Benjamin W Metcalfe

List of Publications by Year in descending order

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Version: 2024-02-01

1307594 1125743 28 220 13 7 g-index citations h-index papers 29 29 29 158 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Development of a functional stack of soil microbial fuel cells to power a water treatment reactor: From the lab to field trials in North East Brazil. Applied Energy, 2020, 278, 115680.	10.1	36
2	A new method for spike extraction using velocity selective recording demonstrated with physiological ENG in Rat. Journal of Neuroscience Methods, 2015, 251, 47-55.	2.5	31
3	Particle Swarm Optimization—An Adaptation for the Control of Robotic Swarms. Robotics, 2021, 10, 58.	3.5	15
4	Wearable Assistive Robotics: A Perspective on Current Challenges and Future Trends. Sensors, 2021, 21, 6751.	3.8	15
5	Power generation and autonomous glucose detection with an integrated array of abiotic fuel cells on a printed circuit board. Journal of Power Sources, 2020, 472, 228530.	7.8	14
6	Array processing of neural signals recorded from the peripheral nervous system for the classification of action potentials. Journal of Neuroscience Methods, 2021, 347, 108967.	2.5	14
7	An Assistive System for Upper Limb Motion Combining Functional Electrical Stimulation and Robotic Exoskeleton. IEEE Transactions on Medical Robotics and Bionics, 2020, 2, 260-268.	3.2	14
8	Fibre-selective discrimination of physiological ENG using velocity selective recording: Report on pilot rat experiments., 2014, 2014, 2645-8.		8
9	Velocity Selective Recording: A Demonstration of Effectiveness on the Vagus Nerve in Pig. , 2018, 2018, 1-4.		8
10	A Functional Electrical Stimulation System of High-Density Electrodes With Auto-Calibration for Optimal Selectivity. IEEE Sensors Journal, 2020, 20, 8833-8843.	4.7	7
11	Towards effective energy harvesting from stacks of soil microbial fuel cells. Journal of Power Sources, 2021, 515, 230591.	7.8	7
12	Sensory Feedback for Upper-Limb Prostheses: Opportunities and Barriers. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 738-747.	4.9	7
13	The Use of the Velocity Selective Recording Technique to Reveal the Excitation Properties of the Ulnar Nerve in Pigs. Sensors, 2022, 22, 58.	3.8	6
14	Tutorial: a guide to techniques for analysing recordings from the peripheral nervous system. Journal of Neural Engineering, 2022, 19, 042001.	3.5	6
15	An enhancement to velocity selective discrimination of neural recordings: Extraction of neuronal firing rates., 2014, 2014, 4111-4.		5
16	Microfluidics Integration into Low-Noise Multi-Electrode Arrays. Micromachines, 2021, 12, 727.	2.9	5
17	A Summary of Current and New Methods in Velocity Selective Recording (VSR) of Electroneurogram (ENG). , 2015 , , .		4
18	Modelling dynamic photovoltaic arrays for marine applications. , 2016, , .		4

#	Article	IF	CITATIONS
19	A Cost-Effective Pulse Oximeter Designed in Response to the COVID-19 Pandemic. Journal of Open Hardware, 2021, 5, .	0.5	3
20	Interferential Current Stimulation for Non-Invasive Somatotopic Sensory Feedback for Upper-Limb Prosthesis: Simulation Results using a Computable Human Phantom., 2021,,.		3
21	A reconfigurable architecture for real-time digital simulation of neurons. , 2017, , .		2
22	A dataset of action potentials recorded from the L5 dorsal rootlet of rat using a multiple electrode array. Data in Brief, 2020, 33, 106561.	1.0	2
23	A New Method for Neural Spike Alignment: The Centroid Filter. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1988-1997.	4.9	1
24	An Analytical Comparison of Locally-Connected Reconfigurable Neural Network Architectures Using a C. elegans Locomotive Model. Computers, 2018, 7, 43.	3.3	1
25	An Ultra-Sensitive Biosensor to Investigate Random Telegraph Noise in Human Breast Cancer Cells. , 2020, 60, .		1
26	Dynamic Photo-Voltaic Arrays for Marine Applications using Hardware-in-the-Loop Simulation Control., 2021,,.		0
27	Source Localisation Using Wavefield Correlation-Enhanced Particle Swarm Optimisation. Robotics, 2022, 11, 52.	3.5	0
28	The Design of a Low Noise, Multi-Channel Recording System for Use in Implanted Peripheral Nerve Interfaces. Sensors, 2022, 22, 3450.	3.8	O