes in Computer Science, 2003, , 792-799.	1.3	29
70	Effect of the ceramic membrane properties on the microbial fuel cell power output and catholyte generation. Journal of Power Sources, 2019, 429, 30-37.	7.8	27
71	Artificial gills for robots: MFC behaviour in water. Bioinspiration and Biomimetics, 2007, 2, S83-S93.	2.9	26
72	Binder materials for the cathodes applied to self-stratifying membraneless microbial fuel cell. Bioelectrochemistry, 2018, 123, 119-124.	4.6	26

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73	Fade to Green: A Biodegradable Stack of Microbial Fuel Cells. ChemSusChem, 2015, 8, 2705-2712.	6.8	25
74	A Comprehensive Study of Custom-Made Ceramic Separators for Microbial Fuel Cells: Towards â€œLivingâ€•Bricks. Energies, 2019, 12, 4071.	3.1	23
75	Resilience and limitations of MFC anodic community when exposed to antibacterial agents. Bioelectrochemistry, 2020, 134, 107500.	4.6	23
76	Scalability of self-stratifying microbial fuel cell: Towards height miniaturisation. Bioelectrochemistry, 2019, 127, 68-75.	4.6	22
77	Highâ€Performance, Totally Flexible, Tubular Microbial Fuel Cell. ChemElectroChem, 2014, 1, 1994-1999.	3.4	21
78	Multiâ€functional microbial fuel cells for power, treatment and electroâ€osmotic purification of urine. Journal of Chemical Technology and Biotechnology, 2019, 94, 2098-2106.	3.2	21
79	Small Scale Microbial Fuel Cells and Different Ways of Reporting Output. ECS Transactions, 2010, 28, 1-9.	0.5	20
80	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.	5.2	20
81	Towards monolithically printed Mfcs: Development of a 3d-printable membrane electrode assembly (mea). International Journal of Hydrogen Energy, 2019, 44, 4450-4462.	7.1	19
82	Impact of Inoculum Type on the Microbial Community and Power Performance of Urine-Fed Microbial Fuel Cells. Microorganisms, 2020, 8, 1921.	3.6	18
83	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.	3.1	17
84	Developing 3D-Printable Cathode Electrode for Monolithically Printed Microbial Fuel Cells (MFCs). Molecules, 2020, 25, 3635.	3.8	17
85	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.	3.3	17
86	Microbial Fuel Cell-driven caustic potash production from wastewater for carbon sequestration. Bioresource Technology, 2016, 215, 285-289.	9.6	16
87	Prevention and removal of membrane and separator biofouling in bioelectrochemical systems: a comprehensive review. IScience, 2022, 25, 104510.	4.1	16
88	Tongue Microbiota and Malodour. Microbial Ecology in Health and Disease, 1999, 11, 226-233.	3.5	14
89	Cellular non-linear network model of microbial fuel cell. BioSystems, 2017, 156-157, 53-62.	2.0	13
90	Towards implementation of cellular automata in Microbial Fuel Cells. PLoS ONE, 2017, 12, e0177528.	2.5	13

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91	Modelling oral malodour from a tongue biofilm. Journal of Breath Research, 2008, 2, 017003.	3.0	12
92	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.	3.0	12
93	Scaling up self-stratifying supercapacitive microbial fuel cell. International Journal of Hydrogen Energy, 2020, 45, 25240-25248.	7.1	12
94	Modelling the effects of pH on tongue biofilm using a sorbarod biofilm perfusion system. Journal of Breath Research, 2010, 4, 017107.	3.0	11
95	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.	3.3	11
96	Living Architecture: Toward Energy Generating Buildings Powered by Microbial Fuel Cells. Frontiers in Energy Research, 2019, 7, .	2.3	11
97	Microbial fuel cell compared to a chemostat. Chemosphere, 2022, 296, 133967.	8.2	11
98	Gelatin as a promising printable feedstock for microbial fuel cells (MFC). International Journal of Hydrogen Energy, 2017, 42, 1783-1790.	7.1	10
99	Air-breathing cathode self-powered supercapacitive microbial fuel cell with human urine as electrolyte. Electrochimica Acta, 2020, 353, 136530.	5.2	10
100	Review: <i>In vitro</i> biofilm models for studying oral malodour. Flavour and Fragrance Journal, 2013, 28, 212-222.	2.6	9
101	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.	3.2	9
102	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.	2.7	8
103	Physarum polycephalum: Towards a biological controller. BioSystems, 2015, 127, 42-46.	2.0	7
104	Electrosynthesis, modulation, and self-driven electroseparation in microbial fuel cells. IScience, 2021, 24, 102805.	4.1	6
105	Electronic faucet powered by low cost ceramic microbial fuel cells treating urine. Journal of Power Sources, 2021, 506, 230004.	7.8	6
106	Effect of simple interventions on the performance of a miniature MFC fed with fresh urine. International Journal of Hydrogen Energy, 2021, 46, 33594-33600.	7.1	5
107	Discovery, development and exploitation of steady-state biofilms. Journal of Breath Research, 2020, 14, 044001.	3.0	4
108	Microbial Fuel Cell Based Thermosensor for Robotic Applications. Frontiers in Robotics and AI, 2021, 8, 558953.	3.2	4

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109	A clinical study on the antimicrobial and breath-freshening effect of zinc-containing lozenge formulations. Microbial Ecology in Health and Disease, 2007, 19, 164-170.	3.5	3
110	Development of a Bio-Digital Interface Powered by Microbial Fuel Cells. Sustainability, 2022, 14, 1735.	3.2	3
111	Integration of Cost-Efficient Carbon Electrodes into the Development of Microbial Fuel Cells. Carbon Materials, 2022, , 43-57.	1.2	1
112	Slime Mould Controller for Microbial Fuel Cells. Emergence, Complexity and Computation, 2016, , 285-298.	0.3	0
113	Microbial Fuel Cells, Concept, and Applications. , 2022, , 875-909.		0
114	Microbial Fuel Cells, Concept, and Applications. , 2020, , 1-35.		0
115	Phototrophic microbial fuel cells. , 2022, , 699-727.		0