Sven Kerzenmacher

List of Publications by Year
in descending order

57	1,980	279798	254184
papers	citations	23 h-index	43 g-index

66	66	66	2317
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Energy harvesting by implantable abiotically catalyzed glucose fuel cells. Journal of Power Sources, 2008, 182, 1-17.	7.8	345
2	Strategies for the Fabrication of Porous Platinum Electrodes. Advanced Materials, 2011, 23, 4976-5008.	21.0	171
3	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.	7.8	105
4	Unbalanced fermentation of glycerol in Escherichia coli via heterologous production of an electron transport chain and electrode interaction in microbial electrochemical cells. Bioresource Technology, 2015, 186, 89-96.	9.6	96
5	A highly efficient buckypaper-based electrode material for mediatorless laccase-catalyzed dioxygen reduction. Biosensors and Bioelectronics, 2011, 26, 4133-4138.	10.1	86
6	Characterization of microbial current production as a function of microbeâ€“electrode-interaction. Bioresource Technology, 2014, 157, 284-292.	9.6	68
7	Involvement and specificity ofShewanella oneidensisouter membrane cytochromes in the reduction of soluble and solid-phase terminal electron acceptors. FEMS Microbiology Letters, 2010, 306, 144-151.	1.8	65
8	Cyclic Electrodeposition of PtCu Alloy: Facile Fabrication of Highly Porous Platinum Electrodes. Advanced Materials, 2012, 24, 2916-2921.	21.0	63
9	Systematic screening of carbon-based anode materials for microbial fuel cells with Shewanella oneidensis MR-1. Bioresource Technology, 2013, 146, 386-392.	9.6	63
10	A potentially implantable glucose fuel cell with Raney-platinum film electrodes for improved hydrolytic and oxidative stability. Journal of Power Sources, 2011, 196, 1264-1272.	7.8	58
11	Carbon electrodes for direct electron transfer type laccase cathodes investigated by current densityâ€“cathode potential behavior. Biosensors and Bioelectronics, 2010, 26, 841-845.	10.1	54
12	Strategies to extend the lifetime of bioelectrochemical enzyme electrodes for biosensing and biofuel cell applications. Applied Microbiology and Biotechnology, 2011, 89, 1315-1322.	3.6	53
13	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.	9.6	43
14	Power supply for electronic contact lenses: Abiotic glucose fuel cells vs. Mg/air batteries. Journal of Power Sources, 2018, 401, 403-414.	7.8	40
15	Raney-platinum film electrodes for potentially implantable glucose fuel cells. Part 1: Nickel-free glucose oxidation anodes. Journal of Power Sources, 2010, 195, 6516-6523.	7.8	39
16	Porous Platinum Electrodes Fabricated by Cyclic Electrodeposition of PtCu Alloy: Application to Implantable Glucose Fuel Cells. Journal of Physical Chemistry C, 2012, 116, 19689-19698.	3.1	39
17	A complete testing environment for the automated parallel performance characterization of biofuel cells: design, validation, and application. Journal of Applied Electrochemistry, 2009, 39, 1477-1485.	2.9	38
18	Revisiting methods to characterize bioelectrochemical systems: The influence of uncompensated resistance (iR-drop), double layer capacitance, and junction potential. Journal of Power Sources, 2017, 356, 408-418.	7.8	38

#	Article	IF	Citations
19	Raney-platinum film electrodes for potentially implantable glucose fuel cells. Part 2: Glucose-tolerant oxygen reduction cathodes. Journal of Power Sources, 2010, 195, 6524-6531.	7.8	36
20	A Single Layer Glucose Fuel Cell Intended as Power Supplying Coating for Medical Implants. Fuel Cells, 2011, 11, 316-326.	2.4	34
21	Molybdenum sulphides on carbon supports as electrocatalysts for hydrogen evolution in acidic industrial wastewater. Applied Energy, 2017, 190, 1221-1233.	10.1	34
22	From an extremophilic community to an electroautotrophic production strain: identifying a novel Knallgas bacterium as cathodic biofilm biocatalyst. ISME Journal, 2020, 14, 1125-1140.	9.8	28
23	Performance Loss of a Pt‐Based Implantable Glucose Fuel Cell in Simulated Tissue and Cerebrospinal Fluids. ChemElectroChem, 2014, 1, 1895-1900.	3.4	27
24	How Does the Choice of Anode Material Influence Electrical Performance? A Comparison of Two Microbial Fuel Cell Model Organisms. ChemElectroChem, 2014, 1, 1849-1853.	3.4	24
25	Improving the performance of a biofuel cell cathode with laccase-containing culture supernatant from Pycnoporus sanguineus. Bioresource Technology, 2015, 175, 445-453.	9.6	24
26	Fabrication of highly porous platinum electrodes for micro-scale applications by pulsed electrodeposition and dealloying. Journal of Power Sources, 2013, 242, 255-263.	7.8	23
27	Engineering of Microbial Electrodes. Advances in Biochemical Engineering/Biotechnology, 2017, 167, 135-180.	1.1	23
28	Prolongation of electrode lifetime in biofuel cells by periodic enzyme renewal. Applied Microbiology and Biotechnology, 2012, 96, 841-849.	3.6	22
29	A versatile miniature bioreactor and its application to bioelectrochemistry studies. Biosensors and Bioelectronics, 2010, 25, 2559-2565.	10.1	20
30	Overcoming Bottlenecks of Enzymatic Biofuel Cell Cathodes: Crude Fungal Culture Supernatant Can Help to Extend Lifetime and Reduce Cost. ChemSusChem, 2013, 6, 1209-1215.	6.8	20
31	Nanofiber-deposited porous platinum enables glucose fuel cell anodes with high current density in body fluids. Journal of Power Sources, 2017, 362, 168-173.	7.8	17
32	Bio-electrochemical conversion of industrial wastewater-COD combined with downstream methanol synthesis – an economic and life cycle assessment. Green Chemistry, 2018, 20, 2742-2762.	9.0	17
33	Poisoning of Highly Porous Platinum Electrodes by Amino Acids and Tissue Fluid Constituents. ChemElectroChem, 2015, 2, 1785-1793.	3.4	14
34	Pulsed Electrodeposition of Highly Porous Pt Alloys for use in Methanol, Formic Acid, and Glucose Fuel Cells. ChemElectroChem, 2018, 5, 1013-1023.	3.4	13
35	Passive water management for µfuel-cells using capillary microstructures. Journal of Micromechanics and Microengineering, 2008, 18, 104007.	2.6	12
36	Selective natural induction of laccases in Pleurotus sajor-caju, suitable for application at a biofuel cell cathode at neutral pH. Bioresource Technology, 2016, 218, 455-462.	9.6	12

#	Article	IF	Citations
37	The performance of microbial anodes in municipal wastewater: Pre-grown multispecies biofilm vs. natural inocula. Bioresource Technology, 2016, 221, 165-171.	9.6	12
38	High-porous platinum electrodes for functional electrical stimulation. , 2011, 2011, 5404-7.		11
39	Using planktonic microorganisms to supply the unpurified multi-copper oxidases laccase and copper efflux oxidases at a biofuel cell cathode. Bioresource Technology, 2014, 158, 231-238.	9.6	10
40	An air-breathing enzymatic cathode with extended lifetime by continuous laccase supply. Bioresource Technology, 2018, 264, 306-310.	9.6	10
41	Local Acidification Limits the Current Production and Biofilm Formation of Shewanella oneidensis MR-1 With Electrospun Anodes. Frontiers in Microbiology, 2021, 12, 660474.	3.5	10
42	Fabrication of Highly Porous Platinum by Cyclic Electrodeposition of PtCu Alloys: How do Process Parameters Affect Morphology?. Journal of the Electrochemical Society, 2013, 160, D111-D118.	2.9	8
43	Simultaneous use of a crossflow filtration membrane as microbial fuel cell anode â€“ Permeate flow leads to 4-fold increased current densities. Bioresource Technology, 2018, 257, 274-280.	9.6	8
44	A Surface Mountable Glucose Fuel Cell for Medical Implants. , 2007, , .		6
45	Systematic investigation of anode materials for microbial fuel cells with the model organism G . sulfurreducens. Bioresource Technology Reports, 2018, 2, 29-37.	2.7	6
46	Enzymatic Fuel Cells Solely Supplied with Unpurified Cellobiose Dehydrogenase and Laccase in Microorganismâ€™s Culture Supernatants. ChemElectroChem, 2014, 1, 1886-1894.	3.4	5
47	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, .	2.3	4
48	Activation of electrospun carbon fibers: the effect of fiber diameter on CO2 and steam reaction kinetics. Journal of Polymer Research, 2021, 28, 1.	2.4	4
49	A Binder-less Glucose Fuel Cell with Improved Chemical Stability Intended as Power Supply for Medical Implants. IFMBE Proceedings, 2009, , 2379-2383.	0.3	3
50	Biofuel cells as sustainable power sources for implantable systems. , 2013, , 183-212.		3
51	High Current Production of Shewanella Oneidensis with Electrospun Carbon Nanofiber Anodes is Directly Linked to Biofilm Formation**. ChemElectroChem, 2021, 8, 1836-1846.	3.4	3
52	A thin silicon thermoelectric nanowire characterization platform (TNCP) equipped with nanoporous electrodes for electrical contact formation. Journal of Physics: Conference Series, 2016, 757, 012001.	0.4	2
53	Development of a TEM Compatible Nanowire Characterization Platform With Self-Forming Contacts. IEEE Transactions on Semiconductor Manufacturing, 2018, 31, 22-31.	1.7	2
54	In vivocharacterization of electroactive biofilms inside porous electrodes with MR Imaging. RSC Advances, 2022, 12, 17784-17793.	3.6	2

#	Article	IF	Citations
55	Electrodeposited thin-layer electrodes for the use in potentially implantable glucose fuel cells. , 2009, , .		1
56	Dissimilatory Metal Reducers Producing Electricity: Microbial Fuel Cells. , 2013, , 203-230.		0
57	Design and fabrication of miniaturized PEM fuel cell combined microreactor with self-regulated hydrogen mechanism. Journal of Physics: Conference Series, 2015, 660, 012055.	0.4	0