Chet T Moritz

List of Publications by Year
in descending order

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49 papers	2,673 citations	257101 24 h-index	264894 42 g-index
50 all docs	50 docs citations	50 times ranked	2969 citing authors

#	Article	IF	Citations
1	Direct control of paralysed muscles by cortical neurons. Nature, 2008, 456, 639-642.	13.7	545
2	Discharge Rate Variability Influences the Variation in Force Fluctuations Across the Working Range of a Hand Muscle. Journal of Neurophysiology, 2005, 93, 2449-2459.	0.9	360
3	Flexible and stretchable nanowire-coated fibers for optoelectronic probing of spinal cord circuits. Science Advances, 2017, 3, e1600955.	4.7	170
4	Transcutaneous Electrical Spinal Stimulation Promotes Long-Term Recovery of Upper Extremity Function in Chronic Tetraplegia. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1272-1278.	2.7	143
5	Increased Anatomical Specificity of Neuromodulation via Modulated Focused Ultrasound. PLoS ONE, 2014, 9, e86939.	1.1	142
6	Passive dynamics change leg mechanics for an unexpected surface during human hopping. Journal of Applied Physiology, 2004, 97, 1313-1322.	1.2	127
7	Transcutaneous Spinal Cord Stimulation Restores Hand and Arm Function After Spinal Cord Injury. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 310-319.	2.7	97
8	Forelimb Movements and Muscle Responses Evoked by Microstimulation of Cervical Spinal Cord in Sedated Monkeys. Journal of Neurophysiology, 2007, 97, 110-120.	0.9	96
9	Cervical intraspinal microstimulation evokes robust forelimb movements before and after injury. Journal of Neural Engineering, 2013, 10, 036001.	1.8	78
10	Human hopping on very soft elastic surfaces: implications for muscle pre-stretch and elastic energy storage in locomotion. Journal of Experimental Biology, 2005, 208, 939-949.	0.8	73
11	Prolonged muscle vibration increases stretch reflex amplitude, motor unit discharge rate, and force fluctuations in a hand muscle. Journal of Applied Physiology, 2005, 99, 1835-1842.	1.2	63
12	Volitional control of single cortical neurons in a brainâ€“machine interface. Journal of Neural Engineering, 2011, 8, 025017.	1.8	62
13	Robust passive dynamics of the musculoskeletal system compensate for unexpected surface changes during human hopping. Journal of Applied Physiology, 2009, 107, 801-808.	1.2	56
14	Ultra-Capacitive Carbon Neural Probe Allows Simultaneous Long-Term Electrical Stimulations and High-Resolution Neurotransmitter Detection. Scientific Reports, 2018, 8, 6958.	1.6	56
15	Neuromuscular changes for hopping on a range of damped surfaces. Journal of Applied Physiology, 2004, 96, 1996-2004.	1.2	49
16	Therapeutic intraspinal stimulation to generate activity and promote long-term recovery. Frontiers in Neuroscience, 2014, 8, 21.	1.4	44
17	Affective brain-computer interfaces as enabling technology for responsive psychiatric stimulation. Brain-Computer Interfaces, 2014, 1, 126-136.	0.9	42
18	Therapeutic Stimulation for Restoration of Function After Spinal Cord Injury. Physiology, 2017, 32, 391-398.	1.6	42

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19	Preliminary Investigation of an Electromyography-Controlled Video Game as a Home Program for Persons in the Chronic Phase of Stroke Recovery. Archives of Physical Medicine and Rehabilitation, 2014, 95, 1461-1469.	0.5	39
20	Understanding upper extremity home programs and the use of gaming technology for persons after stroke. Disability and Health Journal, 2015, 8, 507-513.	1.6	38
21	A Cervical Hemi-Contusion Spinal Cord Injury Model for the Investigation of Novel Therapeutics Targeting Proximal and Distal Forelimb Functional Recovery. Journal of Neurotrauma, 2015, 32, 1994-2007.	1.7	37
22	Now is the Critical Time for Engineered Neuroplasticity. Neurotherapeutics, 2018, 15, 628-634.	2.1	28
23	Coherence at 16-32 Hz Can Be Caused by Short-Term Synchrony of Motor Units. Journal of Neurophysiology, 2005, 94, 105-118.	0.9	26
24	Human hoppers compensate for simultaneous changes in surface compression and damping. Journal of Biomechanics, 2006, 39, 1030-1038.	0.9	26
25	Intraspinal microstimulation for respiratory muscle activation. Experimental Neurology, 2018, 302, 93-103.	2.0	25
26	New Perspectives on Neuroengineering and Neurotechnologies: NSF-DFG Workshop Report. IEEE Transactions on Biomedical Engineering, 2016, 63, 1354-1367.	2.5	23
27	Glassy carbon microelectrode arrays enable voltage-peak separated simultaneous detection of dopamine and serotonin using fast scan cyclic voltammetry. Analyst, The, 2021, 146, 3955-3970.	1.7	21
28	Multisite Transcutaneous Spinal Stimulation for Walking and Autonomic Recovery in Motor-Incomplete Tetraplegia: A Single-Subject Design. Physical Therapy, 2022, 102, .	1.1	19
29	Brain-Computer-Spinal Interface Restores Upper Limb Function After Spinal Cord Injury. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1233-1242.	2.7	17
30	Simultaneous and independent control of a brain-computer interface and contralateral limb movement. Brain-Computer Interfaces, 2015, 2, 174-185.	0.9	14
31	Neural engineering: the process, applications, and its role in the future of medicine. Journal of Neural Engineering, 2019, 16, 063002.	1.8	14
32	Meeting Proceedings for SCI 2020: Launching a Decade of Disruption in Spinal Cord Injury Research. Journal of Neurotrauma, 2021, 38, 1251-1266.	1.7	14
33	A Robust Encoding Scheme for Delivering Artificial Sensory Information via Direct Brain Stimulation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1994-2004.	2.7	13
34	A giant step for spinal cord injury research. Nature Neuroscience, 2018, 21, 1647-1648.	7.1	12
35	Regenerative Rehabilitation: Combining Stem Cell Therapies and Activity-Dependent Stimulation. Pediatric Physical Therapy, 2017, 29, S10-S15.	0.3	10
36	A spring in your step: some is good, more is not always better. Journal of Applied Physiology, 2009, 107, 643-644.	1.2	8

#	Article	IF	Citations
37	Reconfiguring Motor Circuits for a Joint Manual and BCI Task. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 248-257.	2.7	7
38	'Neurogame Therapy' for Improvement of Movement Coordination after Brain Injury: Developing a Wireless Biosignal Game Therapy System. , 2011, , .		6
39	Automated Center-out Rodent Behavioral Trainer (ACRoBaT), an automated device for training rats to perform a modified center out task. Behavioural Brain Research, 2018, 346, 115-121.	1.2	6
40	A roadmap for advancing neurostimulation approaches for bladder and bowel function after spinal cord injury. Spinal Cord, 2020, 58, 1227-1232.	0.9	5
41	Respiratory resetting elicited by single pulse spinal stimulation. Respiratory Physiology and Neurobiology, 2020, 274, 103339.	0.7	4
42	Graphene on glassy carbon microelectrodes demonstrate long-term structural and functional stability in neurophysiological recording and stimulation. Journal of Neural Engineering, 2021, 18, 056035.	1.8	4
43	Applying best practices from digital control systems to BMI implementation. , 2012, 2012, 1699-702.		3
44	A high-voltage compliant neural stimulator with HF wireless power and UHF backscatter communication. , 2016, , .		3
45	NeuralCLIP: A Modular FPGA-Based Neural Interface for Closed-Loop Operation. , 2019, , .		3
46	Automated lever task with minimum antigravity movement for rats with cervical spinal cord injury. Journal of Neuroscience Methods, 2022, 366, 109433.	1.3	2
47	High Performance Flexible Protocol for Backscattered-Based Neural Implants. , 2019, , .		1
48	An optimal control analysis of motor strategies in a brain-computer interface task. , 2013, , .		0
49	Design of intracortical microstimulation patterns to control the location, intensity, and quality of evoked sensations in human and animal models. , 2021, , 479-506.		0