Richard F Ff Weir

List of Publications by Year
in descending order

29	1,364	566801 15	642321 23
papers	citations	h-index	g-index

30	30	30	1143
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A heuristic fuzzy logic approach to EMG pattern recognition for multifunctional prosthesis control. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2005, 13, 280-291.	2.7	349
2	Implantable Myoelectric Sensors (IMESs) for Intramuscular Electromyogram Recording. IEEE Transactions on Biomedical Engineering, 2009, 56, 159-171.	2.5	223
3	A Comparison of the Effects of Electrode Implantation and Targeting on Pattern Classification Accuracy for Prosthesis Control. IEEE Transactions on Biomedical Engineering, 2008, 55, 2198-2211.	2.5	134
4	Toward higher-performance bionic limbs for wider clinical use. Nature Biomedical Engineering, 2023, 7, 473-485.	11.6	104
5	Dexterous Control of a Prosthetic Hand Using Fine-Wire Intramuscular Electrodes in Targeted Extrinsic Muscles. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 828-836.	2.7	79
6	Humans can integrate feedback of discrete events in their sensorimotor control of a robotic hand. Experimental Brain Research, 2014, 232, 3421-3429.	0.7	70
7	User-Modulated Impedance Control of a Prosthetic Elbow in Unconstrained, Perturbed Motion. IEEE Transactions on Biomedical Engineering, 2008, 55, 1043-1055.	2.5	65
8	Design and Fabrication of a Six Degree-of-Freedom Open Source Hand. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2016, 24, 562-572.	2.7	49
9	Functional Assessment of a Myoelectric Postural Controller and Multi-Functional Prosthetic Hand by Persons With Trans-Radial Limb Loss. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 618-627.	2.7	40
10	Simulation of Intramuscular EMG Signals Detected Using Implantable Myoelectric Sensors (IMES). IEEE Transactions on Biomedical Engineering, 2006, 53, 1926-1933.	2.5	39
11	Design and Validation of a Morphing Myoelectric Hand Posture Controller Based on Principal Component Analysis of Human Grasping. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 249-257.	2.7	34
12	Comparative study of state-of-the-art myoelectric controllers for multigrasp prosthetic hands. Journal of Rehabilitation Research and Development, 2014, 51, 1439-1454.	1.6	28
13	Extrinsic Finger and Thumb Muscles Command a Virtual Hand to Allow Individual Finger and Grasp Control. IEEE Transactions on Biomedical Engineering, 2015, 62, 218-226.	2.5	28
14	Design of a High-Speed Prosthetic Finger Driven by Peano-HASEL Actuators. Frontiers in Robotics and AI, 2020, 7, 586216.	2.0	22
15	Activation of individual extrinsic thumb muscles and compartments of extrinsic finger muscles. Journal of Neurophysiology, 2013, 110, 1385-1392.	0.9	21
16	Optogenetic stimulation of cholinergic fibers for the modulation of insulin and glycemia. Scientific Reports, 2021, 11, 3670.	1.6	17
17	Effect of compliance location in series elastic actuators. Robotica, 2013, 31, 1313-1318.	1.3	15
18	On the development of optical peripheral nerve interfaces. Neural Regeneration Research, 2019, 14, 425.	1.6	14

#	Article	IF	Citations
19	Design and evaluation of a distally actuated powered finger prosthesis with self-contained transmission for individuals with partial hand loss. Advances in Mechanical Engineering, 2019, 11, 168781401983411.	0.8	10
20	A Myoelectric Postural Control Algorithm for Persons With Transradial Amputations: A Consideration of Clinical Readiness. IEEE Robotics and Automation Magazine, 2020, 27, 77-86.	2.2	8
21	Quantification of isolated muscle compartment activity in extrinsic finger muscles for potential prosthesis control sites. , 2011, 2011, 4104-7.		4
22	Extrapolation of Emerging Technologies and Their Long-Term Implications for Myoelectric versus Body-Powered Prostheses: An Engineering Perspective. Journal of Prosthetics and Orthotics, 2017, 29, P63-P74.	0.2	3
23	Intravascular injections of adenoassociated viral vector serotypes rh10 and PHP.B transduce murine sciatic nerve axons. Neuroscience Letters, 2019, 706, 51-55.	1.0	3
24	Real-Time Prosthetic Digit Actuation by Optical Read-out of Activity-Dependent Calcium Signals in an Ex Vivo Peripheral Nerve. , 2019, , .		2
25	Reliability of Implantable MyoElectric Sensors (IMES). , 2008, , .		1
26	User surveys support designing a prosthetic wrist that incorporates the Dart Throwerâ€™s Motion. Disability and Rehabilitation: Assistive Technology, 2019, 14, 312-315.	1.3	1
27	Comparison of Myoelectric Control Schemes for Simultaneous Hand and Wrist Movement using Chronically Implanted Electromyography: A Case Series*. , 2021, 2021, 6224-6230.		1
28	The future of adenoassociated viral vectors for optogenetic peripheral nerve interfaces. Neural Regeneration Research, 2021, 16, 1446.	1.6	0
29	Survey report on neural-machine interface for multifunctional upper limb prostheses. Journal of Life Support Engineering, 2006, 18, 159-159.	0.1	0