

Sven Kerzenmacher

List of Publications by Year in descending order

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Version: 2024-02-01

57
papers

1,980
citations

318942

23
h-index

286692

43
g-index

66
all docs

66
docs citations

66
times ranked

2620
citing authors

#	ARTICLE	IF	CITATIONS
1	<i>In vivo</i> characterization of electroactive biofilms inside porous electrodes with MR Imaging. RSC Advances, 2022, 12, 17784-17793.	1.7	2
2	Activation of electrospun carbon fibers: the effect of fiber diameter on CO ₂ and steam reaction kinetics. Journal of Polymer Research, 2021, 28, 1.	1.2	4
3	High Current Production of <i>Shewanella Oneidensis</i> with Electrospun Carbon Nanofiber Anodes is Directly Linked to Biofilm Formation**. ChemElectroChem, 2021, 8, 1836-1846.	1.7	3
4	Local Acidification Limits the Current Production and Biofilm Formation of <i>Shewanella oneidensis</i> MR-1 With Electrospun Anodes. Frontiers in Microbiology, 2021, 12, 660474.	1.5	10
5	From an extremophilic community to an electroautotrophic production strain: identifying a novel <i>Knallgas</i> bacterium as cathodic biofilm biocatalyst. ISME Journal, 2020, 14, 1125-1140.	4.4	28
6	Development of a TEM Compatible Nanowire Characterization Platform With Self-Forming Contacts. IEEE Transactions on Semiconductor Manufacturing, 2018, 31, 22-31.	1.4	2
7	Effects of wastewater constituents and operational conditions on the composition and dynamics of anodic microbial communities in bioelectrochemical systems. Bioresource Technology, 2018, 258, 376-389.	4.8	43
8	Pulsed Electrodeposition of Highly Porous Pt Alloys for use in Methanol, Formic Acid, and Glucose Fuel Cells. ChemElectroChem, 2018, 5, 1013-1023.	1.7	13
9	Systematic investigation of anode materials for microbial fuel cells with the model organism <i>G. sulfurreducens</i> . Bioresource Technology Reports, 2018, 2, 29-37.	1.5	6
10	Simultaneous use of a crossflow filtration membrane as microbial fuel cell anode – Permeate flow leads to 4-fold increased current densities. Bioresource Technology, 2018, 257, 274-280.	4.8	8
11	Bio-electrochemical conversion of industrial wastewater-COD combined with downstream methanol synthesis – an economic and life cycle assessment. Green Chemistry, 2018, 20, 2742-2762.	4.6	17
12	Toward an Energy Efficient Wastewater Treatment: Combining a Microbial Fuel Cell/Electrolysis Cell Anode With an Anaerobic Membrane Bioreactor. Frontiers in Energy Research, 2018, 6, .	1.2	4
13	Power supply for electronic contact lenses: Abiotic glucose fuel cells vs. Mg/air batteries. Journal of Power Sources, 2018, 401, 403-414.	4.0	40
14	An air-breathing enzymatic cathode with extended lifetime by continuous laccase supply. Bioresource Technology, 2018, 264, 306-310.	4.8	10
15	Molybdenum sulphides on carbon supports as electrocatalysts for hydrogen evolution in acidic industrial wastewater. Applied Energy, 2017, 190, 1221-1233.	5.1	34
16	Revisiting methods to characterize bioelectrochemical systems: The influence of uncompensated resistance (<i>i</i> R-drop), double layer capacitance, and junction potential. Journal of Power Sources, 2017, 356, 408-418.	4.0	38
17	Engineering of Microbial Electrodes. Advances in Biochemical Engineering/Biotechnology, 2017, 167, 135-180.	0.6	23
18	Nanofiber-deposited porous platinum enables glucose fuel cell anodes with high current density in body fluids. Journal of Power Sources, 2017, 362, 168-173.	4.0	17

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19	Selective natural induction of laccases in <i>Pleurotus sajor-caju</i> , suitable for application at a biofuel cell cathode at neutral pH. <i>Bioresource Technology</i> , 2016, 218, 455-462.	4.8	12
20	The performance of microbial anodes in municipal wastewater: Pre-grown multispecies biofilm vs. natural inocula. <i>Bioresource Technology</i> , 2016, 221, 165-171.	4.8	12
21	A thin silicon thermoelectric nanowire characterization platform (TNCP) equipped with nanoporous electrodes for electrical contact formation. <i>Journal of Physics: Conference Series</i> , 2016, 757, 012001.	0.3	2
22	Poisoning of Highly Porous Platinum Electrodes by Amino Acids and Tissue Fluid Constituents. <i>ChemElectroChem</i> , 2015, 2, 1785-1793.	1.7	14
23	Design and fabrication of miniaturized PEM fuel cell combined microreactor with self-regulated hydrogen mechanism. <i>Journal of Physics: Conference Series</i> , 2015, 660, 012055.	0.3	0
24	Unbalanced fermentation of glycerol in <i>Escherichia coli</i> via heterologous production of an electron transport chain and electrode interaction in microbial electrochemical cells. <i>Bioresource Technology</i> , 2015, 186, 89-96.	4.8	96
25	Improving the performance of a biofuel cell cathode with laccase-containing culture supernatant from <i>Pycnoporus sanguineus</i> . <i>Bioresource Technology</i> , 2015, 175, 445-453.	4.8	24
26	Enzymatic Fuel Cells Solely Supplied with Unpurified Cellobiose Dehydrogenase and Laccase in Microorganism's Culture Supernatants. <i>ChemElectroChem</i> , 2014, 1, 1886-1894.	1.7	5
27	Performance Loss of a Pt-Based Implantable Glucose Fuel Cell in Simulated Tissue and Cerebrospinal Fluids. <i>ChemElectroChem</i> , 2014, 1, 1895-1900.	1.7	27
28	Characterization of microbial current production as a function of microbe's electrode-interaction. <i>Bioresource Technology</i> , 2014, 157, 284-292.	4.8	68
29	Using planktonic microorganisms to supply the unpurified multi-copper oxidases laccase and copper efflux oxidases at a biofuel cell cathode. <i>Bioresource Technology</i> , 2014, 158, 231-238.	4.8	10
30	How Does the Choice of Anode Material Influence Electrical Performance? A Comparison of Two Microbial Fuel Cell Model Organisms. <i>ChemElectroChem</i> , 2014, 1, 1849-1853.	1.7	24
31	Overcoming Bottlenecks of Enzymatic Biofuel Cell Cathodes: Crude Fungal Culture Supernatant Can Help to Extend Lifetime and Reduce Cost. <i>ChemSusChem</i> , 2013, 6, 1209-1215.	3.6	20
32	Systematic screening of carbon-based anode materials for microbial fuel cells with <i>Shewanella oneidensis</i> MR-1. <i>Bioresource Technology</i> , 2013, 146, 386-392.	4.8	63
33	Fabrication of highly porous platinum electrodes for micro-scale applications by pulsed electrodeposition and dealloying. <i>Journal of Power Sources</i> , 2013, 242, 255-263.	4.0	23
34	Dissimilatory Metal Reducers Producing Electricity: Microbial Fuel Cells. , 2013, , 203-230.		0
35	Fabrication of Highly Porous Platinum by Cyclic Electrodeposition of PtCu Alloys: How do Process Parameters Affect Morphology?. <i>Journal of the Electrochemical Society</i> , 2013, 160, D111-D118.	1.3	8
36	Biofuel cells as sustainable power sources for implantable systems. , 2013, , 183-212.		3

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37	Porous Platinum Electrodes Fabricated by Cyclic Electrodeposition of PtCu Alloy: Application to Implantable Glucose Fuel Cells. <i>Journal of Physical Chemistry C</i> , 2012, 116, 19689-19698.	1.5	39
38	Prolongation of electrode lifetime in biofuel cells by periodic enzyme renewal. <i>Applied Microbiology and Biotechnology</i> , 2012, 96, 841-849.	1.7	22
39	Cyclic Electrodeposition of PtCu Alloy: Facile Fabrication of Highly Porous Platinum Electrodes. <i>Advanced Materials</i> , 2012, 24, 2916-2921.	11.1	63
40	Strategies to extend the lifetime of bioelectrochemical enzyme electrodes for biosensing and biofuel cell applications. <i>Applied Microbiology and Biotechnology</i> , 2011, 89, 1315-1322.	1.7	53
41	Strategies for the Fabrication of Porous Platinum Electrodes. <i>Advanced Materials</i> , 2011, 23, 4976-5008.	11.1	171
42	A Single Layer Glucose Fuel Cell Intended as Power Supplying Coating for Medical Implants. <i>Fuel Cells</i> , 2011, 11, 316-326.	1.5	34
43	A highly efficient buckypaper-based electrode material for mediatorless laccase-catalyzed dioxygen reduction. <i>Biosensors and Bioelectronics</i> , 2011, 26, 4133-4138.	5.3	86
44	A potentially implantable glucose fuel cell with Raney-platinum film electrodes for improved hydrolytic and oxidative stability. <i>Journal of Power Sources</i> , 2011, 196, 1264-1272.	4.0	58
45	High-porous platinum electrodes for functional electrical stimulation. , 2011, 2011, 5404-7.		11
46	Carbon electrodes for direct electron transfer type laccase cathodes investigated by current density-cathode potential behavior. <i>Biosensors and Bioelectronics</i> , 2010, 26, 841-845.	5.3	54
47	Raney-platinum film electrodes for potentially implantable glucose fuel cells. Part 1: Nickel-free glucose oxidation anodes. <i>Journal of Power Sources</i> , 2010, 195, 6516-6523.	4.0	39
48	Raney-platinum film electrodes for potentially implantable glucose fuel cells. Part 2: Glucose-tolerant oxygen reduction cathodes. <i>Journal of Power Sources</i> , 2010, 195, 6524-6531.	4.0	36
49	A versatile miniature bioreactor and its application to bioelectrochemistry studies. <i>Biosensors and Bioelectronics</i> , 2010, 25, 2559-2565.	5.3	20
50	Involvement and specificity of <i>Shewanella oneidensis</i> outer membrane cytochromes in the reduction of soluble and solid-phase terminal electron acceptors. <i>FEMS Microbiology Letters</i> , 2010, 306, 144-151.	0.7	65
51	A Binder-less Glucose Fuel Cell with Improved Chemical Stability Intended as Power Supply for Medical Implants. <i>IFMBE Proceedings</i> , 2009, , 2379-2383.	0.2	3
52	A complete testing environment for the automated parallel performance characterization of biofuel cells: design, validation, and application. <i>Journal of Applied Electrochemistry</i> , 2009, 39, 1477-1485.	1.5	38
53	Electrodeposited thin-layer electrodes for the use in potentially implantable glucose fuel cells. , 2009, , .		1
54	Energy harvesting by implantable abiotically catalyzed glucose fuel cells. <i>Journal of Power Sources</i> , 2008, 182, 1-17.	4.0	345

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55	An abiotically catalyzed glucose fuel cell for powering medical implants: Reconstructed manufacturing protocol and analysis of performance. Journal of Power Sources, 2008, 182, 66-75.	4.0	105
56	Passive water management for μ fuel-cells using capillary microstructures. Journal of Micromechanics and Microengineering, 2008, 18, 104007.	1.5	12
57	A Surface Mountable Glucose Fuel Cell for Medical Implants. , 2007, , .		6