

Reach and grasp by people with tetraplegia using a neuro

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Citation Report

#	ARTICLE	IF	CITATIONS
1	A Table Model for Circuit Simulation. , 1986, , .		8
2	The DLR lightweight robot: design and control concepts for robots in human environments. Industrial Robot, 2007, 34, 376-385.	1.2	512
3	Brainâ€“computer interfaces for controlling wheelchairs. , 2008, , 323-344.		0
4	Infrastructure for studying decision â€” Making processes. , 2010, , .		0
5	Advances in neurosurgery: Five new things. Neurology: Clinical Practice, 2012, 2, 201-207.	0.8	1
6	Hand Robotics Rehabilitation: Feasibility and Preliminary Results of a Robotic Treatment in Patients with Hemiparesis. Stroke Research and Treatment, 2012, 2012, 1-5.	0.5	72
7	Facilitation and restoration of cognitive function in primate prefrontal cortex by a neuroprosthesis that utilizes minicolumn-specific neural firing. Journal of Neural Engineering, 2012, 9, 056012.	1.8	91
8	Neurally controlled robotic arm enables tetraplegic patient to drink coffee of her own volition. Nature Reviews Neurology, 2012, 8, 353-353.	4.9	4
9	A framework for relating neural activity to freely moving behavior. , 2012, 2012, 2736-9.		1
10	Steering a robot with a brain-computer interface: Impact of video feedback on BCI performance. , 2012, , .		3
11	Brain-controlled robot grabs attention. Nature, 2012, 485, 317-318.	13.7	5
12	Bionics and CogInfoCom. , 2012, , .		0
13	Cognitive signals for brainâ€“machine interfaces in posterior parietal cortex include continuous 3D trajectory commands. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17075-17080.	3.3	87
14	Real-time fusion of gaze and EMG for a reaching neuroprosthesis. , 2012, 2012, 739-42.		7
15	Filling a glass of water: Continuously decoding the speed of 3D hand movements from EEG signals. , 2012, 2012, 4095-8.		5
16	Optimal spaceâ€“time precoding of artificial sensory feedback through multichannel microstimulation in bi-directional brainâ€“machine interfaces. Journal of Neural Engineering, 2012, 9, 065004.	1.8	19
17	Embryonic Learning of Vocal Passwords in Superb Fairy-Wrens Reveals Intruder Cuckoo Nestlings. Current Biology, 2012, 22, 2155-2160.	1.8	160
18	A high-performance neural prosthesis enabled by control algorithm design. Nature Neuroscience, 2012, 15, 1752-1757.	7.1	454

#	ARTICLE	IF	CITATIONS
19	Current Challenges to the Clinical Translation of Brain Machine Interface Technology. <i>International Review of Neurobiology</i> , 2012, 107, 137-160.	0.9	16
20	Neural interfaces for the brain and spinal cord—restoring motor function. <i>Nature Reviews Neurology</i> , 2012, 8, 690-699.	4.9	213
21	Applying best practices from digital control systems to BMI implementation. , 2012, 2012, 1699-702.		3
22	Optogenetic Neuromodulation. <i>International Review of Neurobiology</i> , 2012, 107, 185-205.	0.9	23
23	Quantum Computing: A Prime Modality in Neurosurgery's Future. <i>World Neurosurgery</i> , 2012, 78, 404-408.	0.7	8
24	Computers and Neurosurgery. <i>World Neurosurgery</i> , 2012, 78, 392-398.	0.7	4
26	Augmentative and Alternative Communication for People with Progressive Neuromuscular Disease. <i>Physical Medicine and Rehabilitation Clinics of North America</i> , 2012, 23, 689-699.	0.7	24
27	Prediction of Imagined Single-Joint Movements in a Person With High-Level Tetraplegia. <i>IEEE Transactions on Biomedical Engineering</i> , 2012, 59, 2755-2765.	2.5	39
28	Functional near-infrared spectroscopy based brain activity classification for development of a brain-computer interface. , 2012, , .		11
29	Interfacing the Somatosensory System to Restore Touch and Proprioception: Essential Considerations. <i>Journal of Motor Behavior</i> , 2012, 44, 403-418.	0.5	93
30	The Smartest Materials: The Future of Nanoelectronics in Medicine. <i>ACS Nano</i> , 2012, 6, 6541-6545.	7.3	82
31	Continuous decoding of grasping tasks for a prospective implantable cortical neuroprosthesis. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2012, 9, 84.	2.4	9
32	From the bench to the bedside: Brain-machine interfaces in spinal cord injury, the blood-brain barrier, and neurodegeneration, using the hippocampus to improve cognition, metabolism, and epilepsy, and understanding axonal death. , 2012, 3, 108.		0
33	Intention Concepts and Brain-Machine Interfacing. <i>Frontiers in Psychology</i> , 2012, 3, 455.	1.1	11
34	A Review of fMRI as a Tool for Enhancing Eeg-Based Brain-Machine Interfaces. <i>Applied Bionics and Biomechanics</i> , 2012, 9, 125-133.	0.5	3
35	Mind-controlled robot arms show promise. <i>Nature</i> , 2012, , .	13.7	3
37	Sensors and Decoding for Intracortical Brain Computer Interfaces. <i>Annual Review of Biomedical Engineering</i> , 2013, 15, 383-405.	5.7	110
38	The utility of multichannel local field potentials for brain-machine interfaces. <i>Journal of Neural Engineering</i> , 2013, 10, 046005.	1.8	65

#	ARTICLE	IF	CITATIONS
39	Philosophy of Art. , 2013, , 1675-1675.		0
40	A new high-density (25 electrodes/mm <sup>2</sup> ) penetrating microelectrode array for recording and stimulating sub-millimeter neuroanatomical structures. Journal of Neural Engineering, 2013, 10, 045003.	1.8	124
41	Motion control of thumb and index finger of an artificial hand for precision grip using asynchronous decoding of CM cell activity. BMC Neuroscience, 2013, 14, .	0.8	1
42	Brain-machine interface in chronic stroke rehabilitation: A controlled study. Annals of Neurology, 2013, 74, 100-108.	2.8	754
43	Physics in Christianity. , 2013, , 1729-1735.		1
44	Classification of functional near-infrared spectroscopy signals corresponding to the right- and left-wrist motor imagery for development of a brain-computer interface. Neuroscience Letters, 2013, 553, 84-89.	1.0	266
45	Long term, stable brain machine interface performance using local field potentials and multiunit spikes. Journal of Neural Engineering, 2013, 10, 056005.	1.8	167
46	Brain-computer interfaces. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2013, 110, 67-74.	1.0	60
47	A Primer on Brain-Machine Interfaces, Concepts, and Technology: A Key Element in the Future of Functional Neurorestoration. World Neurosurgery, 2013, 79, 457-471.	0.7	48
48	Three-dimensional upper limb movement decoding from EEG signals. , 2013, , .		8
50	Detecting awareness after severe brain injury. Nature Reviews Neuroscience, 2013, 14, 801-809.	4.9	163
51	Opto-1/4 ECoG Array: A Hybrid Neural Interface With Transparent 1/4 ECoG Electrode Array and Integrated LEDs for Optogenetics. IEEE Transactions on Biomedical Circuits and Systems, 2013, 7, 593-600.	2.7	148
52	Transfer of information by BMI. Neuroscience, 2013, 255, 134-146.	1.1	22
53	Realizing the Promise of Robotic Leg Prostheses. Science Translational Medicine, 2013, 5, 210ps15.	5.8	94
54	A Brain-Machine Interface Enables Bimanual Arm Movements in Monkeys. Science Translational Medicine, 2013, 5, 210ra154.	5.8	140
55	Personalized Neuroprosthetics. Science Translational Medicine, 2013, 5, 210rv2.	5.8	141
56	Translating the Brain-Machine Interface. Science Translational Medicine, 2013, 5, 210ps17.	5.8	103
57	Multisensory Imagery. , 2013, , .		42

#	ARTICLE	IF	CITATIONS
58	Engineering Approaches to Illuminating Brain Structure and Dynamics. <i>Neuron</i> , 2013, 80, 568-577.	3.8	116
59	Relationship between intracortical electrode design and chronic recording function. <i>Biomaterials</i> , 2013, 34, 8061-8074.	5.7	220
60	Measurement of Wireless Link for Brain-Machine Interface Systems Using Human-Head Equivalent Liquid. <i>IEEE Antennas and Wireless Propagation Letters</i> , 2013, 12, 1307-1310.	2.4	18
61	Brain-computer interface technologies: from signal to action. <i>Reviews in the Neurosciences</i> , 2013, 24, 537-52.	1.4	169
62	Baptisms of fire or death knells for acute-slice physiology in the age of "omics and light?. <i>Reviews in the Neurosciences</i> , 2013, 24, 527-36.	1.4	8
63	State-based decoding of hand and finger kinematics using neuronal ensemble and LFP activity during dexterous reach-to-grasp movements. <i>Journal of Neurophysiology</i> , 2013, 109, 3067-3081.	0.9	132
64	Resting state detection for gating movement of a neural prosthesis. , 2013, , .		4
65	An ERD/ERS analysis of the relation between human arm and robot manipulator movements. , 2013, , .		0
66	Generalized virtual fixtures for shared-control grasping in brain-machine interfaces. , 2013, 2013, 323-328.		1
67	Augmenting neuroprosthetic hand control through evaluation of a bioacoustic interface. , 2013, , .		0
68	A complete 256-channel reconfigurable system for in vitro neurobiological experiments. , 2013, , .		2
69	Optimal feedback-controlled point process decoder for adaptation and assisted training in brain-machine interfaces. , 2013, , .		7
70	Mixing decoded cursor velocity and position from an offline Kalman filter improves cursor control in people with tetraplegia. , 2013, , .		8
71	Delineating the whole brain BOLD response to passive movement kinematics. , 2013, 2013, 6650474.		9
72	Modeling and identification of the human arm stretch reflex using a realistic spiking neural network and musculoskeletal model. , 2013, , .		6
73	Observation-based calibration of brain-machine interfaces for grasping. , 2013, , .		3
74	Brain-machine interface control using broadband spectral power from local field potentials. , 2013, 2013, 285-8.		7
75	Decoding three-dimensional arm movements for brain-machine interface. , 2013, , .		2

#	ARTICLE	IF	CITATIONS
76	Investigating the role of firing-rate normalization and dimensionality reduction in brain-machine interface robustness. , 2013, 2013, 293-8.		11
77	In the Spotlight: Neuroengineering. IEEE Reviews in Biomedical Engineering, 2013, 6, 24-26.	13.1	0
78	Brain-machine interface: closer to therapeutic reality?. Lancet, The, 2013, 381, 515-517.	6.3	32
79	High-performance neuroprosthetic control by an individual with tetraplegia. Lancet, The, 2013, 381, 557-564.	6.3	1,550
80	Somatosensory responses in a human motor cortex. Journal of Neurophysiology, 2013, 109, 2192-2204.	0.9	22
81	Cautious optimism on public health in post-earthquake Haiti. Lancet, The, 2013, 381, 517-519.	6.3	12
82	Design and validation of a real-time spiking-neural-network decoder for brain-machine interfaces. Journal of Neural Engineering, 2013, 10, 036008.	1.8	53
83	A heterogeneous framework for real-time decoding of bioacoustic signals: Applications to assistive interfaces and prosthesis control. Expert Systems With Applications, 2013, 40, 5049-5060.	4.4	13
84	A personal retrospective on the second half of the 20th century. BioSystems, 2013, 112, 183-188.	0.9	0
85	The impact of chronic blood-brain barrier breach on intracortical electrode function. Biomaterials, 2013, 34, 4703-4713.	5.7	239
86	The Next Frontier in Composite Tissue Allograft Transplantation. CNS Neuroscience and Therapeutics, 2013, 19, 1-4.	1.9	15
87	Synthetic Nanoelectronic Probes for Biological Cells and Tissues. Annual Review of Analytical Chemistry, 2013, 6, 31-51.	2.8	82
88	An implantable wireless neural interface for recording cortical circuit dynamics in moving primates. Journal of Neural Engineering, 2013, 10, 026010.	1.8	267
89	The Brain Activity Map. Science, 2013, 339, 1284-1285.	6.0	181
90	Ethical and social issues behind brain-computer interface. , 2013, , .		3
91	New Evidence for Therapies in Stroke Rehabilitation. Current Atherosclerosis Reports, 2013, 15, 331.	2.0	106
92	Training spiking neural networks to associate spatio-temporal input-output spike patterns. Neurocomputing, 2013, 107, 3-10.	3.5	74
93	Design and Analysis of Closed-Loop Decoder Adaptation Algorithms for Brain-Machine Interfaces. Neural Computation, 2013, 25, 1693-1731.	1.3	80

#	ARTICLE	IF	CITATIONS
94	Extending, changing, and explaining the brain. <i>Biology and Philosophy</i> , 2013, 28, 613-638.	0.7	5
95	Achieving complex control of a neuroprosthetic arm. <i>Nature Reviews Neurology</i> , 2013, 9, 62-62.	4.9	7
96	Master Neurons Induced by Operant Conditioning in Rat Motor Cortex during a Brain-Machine Interface Task. <i>Journal of Neuroscience</i> , 2013, 33, 8308-8320.	1.7	46
97	Polymer-based flexible capacitive sensor for three-axial force measurements. <i>Journal of Micromechanics and Microengineering</i> , 2013, 23, 015009.	1.5	133
98	Cortical Control of Arm Movements: A Dynamical Systems Perspective. <i>Annual Review of Neuroscience</i> , 2013, 36, 337-359.	5.0	633
99	The Speculative Neuroscience of the Future Human Brain. <i>Humanities</i> , 2013, 2, 209-252.	0.1	2
100	Energy Efficient Low-Noise Multichannel Neural Amplifier in Submicron CMOS Process. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2013, 60, 1764-1775.	3.5	54
101	Biorealistic spiking neural network on FPGA. , 2013, , .		6
102	Towards autonomous neuroprosthetic control using Hebbian reinforcement learning. <i>Journal of Neural Engineering</i> , 2013, 10, 066005.	1.8	34
103	25th Anniversary Article: The Evolution of Electronic Skin (E-Skin): A Brief History, Design Considerations, and Recent Progress. <i>Advanced Materials</i> , 2013, 25, 5997-6038.	11.1	2,001
104	The Convergence of Machine and Biological Intelligence. <i>IEEE Intelligent Systems</i> , 2013, 28, 28-43.	4.0	26
105	Noninvasive control of a robotic arm in multiple dimensions using scalp electroencephalogram. , 2013, , .		12
106	Neural decoding of movement targets by unsorted spike trains. , 2013, , .		0
107	Investigation of phase-locked neuronal oscillation with optical stimulation based on a time-frequency approach. , 2013, , .		1
108	Real-Time Evaluation of a Noninvasive Neuroprosthetic Interface for Control of Reach. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2013, 21, 674-683.	2.7	29
109	Advantages of closed-loop calibration in intracortical brain-computer interfaces for people with tetraplegia. <i>Journal of Neural Engineering</i> , 2013, 10, 046012.	1.8	83
110	Motor trajectory decoding based on fMRI-based BCI; A simulation study. , 2013, , .		4
111	Quadcopter control in three-dimensional space using a noninvasive motor imagery-based brain-computer interface. <i>Journal of Neural Engineering</i> , 2013, 10, 046003.	1.8	452

#	ARTICLE	IF	CITATIONS
112	Neuroprosthetic technology for individuals with spinal cord injury. <i>Journal of Spinal Cord Medicine</i> , 2013, 36, 258-272.	0.7	64
113	Reliability in the location of hindlimb motor representations in Fischer-344 rats. <i>Journal of Neurosurgery: Spine</i> , 2013, 19, 248-255.	0.9	22
114	Stereoencephalography for continuous two-dimensional cursor control in a brain-machine interface. <i>Neurosurgical Focus</i> , 2013, 34, E3.	1.0	25
116	Advances in Neuroprosthetic Learning and Control. <i>PLoS Biology</i> , 2013, 11, e1001561.	2.6	104
117	Neurology and the military. <i>Neurology: Clinical Practice</i> , 2013, 3, 30-38.	0.8	6
118	A Highly Compliant Serpentine Shaped Polyimide Interconnect for Front-End Strain Relief in Chronic Neural Implants. <i>Frontiers in Neurology</i> , 2013, 4, 124.	1.1	16
119	Functional priorities, assistive technology, and brain-computer interfaces after spinal cord injury. <i>Journal of Rehabilitation Research and Development</i> , 2013, 50, 145.	1.6	197
120	Neurosurgery and the dawning age of Brain-Machine Interfaces. , 2013, 4, 11.		5
121	The Representations of Novel Neurotechnologies in Social Media. <i>New Bioethics</i> , 2013, 19, 30-45.	0.5	9
122	An Implantable Neural Sensing Microsystem with Fiber-Optic Data Transmission and Power Delivery. <i>Sensors</i> , 2013, 13, 6014-6031.	2.1	31
123	A 100-Channel Hermetically Sealed Implantable Device for Chronic Wireless Neurosensing Applications. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2013, 7, 115-128.	2.7	134
124	A closed-loop neurobotic system for fine touch sensing. <i>Journal of Neural Engineering</i> , 2013, 10, 046019.	1.8	40
125	Converging Clinical and Engineering Research on Neurorehabilitation. <i>Biosystems and Biorobotics</i> , 2013, , .	0.2	9
126	Attacking Human Implants: A New Generation of Cybercrime. <i>Law, Innovation and Technology</i> , 2013, 5, 248-277.	2.0	20
127	Clinical Characteristics and Outcome in the Acute Phase of Ischemic Locked-In Syndrome: Case Series of Twenty Patients with Ischemic LIS. <i>European Neurology</i> , 2013, 69, 207-212.	0.6	14
128	Neurophysiology of Robot-Mediated Training and Therapy: A Perspective for Future Use in Clinical Populations. <i>Frontiers in Neurology</i> , 2013, 4, 184.	1.1	82
129	ENG-Based Signal Processing and Neural Decoding Algorithms for Rehabilitative Prostheses Control. , 2013, , .		1
130	Selection of cortical neurons for identifying movement transitions in stand and squat. , 2013, 2013, 6051-4.		2



#	ARTICLE	IF	CITATIONS
131	Real-time movement prediction for improved control of neuroprosthetic devices. , 2013, , .		22
132	A fiber optic multi-channel neural recording system for freely moving rats. , 2013, , .		0
133	A user interface for assistive grasping. , 2013, , .		6
134	High accuracy decoding of user intentions using EEG to control a lower-body exoskeleton. , 2013, 2013, 5606-9.		151
135	Feature extraction and unsupervised classification of neural population reward signals for reinforcement based BMI. , 2013, 2013, 5250-3.		6
136	256-channel reconfigurable system for recording the electrophysiological activity of a neural tissue in vitro. , 2013, , .		1
137	An externally head-mounted wireless neural recording device for laboratory animal research and possible human clinical use. , 2013, 2013, 3109-14.		11
138	Adaptive parametric spectral estimation with Kalman smoothing for online early seizure detection. , 2013, , 1410-1413.		3
139	Continuous robot control using surface electromyography of atrophic muscles. , 2013, , .		17
140	Neural representation and identification of reaching targets by spike trains in motor cortex. , 2013, , .		0
141	An OpenViBE-based brainwave control system for Cerebot. , 2013, , .		10
142	Functional near-infrared spectroscopy based discrimination of mental counting and no-control state for development of a brain-computer interface. , 2013, 2013, 1780-3.		20
143	Nonlinear elastic brain tissue model for neural probe-tissue mechanical interaction. , 2013, , .		6
144	Likelihood Gradient Ascent (LGA): A closed-loop decoder adaptation algorithm for brain-machine interfaces. , 2013, 2013, 2768-71.		3
145	Brain-machine interface. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18343-18343.	3.3	18
146	Fabrication of a flexible penetrating microelectrode array for use on curved surfaces of neural tissues. Journal of Micromechanics and Microengineering, 2013, 23, 125010.	1.5	28
147	Estimation of the velocity and trajectory of three-dimensional reaching movements from non-invasive magnetoencephalography signals. Journal of Neural Engineering, 2013, 10, 026006.	1.8	59
148	Decoding continuous limb movements from high-density epidural electrode arrays using custom spatial filters. Journal of Neural Engineering, 2013, 10, 036015.	1.8	32

#	ARTICLE	IF	CITATIONS
149	Local-learning-based neuron selection for grasping gesture prediction in motor brain machine interfaces. <i>Journal of Neural Engineering</i> , 2013, 10, 026008.	1.8	20
150	Nanoparticle-based evaluation of blood-brain barrier leakage during the foreign body response. <i>Journal of Neural Engineering</i> , 2013, 10, 016013.	1.8	19
151	Intra-day signal instabilities affect decoding performance in an intracortical neural interface system. <i>Journal of Neural Engineering</i> , 2013, 10, 036004.	1.8	180
152	Interfaces with the Peripheral Nerve for the Control of Neuroprostheses. <i>International Review of Neurobiology</i> , 2013, 109, 63-83.	0.9	77
153	Failure mode analysis of silicon-based intracortical microelectrode arrays in non-human primates. <i>Journal of Neural Engineering</i> , 2013, 10, 066014.	1.8	493
154	Dynamic Analysis of Naive Adaptive Brain-Machine Interfaces. <i>Neural Computation</i> , 2013, 25, 2373-2420.	1.3	15
155	Exercise: Why It is a Challenge for Both the Nonconscious and Conscious Mind. <i>Review of General Psychology</i> , 2013, 17, 93-110.	2.1	19
156	Neuroprosthetics: Once more, with feeling. <i>Nature</i> , 2013, 497, 176-178.	13.7	47
158	Barriers to novel therapeutics in amyotrophic lateral sclerosis. <i>Neurodegenerative Disease Management</i> , 2013, 3, 525-537.	1.2	0
159	The Chemistry of Cyborgs: Interfacing Technical Devices with Organisms. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13942-13957.	7.2	35
162	Information Analysis on Neural Tuning in Dorsal Premotor Cortex for Reaching and Grasping. <i>Computational and Mathematical Methods in Medicine</i> , 2013, 2013, 1-9.	0.7	5
163	Towards a Naturalistic Brain-Machine Interface: Hybrid Torque and Position Control Allows Generalization to Novel Dynamics. <i>PLoS ONE</i> , 2013, 8, e52286.	1.1	27
164	Detection of Error Related Neuronal Responses Recorded by Electroencephalography in Humans during Continuous Movements. <i>PLoS ONE</i> , 2013, 8, e55235.	1.1	48
165	An Electroencephalographic Brain Interface in an Individual with Tetraplegia. <i>PLoS ONE</i> , 2013, 8, e55344.	1.1	319
166	On the Usage of Linear Regression Models to Reconstruct Limb Kinematics from Low Frequency EEG Signals. <i>PLoS ONE</i> , 2013, 8, e61976.	1.1	85
167	Recursive N-Way Partial Least Squares for Brain-Computer Interface. <i>PLoS ONE</i> , 2013, 8, e69962.	1.1	28
168	Prediction of Hand Trajectory from Electroencephalography Signals in Primary Motor Cortex. <i>PLoS ONE</i> , 2013, 8, e83534.	1.1	37
169	How Thoughts Give Rise to Action - Conscious Motor Intention Increases the Excitability of Target-Specific Motor Circuits. <i>PLoS ONE</i> , 2013, 8, e83845.	1.1	16

#	ARTICLE	IF	CITATIONS
170	In vitro large-scale experimental and theoretical studies for the realization of bi-directional brain-prostheses. <i>Frontiers in Neural Circuits</i> , 2013, 7, 40.	1.4	72
171	Motor directional tuning across brain areas: directional resonance and the role of inhibition for directional accuracy. <i>Frontiers in Neural Circuits</i> , 2013, 7, 92.	1.4	45
172	Creating new functional circuits for action via brain-machine interfaces. <i>Frontiers in Computational Neuroscience</i> , 2013, 7, 157.	1.2	39
173	Identification of a self-paced hitting task in freely moving rats based on adaptive spike detection from multi-unit M1 cortical signals. <i>Frontiers in Neuroengineering</i> , 2013, 6, 11.	4.8	6
174	A BMI-based occupational therapy assist suit: asynchronous control by SSVEP. <i>Frontiers in Neuroscience</i> , 2013, 7, 172.	1.4	64
175	Real-time biomimetic Central Pattern Generators in an FPGA for hybrid experiments. <i>Frontiers in Neuroscience</i> , 2013, 7, 215.	1.4	59
176	Who Needs to Fit in? Who Gets to Stand out? Communication Technologies Including Brain-Machine Interfaces Revealed from the Perspectives of Special Education School Teachers Through an Ableism Lens. <i>Education Sciences</i> , 2013, 3, 30-49.	1.4	14
177	A High Performance MEG Based BCI Using Single Trial Detection of Human Movement Intention. , 0, , .		5
178	Detection of Optogenetic Stimulation in Somatosensory Cortex by Non-Human Primates - Towards Artificial Tactile Sensation. <i>PLoS ONE</i> , 2014, 9, e114529.	1.1	45
179	Comparison of Classifiers for Decoding Sensory and Cognitive Information from Prefrontal Neuronal Populations. <i>PLoS ONE</i> , 2014, 9, e86314.	1.1	49
180	A Bidirectional Brain-Machine Interface Algorithm That Approximates Arbitrary Force-Fields. <i>PLoS ONE</i> , 2014, 9, e91677.	1.1	14
181	High-Accuracy Brain-Machine Interfaces Using Feedback Information. <i>PLoS ONE</i> , 2014, 9, e103539.	1.1	11
182	A Simple ERP Method for Quantitative Analysis of Cognitive Workload in Myoelectric Prosthesis Control and Human-Machine Interaction. <i>PLoS ONE</i> , 2014, 9, e112091.	1.1	45
183	Coarse Electrographic Decoding of Ipsilateral Reach in Patients with Brain Lesions. <i>PLoS ONE</i> , 2014, 9, e115236.	1.1	25
184	A Cerebellar Neuroprosthetic System: Computational Architecture and in vivo Test. <i>Frontiers in Bioengineering and Biotechnology</i> , 2014, 2, 14.	2.0	10
185	Learned self-regulation of the lesioned brain with epidural electrocorticography. <i>Frontiers in Behavioral Neuroscience</i> , 2014, 8, 429.	1.0	36
186	Abiotic-biotic characterization of Pt/Ir microelectrode arrays in chronic implants. <i>Frontiers in Neuroengineering</i> , 2014, 7, 2.	4.8	159
187	The sinusoidal probe: a new approach to improve electrode longevity. <i>Frontiers in Neuroengineering</i> , 2014, 7, 10.	4.8	87

#	ARTICLE	IF	CITATIONS
188	Tracking single units in chronic, large scale, neural recordings for brain machine interface applications. <i>Frontiers in Neuroengineering</i> , 2014, 7, 23.	4.8	17
189	Epidural electrocorticography of phantom hand movement following long-term upper-limb amputation. <i>Frontiers in Human Neuroscience</i> , 2014, 8, 285.	1.0	22
190	Alpha band functional connectivity correlates with the performance of brain-machine interfaces to decode real and imagined movements. <i>Frontiers in Human Neuroscience</i> , 2014, 8, 620.	1.0	22
191	Closed-loop control of spinal cord stimulation to restore hand function after paralysis. <i>Frontiers in Neuroscience</i> , 2014, 8, 87.	1.4	81
192	Decoding of the spike timing of primary afferents during voluntary arm movements in monkeys. <i>Frontiers in Neuroscience</i> , 2014, 8, 97.	1.4	7
193	A confidence metric for using neurobiological feedback in actor-critic reinforcement learning based brain-machine interfaces. <i>Frontiers in Neuroscience</i> , 2014, 8, 111.	1.4	16
194	Multimodal decoding and congruent sensory information enhance reaching performance in subjects with cervical spinal cord injury. <i>Frontiers in Neuroscience</i> , 2014, 8, 123.	1.4	8
195	Restoration of motor function following spinal cord injury via optimal control of intraspinal microstimulation: toward a next generation closed-loop neural prosthesis. <i>Frontiers in Neuroscience</i> , 2014, 8, 296.	1.4	43
196	A functional model and simulation of spinal motor pools and intrafascicular recordings of motoneuron activity in peripheral nerve. <i>Frontiers in Neuroscience</i> , 2014, 8, 371.	1.4	3
197	Motor-related brain activity during action observation: a neural substrate for electrocorticographic brain-computer interfaces after spinal cord injury. <i>Frontiers in Integrative Neuroscience</i> , 2014, 8, 17.	1.0	23
198	Understanding entangled cerebral networks: a prerequisite for restoring brain function with brain-computer interfaces. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 82.	1.2	27
199	Brain-machine interfaces can accelerate clarification of the principal mysteries and real plasticity of the brain. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 104.	1.2	9
200	Ethical issues with brain-computer interfaces. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 136.	1.2	27
201	Selective visual attention to drive cognitive brain-machine interfaces: from concepts to neurofeedback and rehabilitation applications. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 144.	1.2	54
202	Bottlenecks to clinical translation of direct brain-computer interfaces. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 226.	1.2	13
203	An EEG-Based BCI Platform to Improve Arm Reaching Ability of Chronic Stroke Patients by Means of an Operant Learning Training with a Contingent Force Feedback. <i>International Journal of E-Health and Medical Communications</i> , 2014, 5, 114-134.	1.4	4
204	Comic Books, Mock Trials, and Zombies: Engaging Integrative Biopsychology Themes in the Classroom. <i>Journal of Psychology and Theology</i> , 2014, 42, 188-199.	0.2	0
206	Brain-machine interfaces. , 2014, , 565-576.		2

#	ARTICLE	IF	CITATIONS
207	Intracranial brain-computer interfaces for communication and control. , 2014, , 577-585.		3
208	Electronic Assistive Technology. , 2014, , 359-388.		2
209	Comparing temporal aspects of visual, tactile, and microstimulation feedback for motor control. Journal of Neural Engineering, 2014, 11, 046025.	1.8	30
210	The impact of mind-body awareness training on the early learning of a brain-computer interface. Technology, 2014, 02, 254-260.	1.4	40
211	Stable and artifact-resistant decoding of 3D hand trajectories from ECoG signals using the generalized additive model. Journal of Neural Engineering, 2014, 11, 066005.	1.8	23
212	A study of predicting movement intentions in various spatial reaching tasks from M1 neural activities. , 2014, 2014, 2666-9.		1
213	On the asynchronously continuous control of mobile robot movement by motor cortical spiking activity. , 2014, 2014, 3049-52.		4
214	Observation-based training for neuroprosthetic control of grasping by amputees. , 2014, 2014, 3989-92.		4
215	Like the back of the (right) hand? A new fMRI look on the hand laterality task. Experimental Brain Research, 2014, 232, 3873-3895.	0.7	44
216	Cursor control by Kalman filter with a non-invasive body-machine interface. Journal of Neural Engineering, 2014, 11, 056026.	1.8	7
217	Self-recalibrating classifiers for intracortical brain-computer interfaces. Journal of Neural Engineering, 2014, 11, 026001.	1.8	51
218	A freely-moving monkey treadmill model. Journal of Neural Engineering, 2014, 11, 046020.	1.8	56
220	Abidirectional brain-computer interface for effective epilepsy control. Journal of Zhejiang University: Science C, 2014, 15, 839-847.	0.7	5
221	A brain-computer interface for high-level remote control of an autonomous, reinforcement-learning-based robotic system for reaching and grasping. , 2014, , .		25
222	High-performance brain-machine interface enabled by an adaptive optimal feedback-controlled point process decoder. , 2014, 2014, 6493-6.		16
223	Simultaneous real-time monitoring of multiple cortical systems. Journal of Neural Engineering, 2014, 11, 056001.	1.8	3
224	fMRI-Based Robotic Embodiment: Controlling a Humanoid Robot by Thought Using Real-Time fMRI. Presence: Teleoperators and Virtual Environments, 2014, 23, 229-241.	0.3	19
225	Neural Decoding Using a Parallel Sequential Monte Carlo Method on Point Processes with Ensemble Effect. BioMed Research International, 2014, 2014, 1-11.	0.9	14

#	ARTICLE	IF	CITATIONS
226	Qualitative assessment of Tongue Drive System by people with high-level spinal cord injury. Journal of Rehabilitation Research and Development, 2014, 51, 451-466.	1.6	25
227	The sympathy of policy-makers towards animal-rights activists, and the future of biomedical research. Regulatory Toxicology and Pharmacology, 2014, 70, 577-578.	1.3	2
228	Using Reinforcement Learning to Provide Stable Brain-Machine Interface Control Despite Neural Input Reorganization. PLoS ONE, 2014, 9, e87253.	1.1	65
229	Severely affected ALS patients have broad and high expectations for brain-machine interfaces. Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration, 2014, 15, 513-519.	1.1	18
230	Neural Coding for Effective Rehabilitation. BioMed Research International, 2014, 2014, 1-17.	0.9	2
231	A Study on Decoding Models for the Reconstruction of Hand Trajectories from the Human Magnetoencephalography. BioMed Research International, 2014, 2014, 1-8.	0.9	4
232	Locked in, but not out?. Neurology, 2014, 82, 1852-1853.	1.5	17
233	Optical coherence microscopy of mouse cortical vasculature surrounding implanted electrodes. Proceedings of SPIE, 2014, , .	0.8	2
234	PCA Learning for Non-brain Waves-Controlled Robotic Hand (Prosthesis): Grasp Stabilization and Control. , 2014, , .		2
235	A Passive Upper Limb Exoskeleton for Macaques in a BMI Study: Kinematic Design, Analysis, and Calibration. , 2014, , .		1
236	Single muscle site sEMG interface for assistive grasping. , 2014, , .		2
237	Design of a neural decoder by sensory prediction and error correction. , 2014, , .		0
238	EMG estimation from EEGs for constructing a power assist system. , 2014, , .		5
240	Longitudinal vascular dynamics following cranial window and electrode implantation measured with speckle variance optical coherence angiography. Biomedical Optics Express, 2014, 5, 2823.	1.5	29
241	CLINATEC<sup>2</sup>&#x00AE;</sup> BCI platform based on the ECoG-recording implant WIMAGINE<sup>2</sup>&#x00AE;</sup> and the innovative signal-processing: Preclinical results. , 2014, 2014, 1222-5.		10
242	Assessing vibrotactile feedback strategies by controlling a cursor with unstable dynamics. , 2014, 2014, 2589-92.		2
243	Cell categories and k-nearest neighbor algorithm based decoding of primary motor cortical activity during reach-to-grasp task. , 2014, 2014, 2322-5.		0
244	The PennBMBI: A general purpose wireless Brain-Machine-Brain Interface system for unrestrained animals. , 2014, , .		15

#	ARTICLE	IF	CITATIONS
245	Towards a miniaturized brain-machine-spinal cord interface (BMSI) for restoration of function after spinal cord injury. , 2014, 2014, 486-9.		17
246	Hybrid decoding of both spikes and low-frequency local field potentials for brain-machine interfaces. , 2014, 2014, 3041-4.		8
247	Effective noise minimization in multichannel recording circuits processed in modern technologies for neurobiology experiments. , 2014, , .		2
248	Improving classification accuracy of covert yes/no response decoding using support vector machines: An fNIRS study. , 2014, , .		18
249	Differences in motor cortical representations of kinematic variables between action observation and action execution and implications for brain-machine interfaces. , 2014, 2014, 1334-7.		0
250	Combining Decoder Design and Neural Adaptation in Brain-Machine Interfaces. Neuron, 2014, 84, 665-680.	3.8	144
251	Population interactions between parietal and primary motor cortices during reach. Journal of Neurophysiology, 2014, 112, 2959-2984.	0.9	9
252	Wireless Neurosensor for Full-Spectrum Electrophysiology Recordings during Free Behavior. Neuron, 2014, 84, 1170-1182.	3.8	200
253	Workshops of the Fifth International Brain-Computer Interface Meeting: Defining the Future. Brain-Computer Interfaces, 2014, 1, 27-49.	0.9	35
254	Implicit human intention inference through gaze cues for people with limited motion ability. , 2014, , .		6
255	Comparison about EEG signals processing in BCI applications. , 2014, , .		0
256	Neuroprosthetic limb control with electrocorticography: Approaches and challenges. , 2014, 2014, 5212-5.		2
257	Developing new frontiers in the Rubber Hand Illusion: Design of an open source robotic hand to better understand prosthetics. , 2014, , .		16
258	A design of neural decoder by reducing discrepancy between Manual Control (MC) and Brain Control (BC). , 2014, , .		2
259	Impaired import: how huntingtin harms. Nature Neuroscience, 2014, 17, 747-749.	7.1	2
260	Replace, Repair, Restore, Relieve â€“ Bridging Clinical and Engineering Solutions in Neurorehabilitation. Biosystems and Biorobotics, 2014, , .	0.2	8
261	Study on the Teleoperation Virtual Liver Surgery Simulation System with Haptic Feedback. Advanced Materials Research, 0, 945-949, 1507-1512.	0.3	0
262	A collaborative BCI approach to autonomous control of a prosthetic limb system. , 2014, , .		33

#	ARTICLE	IF	CITATIONS
264	Identification of three mental states using a motor imagery based brain machine interface. , 2014, , .		3
265	Preserved Foot Motor Cortex in Patients With Complete Spinal Cord Injury. Neurorehabilitation and Neural Repair, 2014, 28, 179-187.	1.4	6
267	On the development of brain quantum-computer interfaces. , 2014, , .		1
268	Brainâ€“Computer Interfaces and Assistive Technology. The International Library of Ethics, Law and Technology, 2014, , 7-38.	0.2	23
269	Pre-frontal control of closed-loop limbic neurostimulation by rodents using a brainâ€“computer interface. Journal of Neural Engineering, 2014, 11, 024001.	1.8	22
270	Designing Dynamical Properties of Brainâ€“Machine Interfaces to Optimize Task-Specific Performance. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 911-920.	2.7	28
271	Extracting kinetic information from human motor cortical signals. NeuroImage, 2014, 101, 695-703.	2.1	84
272	Subject-specific modulation of local field potential spectral power during brainâ€“machine interface control in primates. Journal of Neural Engineering, 2014, 11, 026002.	1.8	62
273	Predicting hand orientation in reach-to-grasp tasks using neural activities from primary motor cortex. , 2014, 2014, 1306-9.		4
274	Decoding of intentional actions from scalp electroencephalography (EEG) in freely-behaving infants. , 2014, 2014, 2115-8.		3
275	Development of Upper Limb Prostheses: Current Progress and Areas for Growth. Archives of Physical Medicine and Rehabilitation, 2014, 95, 1013-1014.	0.5	16
276	Decoding grasp force profile from electrocorticography signals in non-human primate sensorimotor cortex. Neuroscience Research, 2014, 83, 1-7.	1.0	36
277	Cognitive-motor brainâ€“machine interfaces. Journal of Physiology (Paris), 2014, 108, 38-44.	2.1	30
278	Neuromodulation, Agency and Autonomy. Brain Topography, 2014, 27, 46-54.	0.8	47
279	A Review of Organic and Inorganic Biomaterials for Neural Interfaces. Advanced Materials, 2014, 26, 1846-1885.	11.1	456
280	Give Me a Sign: Decoding Complex Coordinated Hand Movements Using High-Field fMRI. Brain Topography, 2014, 27, 248-257.	0.8	30
281	Sensory uncertainty and stick balancing at the fingertip. Biological Cybernetics, 2014, 108, 85-101.	0.6	61
282	Brain-machine interfaces: an overview. Translational Neuroscience, 2014, 5, .	0.7	64



#	ARTICLE	IF	CITATIONS
283	Brain-Computer Interface Research. Biosystems and Biorobotics, 2014, , .	0.2	10
284	Brain-Computer Interfaces Using Sensorimotor Rhythms: Current State and Future Perspectives. IEEE Transactions on Biomedical Engineering, 2014, 61, 1425-1435.	2.5	361
285	Adaptive Offset Correction for Intracortical Brain-Computer Interfaces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 239-248.	2.7	17
286	A comparison of neuroinflammation to implanted microelectrodes in rat and mouse models. Biomaterials, 2014, 35, 5637-5646.	5.7	38
287	Volitional modulation of optically recorded calcium signals during neuroprosthetic learning. Nature Neuroscience, 2014, 17, 807-809.	7.1	133
288	Feature Extraction Using Extrema Sampling of Discrete Derivatives for Spike Sorting in Implantable Upper-Limb Neural Prostheses. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 716-726.	2.7	33
289	A general method for assessing brain-computer interface performance and its limitations. Journal of Neural Engineering, 2014, 11, 026018.	1.8	16
290	Performance measurement for brain-computer or brain-machine interfaces: a tutorial. Journal of Neural Engineering, 2014, 11, 035001.	1.8	71
291	Motor imagery-induced EEG patterns in individuals with spinal cord injury and their impact on brain-computer interface accuracy. Journal of Neural Engineering, 2014, 11, 035011.	1.8	46
292	Shedding light on learning. Nature Neuroscience, 2014, 17, 746-747.	7.1	1
293	An Analogue Front-End Model for Developing Neural Spike Sorting Systems. IEEE Transactions on Biomedical Circuits and Systems, 2014, 8, 216-227.	2.7	48
294	Optogenetic Brain Interfaces. IEEE Reviews in Biomedical Engineering, 2014, 7, 3-30.	13.1	76
295	Corticospinal neuroprostheses to restore locomotion after spinal cord injury. Neuroscience Research, 2014, 78, 21-29.	1.0	47
296	Chronic cortical and electromyographic recordings from a fully implantable device: preclinical experience in a nonhuman primate. Journal of Neural Engineering, 2014, 11, 016009.	1.8	52
297	Creating the Feedback Loop. Neurosurgery Clinics of North America, 2014, 25, 187-204.	0.8	91
298	Bayesian decoding using unsorted spikes in the rat hippocampus. Journal of Neurophysiology, 2014, 111, 217-227.	0.9	96
299	Online binary decision decoding using functional near-infrared spectroscopy for the development of brain-computer interface. Experimental Brain Research, 2014, 232, 555-564.	0.7	203
300	A Survey on CPG-Inspired Control Models and System Implementation. IEEE Transactions on Neural Networks and Learning Systems, 2014, 25, 441-456.	7.2	221

#	ARTICLE	IF	CITATIONS
301	Exploration of the brain for optimal placement of BCI implants in paralyzed people. , 2014, , .		3
302	Simultaneous Neural Control of Simple Reaching and Grasping With the Modular Prosthetic Limb Using Intracranial EEG. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 695-705.	2.7	65
303	Collaborative Approach in the Development of High-Performance Brain-Computer Interfaces for a Neuroprosthetic Arm: Translation from Animal Models to Human Control. Clinical and Translational Science, 2014, 7, 52-59.	1.5	55
304	Local field potentials mitigate decline in motor decoding performance caused by loss of spiking units. , 2014, 2014, 1298-301.		2
305	MEMS-based microelectrode technologies capable of penetrating neural tissues. Biomedical Engineering Letters, 2014, 4, 109-119.	2.1	5
306	Controlling an avatar by thought using real-time fMRI. Journal of Neural Engineering, 2014, 11, 035006.	1.8	34
307	A cognitive neuroprosthetic that uses cortical stimulation for somatosensory feedback. Journal of Neural Engineering, 2014, 11, 056024.	1.8	91
308	State of the art in excavators. , 2014, , .		6
309	Motor cortical control of movement speed with implications for brain-machine interface control. Journal of Neurophysiology, 2014, 112, 411-429.	0.9	52
310	Long-term decoding stability of local field potentials from silicon arrays in primate motor cortex during a 2D center out task. Journal of Neural Engineering, 2014, 11, 036009.	1.8	55
311	Effects of caspase-1 knockout on chronic neural recording quality and longevity: Insight into cellular and molecular mechanisms of the reactive tissue response. Biomaterials, 2014, 35, 9620-9634.	5.7	118
312	A high-performance brain-machine interface (BMI) using image information. , 2014, , .		0
313	CMRR improvement for multichannel integrated recording circuits processed in submicron technologies dedicated to neurobiology experiments. , 2014, , .		1
315	To sort or not to sort: the impact of spike-sorting on neural decoding performance. Journal of Neural Engineering, 2014, 11, 056005.	1.8	94
316	Chronic tissue response to carboxymethyl cellulose based dissolvable insertion needle for ultra-small neural probes. Biomaterials, 2014, 35, 9255-9268.	5.7	170
317	Sorting and Tracking Neuronal Spikes via Simple Thresholding. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 858-869.	2.7	6
318	The roles of blood-derived macrophages and resident microglia in the neuroinflammatory response to implanted Intracortical microelectrodes. Biomaterials, 2014, 35, 8049-8064.	5.7	77
320	Reconstruction of hand movements from EEG signals based on non-linear regression. , 2014, , .		10

#	ARTICLE	IF	CITATIONS
321	Reliability of directional information in unsorted spikes and local field potentials recorded in human motor cortex. <i>Journal of Neural Engineering</i> , 2014, 11, 046007.	1.8	92
322	Brain-Computer Interface after Nervous System Injury. <i>Neuroscientist</i> , 2014, 20, 639-651.	2.6	94
323	Performance sustaining intracortical neural prostheses. <i>Journal of Neural Engineering</i> , 2014, 11, 066003.	1.8	58
324	Electronic bypass of spinal lesions: activation of lower motor neurons directly driven by cortical neural signals. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2014, 11, 107.	2.4	13
325	Restoring sensorimotor function through intracortical interfaces: progress and looming challenges. <i>Nature Reviews Neuroscience</i> , 2014, 15, 313-325.	4.9	304
326	Brain Implants for Substituting Lost Motor Function: State of the Art and Potential Impact on the Lives of Motor-Impaired Seniors. <i>Gerontology</i> , 2014, 60, 366-372.	1.4	6
327	Advances toward regenerative medicine in the central nervous system: challenges in making stem cell therapy a viable clinical strategy. <i>Molecular and Cellular Therapies</i> , 2014, 2, 12.	0.2	20
328	Information Systems Opportunities in Brain-Computer Machine Interface Decoders. <i>Proceedings of the IEEE</i> , 2014, 102, 666-682.	16.4	79
329	Reactivation of emergent task-related ensembles during slow-wave sleep after neuroprosthetic learning. <i>Nature Neuroscience</i> , 2014, 17, 1107-1113.	7.1	116
330	From assistance towards restoration with epidural brain-computer interfacing. <i>Restorative Neurology and Neuroscience</i> , 2014, 32, 517-525.	0.4	35
331	Demonstration of a Semi-Autonomous Hybrid Brain-Computer Machine Interface Using Human Intracranial EEG, Eye Tracking, and Computer Vision to Control a Robotic Upper Limb Prosthetic. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2014, 22, 784-796.	2.7	162
332	Movement prediction with sensory feedback and environmental interaction. , 2014, , .		0
333	Decoding index finger position from EEG using random forests. , 2014, , .		4
334	Non-causal spike filtering improves decoding of movement intention for intracortical BCIs. <i>Journal of Neuroscience Methods</i> , 2014, 236, 58-67.	1.3	28
335	Toward More Versatile and Intuitive Cortical Brain-Computer Machine Interfaces. <i>Current Biology</i> , 2014, 24, R885-R897.	1.8	70
336	Continuous Closed-Loop Decoder Adaptation with a Recursive Maximum Likelihood Algorithm Allows for Rapid Performance Acquisition in Brain-Machine Interfaces. <i>Neural Computation</i> , 2014, 26, 1811-1839.	1.3	35
337	The Muscle Sensor for on-site neuroscience lectures to pave the way for a better understanding of brain-machine-interface research. <i>Neuroscience Research</i> , 2014, 78, 95-99.	1.0	2
338	Physiological Challenges for Intracortical Electrodes. <i>Brain Stimulation</i> , 2014, 7, 1-6.	0.7	59

#	ARTICLE	IF	CITATIONS
339	Recapitulating Flesh with Silicon and Steel: Advancements in Upper Extremity Robotic Prosthetics. <i>World Neurosurgery</i> , 2014, 81, 730-741.	0.7	13
340	EEG-Based Classification of Imagined Arm Trajectories. <i>Biosystems and Biorobotics</i> , 2014, , 611-620.	0.2	5
341	fNIRS based dual movement control command generation using prefrontal brain activity. , 2014, , .		18
342	Intention estimation in brain-machine interfaces. <i>Journal of Neural Engineering</i> , 2014, 11, 016004.	1.8	64
343	Real-Time Simulation of Three-Dimensional Shoulder Girdle and Arm Dynamics. <i>IEEE Transactions on Biomedical Engineering</i> , 2014, 61, 1947-1956.	2.5	58
344	The effect of inflammatory cell-derived MCP-1 loss on neuronal survival during chronic neuroinflammation. <i>Biomaterials</i> , 2014, 35, 6698-6706.	5.7	48
345	Digitally assisted neural recording and spike detection multichannel integrated circuit designed in 180 nm CMOS technology. <i>Microelectronics Journal</i> , 2014, 45, 1187-1193.	1.1	11
346	Direct Brain Control and Communication in Paralysis. <i>Brain Topography</i> , 2014, 27, 4-11.	0.8	52
347	Muscle synergies evoked by microstimulation are preferentially encoded during behavior. <i>Frontiers in Computational Neuroscience</i> , 2014, 8, 20.	1.2	56
348	Decoding spectrotemporal features of overt and covert speech from the human cortex. <i>Frontiers in Neuroengineering</i> , 2014, 7, 14.	4.8	144
349	Bidirectional control of a one-dimensional robotic actuator by operant conditioning of a single unit in rat motor cortex. <i>Frontiers in Neuroscience</i> , 2014, 8, 206.	1.4	16
350	What limits the performance of current invasive brain machine interfaces?. <i>Frontiers in Systems Neuroscience</i> , 2014, 8, 68.	1.2	57
351	Single trial prediction of self-paced reaching directions from EEG signals. <i>Frontiers in Neuroscience</i> , 2014, 8, 222.	1.4	60
352	Nanotechnology for Neural Tissue Engineering. , 2014, , 367-380.		1
353	BIOMIMETIC APPROACHES TO PERIPHERAL NEUROPROSTHETIC INTERFACES. <i>World Scientific Series in Nanoscience and Nanotechnology</i> , 2014, , 121-151.	0.1	0
354	Brain machine interfaces: state of the art and challenges to translation. <i>Neurobiology of Disease</i> , 2015, 83, 152-153.	2.1	0
355	Surveying the interest of individuals with upper limb loss in novel prosthetic control techniques. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2015, 12, 53.	2.4	126
356	Systems Neuroengineering: Understanding and Interacting with the Brain. <i>Engineering</i> , 2015, 1, 292-308.	3.2	30

#	ARTICLE	IF	CITATIONS
357	Detecting and comparing the onset of self-paced and cue-based finger movements from EEG signals. , 2015, , .		0
358	Design for the testability of the multichannel neural recording and stimulating integrated circuit. , 2015, , .		0
359	Movement related directional tuning from broadband electrocorticography in humans. , 2015, , .		1
360	ADVANCING CHRONIC INTRACORTICAL ELECTRODE RECORDING FUNCTION. , 2015, , 351-368.		0
361	Decoding upper limb residual muscle activity in severe chronic stroke. Annals of Clinical and Translational Neurology, 2015, 2, 1-11.	1.7	38
363	EEG Complex Grasping Patterns Recognition For BMI Robotic And Prosthesis Motion Control. , 2015, , .		1
364	Long-term stability of sensitivity to intracortical microstimulation of somatosensory cortex. Journal of Neural Engineering, 2015, 12, 056010.	1.8	40
366	Towards user-centered design of a robotic prosthetic hand with EMG control interfaces. , 2015, , .		2
367	Teaching brain-machine interfaces as an alternative paradigm to neuroprosthetics control. Scientific Reports, 2015, 5, 13893.	1.6	119
368	Comprehensive rehabilitative care across the spectrum of amyotrophic lateral sclerosis. NeuroRehabilitation, 2015, 37, 53-68.	0.5	53
369	Object search framework based on gaze interaction. , 2015, , .		3
370	Comparing metrics to evaluate performance of regression methods for decoding of neural signals. , 2015, 2015, 1083-6.		19
371	An independent life support robot for the lower-limb handicapped and elderly: Task-intention-identification and assistive-motion-planning algorithms. , 2015, , .		3
372	A study on a robot arm driven by three-dimensional trajectories predicted from non-invasive neural signals. BioMedical Engineering OnLine, 2015, 14, 81.	1.3	28
373	Manipulation with the AH1N2 humanoid robot an underactuated/overactuated problem. , 2015, , .		1
374	Representation of continuous hand and arm movements in macaque areas M1, F5, and AIP: a comparative decoding study. Journal of Neural Engineering, 2015, 12, 056016.	1.8	25
375	Learning from brain control: clinical application of brainâ€“computer interfaces. E-Neuroforum, 2015, 21, .	0.2	6
376	Dissolvable Base Scaffolds Allow Tissue Penetration of Highâ€“Aspectâ€“Ratio Flexible Microneedles. Advanced Healthcare Materials, 2015, 4, 1949-1955.	3.9	17

#	ARTICLE	IF	CITATIONS
377	Dynamic reorganization of neural activity in motor cortex during new sequence production. <i>European Journal of Neuroscience</i> , 2015, 42, 2172-2178.	1.2	7
378	Reducing the implant footprint: low-area neural recording. , 0, , 352-364.		0
379	Emerging Neural Stimulation Technologies for Bladder Dysfunctions. <i>International Neurourology Journal</i> , 2015, 19, 3-11.	0.5	25
380	Detection of movement intention using EEG in a human-robot interaction environment. <i>Research on Biomedical Engineering</i> , 2015, 31, 285-294.	1.5	8
381	Clinical neurorestorative progress in stroke. <i>Journal of Neurorestoratology</i> , 0, , 63.	1.1	9
382	Co-Design Method and Wafer-Level Packaging Technique of Thin-Film Flexible Antenna and Silicon CMOS Rectifier Chips for Wireless-Powered Neural Interface Systems. <i>Sensors</i> , 2015, 15, 31821-31832.	2.1	10
383	Deafferented controllers: a fundamental failure mechanism in cortical neuroprosthetic systems. <i>Frontiers in Behavioral Neuroscience</i> , 2015, 9, 186.	1.0	4
384	Toward Building Hybrid Biological/in silico Neural Networks for Motor Neuroprosthetic Control. <i>Frontiers in Neurobotics</i> , 2015, 9, 8.	1.6	25
385	Decoding of human hand actions to handle missing limbs in neuroprosthetics. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 27.	1.2	31
386	Velocity neurons improve performance more than goal or position neurons do in a simulated closed-loop BCI arm-reaching task. <i>Frontiers in Computational Neuroscience</i> , 2015, 9, 84.	1.2	0
387	Global cortical activity predicts shape of hand during grasping. <i>Frontiers in Neuroscience</i> , 2015, 9, 121.	1.4	78
388	Sensitivity to microstimulation of somatosensory cortex distributed over multiple electrodes. <i>Frontiers in Systems Neuroscience</i> , 2015, 9, 47.	1.2	36
389	Qualitative assessment of patients' attitudes and expectations toward BCIs and implications for future technology development. <i>Frontiers in Systems Neuroscience</i> , 2015, 9, 64.	1.2	25
390	Contribution of LFP dynamics to single-neuron spiking variability in motor cortex during movement execution. <i>Frontiers in Systems Neuroscience</i> , 2015, 9, 89.	1.2	21
391	Advancing brain-machine interfaces: moving beyond linear state space models. <i>Frontiers in Systems Neuroscience</i> , 2015, 9, 108.	1.2	15
392	Preparatory Body State before Reacting to an Opponent: Short-Term Joint Torque Fluctuation in Real-Time Competitive Sports. <i>PLoS ONE</i> , 2015, 10, e0128571.	1.1	10
393	Visual Feedback Dominates the Sense of Agency for Brain-Machine Actions. <i>PLoS ONE</i> , 2015, 10, e0130019.	1.1	57
394	Closed-Loop Control of a Neuroprosthetic Hand by Magnetoencephalographic Signals. <i>PLoS ONE</i> , 2015, 10, e0131547.	1.1	33

#	ARTICLE	IF	CITATIONS
395	Neural Decoding and Applications in Bioelectronic Medicine. <i>Bioelectronic Medicine</i> , 2015, 2, 20-24.	1.0	13
396	Motor Cortex. , 2015, , 965-970.		0
397	Bioelectronic interfaces for artificially driven human movements. , 0, , 281-293.		0
398	Application of multi-output support vector regression on EMGs to decode hand continuous movement trajectory. <i>Bio-Medical Materials and Engineering</i> , 2015, 26, S575-S582.	0.4	1
399	Neuroprosthetics. , 2015, , 714-721.		3
400	A high performing brain-machine interface driven by low-frequency local field potentials alone and together with spikes. <i>Journal of Neural Engineering</i> , 2015, 12, 036009.	1.8	110
401	A High-Performance Keyboard Neural Prosthesis Enabled by Task Optimization. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 21-29.	2.5	51
402	Noninvasive Brain-Computer Interfaces Based on Sensorimotor Rhythms. <i>Proceedings of the IEEE</i> , 2015, 103, 907-925.	16.4	166
403	Estimating cognitive load during self-regulation of brain activity and neurofeedback with therapeutic brain-computer interfaces. <i>Frontiers in Behavioral Neuroscience</i> , 2015, 9, 21.	1.0	37
404	Robust Neuroprosthetic Control from the Stroke Perilesional Cortex. <i>Journal of Neuroscience</i> , 2015, 35, 8653-8661.	1.7	55
405	Brain-machine interfaces in neurorehabilitation of stroke. <i>Neurobiology of Disease</i> , 2015, 83, 172-179.	2.1	256
406	An assistive decision-and-control architecture for force-sensitive hand-arm systems driven by human-machine interfaces. <i>International Journal of Robotics Research</i> , 2015, 34, 763-780.	5.8	43
407	Vertically aligned extracellular microprobe arrays/(111) integrated with (100)-silicon mosfet amplifiers. , 2015, , .		4
408	Brain-Machine Interfaces: The Perception-Action Closed Loop: A Two-Learner System. <i>IEEE Systems, Man, and Cybernetics Magazine</i> , 2015, 1, 6-8.	1.2	15
409	Leveraging historical knowledge of neural dynamics to rescue decoder performance as neural channels are lost: "Decoder hysteresis", 2015, 2015, 1061-6.		3
410	Asynchronous Decoding of Error Potentials during the Monitoring of a Reaching Task. , 2015, , .		13
411	Online control of a humanoid robot through hand movement imagination using CSP and ECoG based features. , 2015, 2015, 1765-8.		5
412	The effects of chronic intracortical microstimulation on neural tissue and fine motor behavior. <i>Journal of Neural Engineering</i> , 2015, 12, 066018.	1.8	64

#	ARTICLE	IF	CITATIONS
413	Brain-Computer Interface Research. Springer Briefs in Electrical and Computer Engineering, 2015, , .	0.3	3
414	EMY: a dual arm exoskeleton dedicated to the evaluation of Brain Machine Interface in clinical trials. , 2015, , .		12
415	Biological and bionic hands: Natural neural coding and artificial perception. , 2015, , .		1
416	Development of low-power analog/RF mixed-signal circuits with flexible thin film devices for wireless BMI systems. , 2015, , .		1
417	Multifunctional user interface implementation details and evaluation. , 2015, , .		0
418	Cortical control of intraspinal microstimulation: Toward a new approach for restoration of function after spinal cord injury. , 2015, 2015, 2159-62.		8
419	Movement target decoding from EEG and the corresponding discriminative sources: A preliminary study. , 2015, 2015, 1468-71.		4
420	A mobile embedded platform for high performance neural signal computation and communication. , 2015, , .		4
421	A bidirectional brain-machine interface connecting alert rodents to a dynamical system. , 2015, 2015, 51-4.		12
422	Decoding bipedal locomotion from the rat sensorimotor cortex. Journal of Neural Engineering, 2015, 12, 056014.	1.8	32
423	Ten-dimensional anthropomorphic arm control in a human brain-machine interface: difficulties, solutions, and limitations. Journal of Neural Engineering, 2015, 12, 016011.	1.8	385
424	Comprehensive chronic laminar single-unit, multi-unit, and local field potential recording performance with planar single shank electrode arrays. Journal of Neuroscience Methods, 2015, 242, 15-40.	1.3	116
425	Restoration of vision in blind individuals using bionic devices: A review with a focus on cortical visual prostheses. Brain Research, 2015, 1595, 51-73.	1.1	192
426	Progress towards biocompatible intracortical microelectrodes for neural interfacing applications. Journal of Neural Engineering, 2015, 12, 011001.	1.8	309
427	Reprint of "Non-causal spike filtering improves decoding of movement intention for intracortical BCIs". Journal of Neuroscience Methods, 2015, 244, 94-103.	1.3	10
428	Reducing the "Stress": Antioxidative Therapeutic and Material Approaches May Prevent Intracortical Microelectrode Failure. ACS Macro Letters, 2015, 4, 275-279.	2.3	31
429	Intracortical Recording Interfaces: Current Challenges to Chronic Recording Function. ACS Chemical Neuroscience, 2015, 6, 68-83.	1.7	77
430	Practical Noninvasive Brain-Machine Interface System for Communication and Control. , 2015, , 15-31.		1



#	ARTICLE	IF	CITATIONS
431	Brainâ€“Machine Interfaces in Stroke Neurorehabilitation. , 2015, , 3-14.		9
432	A 4.78 mm 2 Fully-Integrated Neuromodulation SoC Combining 64 Acquisition Channels With Digital Compression and Simultaneous Dual Stimulation. IEEE Journal of Solid-State Circuits, 2015, 50, 1038-1047.	3.5	75
433	Brainâ€“computer interface control along instructed paths. Journal of Neural Engineering, 2015, 12, 016015.	1.8	11
434	Brain Computer Interface: A Review. Intelligent Systems Reference Library, 2015, , 3-30.	1.0	40
435	Patient-Specific Cortical Electrodes for Sulcal and Gyral Implantation. IEEE Transactions on Biomedical Engineering, 2015, 62, 1034-1041.	2.5	26
436	Using a Noninvasive Decoding Method to Classify Rhythmic Movement Imaginations of the Arm in Two Planes. IEEE Transactions on Biomedical Engineering, 2015, 62, 972-981.	2.5	59
437	What We Can Learn From the Primateâ€™s Visual System. KI - Kunstliche Intelligenz, 2015, 29, 9-18.	2.2	2
438	Decoding a Wide Range of Hand Configurations from Macaque Motor, Premotor, and Parietal Cortices. Journal of Neuroscience, 2015, 35, 1068-1081.	1.7	147
439	Using functional magnetic resonance imaging and electroencephalography to detect consciousness after severe brain injury. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2015, 127, 277-293.	1.0	21
440	Local field potentials in primate motor cortex encode grasp kinetic parameters. NeuroImage, 2015, 114, 338-355.	2.1	57
441	Smart Sensors for Health and Environment Monitoring. KAIST Research Series, 2015, , .	1.5	7
442	Feature learning from incomplete EEG with denoising autoencoder. Neurocomputing, 2015, 165, 23-31.	3.5	127
443	Implementation of biomimetic central pattern generators on field-programmable gate array. , 2015, , 253-271.		0
444	Cortical neuroprosthetics from a clinical perspective. Neurobiology of Disease, 2015, 83, 154-160.	2.1	14
445	Robotic Prosthetics : Moving Beyond Technical Performance. IEEE Technology and Society Magazine, 2015, 34, 71-79.	0.6	4
446	Biophysical Models: Neurovascular Coupling, Cortical Microcircuits, and Metabolism. , 2015, , 399-411.		1
448	Invasive brainâ€“machine interfaces: a survey of paralyzed patientsâ€™ attitudes, knowledge and methods of information retrieval. Journal of Neural Engineering, 2015, 12, 043001.	1.8	29
449	Novel Stroke Therapeutics: Unraveling Stroke Pathophysiology and Its Impact on Clinical Treatments. Neuron, 2015, 87, 297-309.	3.8	296

#	ARTICLE	IF	CITATIONS
450	Assessment of brain-machine interfaces from the perspective of people with paralysis. <i>Journal of Neural Engineering</i> , 2015, 12, 043002.	1.8	96
451	Brain computer interface learning for systems based on electrocorticography and intracortical microelectrode arrays. <i>Frontiers in Integrative Neuroscience</i> , 2015, 9, 40.	1.0	38
452	Recent Advances on the Modular Organization of the Cortex. , 2015, , .		3
453	Defining Ecological Strategies in Neuroprosthetics. <i>Neuron</i> , 2015, 86, 29-33.	3.8	27
454	Neural coding within human brain areas involved in actions. <i>Current Opinion in Neurobiology</i> , 2015, 33, 141-149.	2.0	206
455	Auditory midbrain implant: Research and development towards a second clinical trial. <i>Hearing Research</i> , 2015, 322, 212-223.	0.9	55
456	Flexible multi-channel microelectrode with fluidic paths for intramuscular stimulation and recording. <i>Sensors and Actuators A: Physical</i> , 2015, 228, 28-39.	2.0	18
457	Restoring motor function with bidirectional neural interfaces. <i>Progress in Brain Research</i> , 2015, 218, 241-252.	0.9	32
458	3D-nanostructured boron-doped diamond for microelectrode array neural interfacing. <i>Biomaterials</i> , 2015, 53, 173-183.	5.7	108
459	Control strategies for active lower extremity prosthetics and orthotics: a review. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2015, 12, 1.	2.4	773
460	Prediction of muscle activity during loaded movements of the upper limb. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2015, 12, 6.	2.4	22
461	An overview of brain computer interface. , 2015, , .		3
462	Neuroplasticity subserving the operation of brain-machine interfaces. <i>Neurobiology of Disease</i> , 2015, 83, 161-171.	2.1	21
463	Coating flexible probes with an ultra fast degrading polymer to aid in tissue insertion. <i>Biomedical Microdevices</i> , 2015, 17, 34.	1.4	49
464	An Adaptive Motion-Onset VEP-Based Brain-Computer Interface. <i>IEEE Transactions on Autonomous Mental Development</i> , 2015, 7, 349-356.	2.3	13
465	Hand-in-hand advances in biomedical engineering and sensorimotor restoration. <i>Journal of Neuroscience Methods</i> , 2015, 246, 22-29.	1.3	24
466	Visual Guidance in Control of Grasping. <i>Annual Review of Neuroscience</i> , 2015, 38, 69-86.	5.0	61
467	The PennBMBI: Design of a General Purpose Wireless Brain-Machine-Brain Interface System. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2015, 9, 248-258.	2.7	52

#	ARTICLE	IF	CITATIONS
468	Grasping with the Press of a Button: Grasp-selective Responses in the Human Anterior Intraparietal Sulcus Depend on Nonarbitrary Causal Relationships between Hand Movements and End-effector Actions. <i>Journal of Cognitive Neuroscience</i> , 2015, 27, 1146-1160.	1.1	9
469	Brain-Machine Interfaces beyond Neuroprosthetics. <i>Neuron</i> , 2015, 86, 55-67.	3.8	102
470	Recent advances in bioelectric prostheses. <i>Neurology: Clinical Practice</i> , 2015, 5, 164-170.	0.8	21
471	The Emergence of Single Neurons in Clinical Neurology. <i>Neuron</i> , 2015, 86, 79-91.	3.8	74
472	Highly Stretchable Gold Nanobelts with Sinusoidal Structures for Recording Electroencephalograms. <i>Advanced Materials</i> , 2015, 27, 3145-3151.	11.1	145
473	A 128 channel 290 GMACs/W machine learning based co-processor for intention decoding in brain machine interfaces. , 2015, , .		14
474	Compliant intracortical implants reduce strains and strain rates in brain tissue <i>&lt;i&gt;in vivo&lt;/i&gt;</i> . <i>Journal of Neural Engineering</i> , 2015, 12, 036002.	1.8	85
475	Output Properties of the Cortical Hindlimb Motor Area in Spinal Cord-Injured Rats. <i>Journal of Neurotrauma</i> , 2015, 32, 1666-1673.	1.7	25
476	Clinical translation of a high-performance neural prosthesis. <i>Nature Medicine</i> , 2015, 21, 1142-1145.	15.2	269
477	Three-dimensional macroporous nanoelectronic networks as minimally invasive brain probes. <i>Nature Materials</i> , 2015, 14, 1286-1292.	13.3	334
478	Hybrid EEG-NIRS based BCI for quadcopter control. , 2015, , .		24
479	Musculoskeletal Representation of a Large Repertoire of Hand Grasping Actions in Primates. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2015, 23, 210-220.	2.7	27
480	Implantable Brain Interface: High-Density Microelectrode Array for Neural Recording. <i>KAIST Research Series</i> , 2015, , 75-105.	1.5	0
481	Two Laskers and Counting: Learning From the Past Enables Future Innovations With Central Neural Prostheses. <i>Brain Stimulation</i> , 2015, 8, 439-441.	0.7	3
482	Neural representations of movement intentions during brain-controlled self-motion. , 2015, , .		5
484	Moving Brain-Controlled Devices Outside the Lab: Principles and Applications. <i>Trends in Augmentation of Human Performance</i> , 2015, , 73-94.	0.4	1
485	System identification of brain-machine interface control using a cursor jump perturbation. , 2015, , .		5
486	Design of the ultra low power, low area occupied amplifier for recording biomedical signals in the single Hz bandwidth. , 2015, , .		1

#	ARTICLE	IF	CITATIONS
487	Suppression of excitotoxicity and foreign body response by memantine in chronic cannula implantation into the rat brain. <i>Brain Research Bulletin</i> , 2015, 117, 54-68.	1.4	8
489	Visual Stimulus Background Effects on SSVEP-Based BCI Towards a Practical Robot Car Control. <i>International Journal of Humanoid Robotics</i> , 2015, 12, 1550014.	0.6	5
490	Linking Objects to Actions: Encoding of Target Object and Grasping Strategy in Primate Ventral Premotor Cortex. <i>Journal of Neuroscience</i> , 2015, 35, 10888-10897.	1.7	33
491	Brain-Machine Interfaces: From Macro- to Microcircuits. , 2015, , 407-428.		1
492	An autonomous robotic assistant for drinking. , 2015, , .		42
493	Medical Robotics. , 2015, , .		16
494	A skin-inspired organic digital mechanoreceptor. <i>Science</i> , 2015, 350, 313-316.	6.0	708
495	Learning from brain control: clinical application of brain-computer interfaces. <i>E-Neuroforum</i> , 2015, 6, 87-95.	0.2	10
496	Compact helical antenna for smart implant applications. <i>NPG Asia Materials</i> , 2015, 7, e188-e188.	3.8	64
497	Transparent intracortical microprobe array for simultaneous spatiotemporal optical stimulation and multichannel electrical recording. <i>Nature Methods</i> , 2015, 12, 1157-1162.	9.0	106
499	Decoding Three-Dimensional Trajectory of Executed and Imagined Arm Movements From Electroencephalogram Signals. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2015, 23, 867-876.	2.7	119
500	Single-trial dynamics of motor cortex and their applications to brain-machine interfaces. <i>Nature Communications</i> , 2015, 6, 7759.	5.8	148
501	Recasting brain-machine interface design from a physical control system perspective. <i>Journal of Computational Neuroscience</i> , 2015, 39, 107-118.	0.6	12
502	Multi-Modal Sensing Techniques for Interfacing Hand Prostheses: A Review. <i>IEEE Sensors Journal</i> , 2015, 15, 6065-6076.	2.4	130
503	Rapid evaluation of the durability of cortical neural implants using accelerated aging with reactive oxygen species. <i>Journal of Neural Engineering</i> , 2015, 12, 026003.	1.8	150
504	Single-unit activity, threshold crossings, and local field potentials in motor cortex differentially encode reach kinematics. <i>Journal of Neurophysiology</i> , 2015, 114, 1500-1512.	0.9	53
505	Implications of chronic daily anti-oxidant administration on the inflammatory response to intracortical microelectrodes. <i>Journal of Neural Engineering</i> , 2015, 12, 046002.	1.8	38
506	Representation of Muscle Synergies in the Primate Brain. <i>Journal of Neuroscience</i> , 2015, 35, 12615-12624.	1.7	151

#	ARTICLE	IF	CITATIONS
507	Simultaneous and independent control of a brain-computer interface and contralateral limb movement. <i>Brain-Computer Interfaces</i> , 2015, 2, 174-185.	0.9	14
508	Estimation of two-digit grip type and grip force level by frequency decoding of motor cortex activity for a BMI application. , 2015, , .		3
509	Biological and bionic hands: natural neural coding and artificial perception. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2015, 370, 20140209.	1.8	56
510	Classification of mouth movements using 7 T fMRI. <i>Journal of Neural Engineering</i> , 2015, 12, 066026.	1.8	22
511	A sensor web for neurons. <i>Nature Materials</i> , 2015, 14, 1190-1191.	13.3	20
512	A thin film flexible antenna with CMOS rectifier chip for RF-powered implantable neural interfaces. , 2015, , .		5
513	Hand Shape Representations in the Human Posterior Parietal Cortex. <i>Journal of Neuroscience</i> , 2015, 35, 15466-15476.	1.7	79
514	Virtual typing by people with tetraplegia using a self-calibrating intracortical brain-computer interface. <i>Science Translational Medicine</i> , 2015, 7, 313ra179.	5.8	249
515	Restoring tactile and proprioceptive sensation through a brain interface. <i>Neurobiology of Disease</i> , 2015, 83, 191-198.	2.1	66
516	Comparison of spike sorting and thresholding of voltage waveforms for intracortical brain-machine interface performance. <i>Journal of Neural Engineering</i> , 2015, 12, 016009.	1.8	72
517	Neural Point-and-Click Communication by a Person With Incomplete Locked-In Syndrome. <i>Neurorehabilitation and Neural Repair</i> , 2015, 29, 462-471.	1.4	84
518	In vivo neuronal action potential recordings via three-dimensional microscale needle-electrode arrays. <i>Scientific Reports</i> , 2014, 4, 4868.	1.6	54
519	Degraded EEG decoding of wrist movements in absence of kinaesthetic feedback. <i>Human Brain Mapping</i> , 2015, 36, 643-654.	1.9	26
520	Brain-controlled muscle stimulation for the restoration of motor function. <i>Neurobiology of Disease</i> , 2015, 83, 180-190.	2.1	28
521	Modulation Depth Estimation and Variable Selection in State-Space Models for Neural Interfaces. <i>IEEE Transactions on Biomedical Engineering</i> , 2015, 62, 570-581.	2.5	12
522	Mechanical failure modes of chronically implanted planar silicon-based neural probes for laminar recording. <i>Biomaterials</i> , 2015, 37, 25-39.	5.7	176
523	New frontiers in the rubber hand experiment: when a robotic hand becomes one's own. <i>Behavior Research Methods</i> , 2015, 47, 744-755.	2.3	48
524	Layer-by-layer assembled nanorough iridium-oxide/platinum-black for low-voltage microscale electrode neurostimulation. <i>Sensors and Actuators B: Chemical</i> , 2015, 206, 205-211.	4.0	35

#	ARTICLE	IF	CITATIONS
525	A survey of sensor fusion methods in wearable robotics. <i>Robotics and Autonomous Systems</i> , 2015, 73, 155-170.	3.0	190
526	Brain-computer interfaces and dualism: a problem of brain, mind, and body. <i>AI and Society</i> , 2016, 31, 29-40.	3.1	7
527	Artificial Intelligence (AI) and Computational Neuroscience. <i>Trends in the Sciences</i> , 2016, 21, 4_70-4_73.	0.0	0
528	A brief history of primate research: Global health improvements and ethical challenges. <i>Archives of Medical and Biomedical Research</i> , 2016, 2, 151.	0.2	3
529	Uniform and Non-uniform Perturbations in Brain-Machine Interface Task Elicit Similar Neural Strategies. <i>Frontiers in Systems Neuroscience</i> , 2016, 10, 70.	1.2	4
530	The Evolution of Neuroprosthetic Interfaces. <i>Critical Reviews in Biomedical Engineering</i> , 2016, 44, 123-152.	0.5	56
531	Active C4 Electrodes for Local Field Potential Recording Applications. <i>Sensors</i> , 2016, 16, 198.	2.1	4
534	Microfluidic Neurons, a New Way in Neuromorphic Engineering?. <i>Micromachines</i> , 2016, 7, 146.	1.4	10
535	Brain-Computer Interface. , 2016, , .		6
536	Invasive vs. Non-Invasive Neuronal Signals for Brain-Machine Interfaces: Will One Prevail?. <i>Frontiers in Neuroscience</i> , 2016, 10, 295.	1.4	95
537	Miniaturized Technologies for Enhancement of Motor Plasticity. <i>Frontiers in Bioengineering and Biotechnology</i> , 2016, 4, 30.	2.0	3
538	Designing Closed-Loop Brain-Machine Interfaces Using Model Predictive Control. <i>Technologies</i> , 2016, 4, 18.	3.0	0
539	Design and Microfabrication Considerations for Reliable Flexible Intracortical Implants. <i>Frontiers in Mechanical Engineering</i> , 2016, 2, .	0.8	8
540	Current Challenges Facing the Translation of Brain Computer Interfaces from Preclinical Trials to Use in Human Patients. <i>Frontiers in Cellular Neuroscience</i> , 2015, 9, 497.	1.8	35
541	BrainLiner: A Neuroinformatics Platform for Sharing Time-Aligned Brain-Behavior Data. <i>Frontiers in Neuroinformatics</i> , 2016, 10, 3.	1.3	5
542	Implications of the Dependence of Neuronal Activity on Neural Network States for the Design of Brain-Machine Interfaces. <i>Frontiers in Neuroscience</i> , 2016, 10, 165.	1.4	12
543	Intracortical Brain-Machine Interfaces Advance Sensorimotor Neuroscience. <i>Frontiers in Neuroscience</i> , 2016, 10, 291.	1.4	22
544	A Review of Control Strategies in Closed-Loop Neuroprosthetic Systems. <i>Frontiers in Neuroscience</i> , 2016, 10, 312.	1.4	44

#	ARTICLE	IF	CITATIONS
545	Hybrid Neuroprosthesis for the Upper Limb: Combining Brain-Controlled Neuromuscular Stimulation with a Multi-Joint Arm Exoskeleton. <i>Frontiers in Neuroscience</i> , 2016, 10, 367.	1.4	42
546	Capacitive Feedthroughs for Medical Implants. <i>Frontiers in Neuroscience</i> , 2016, 10, 404.	1.4	3
547	Spiking Neural Networks Based on OxRAM Synapses for Real-Time Unsupervised Spike Sorting. <i>Frontiers in Neuroscience</i> , 2016, 10, 474.	1.4	58
548	A Sliced Inverse Regression (SIR) Decoding the Forelimb Movement from Neuronal Spikes in the Rat Motor Cortex. <i>Frontiers in Neuroscience</i> , 2016, 10, 556.	1.4	4
549	A Bidirectional Brain-Machine Interface Featuring a Neuromorphic Hardware Decoder. <i>Frontiers in Neuroscience</i> , 2016, 10, 563.	1.4	58
550	Enhancing Nervous System Recovery through Neurobiologics, Neural Interface Training, and Neurorehabilitation. <i>Frontiers in Neuroscience</i> , 2016, 10, 584.	1.4	121
551	The Pursuit of Chronically Reliable Neural Interfaces: A Materials Perspective. <i>Frontiers in Neuroscience</i> , 2016, 10, 599.	1.4	15
552	Neural Substrate Expansion for the Restoration of Brain Function. <i>Frontiers in Systems Neuroscience</i> , 2016, 10, 1.	1.2	85
553	Neural Probes for Chronic Applications. <i>Micromachines</i> , 2016, 7, 179.	1.4	42
554	Homo Technologicus: Threat or Opportunity?. <i>Philosophies</i> , 2016, 1, 199-208.	0.4	10
556	Penalized Multi-Way Partial Least Squares for Smooth Trajectory Decoding from Electrocorticographic (ECoG) Recording. <i>PLoS ONE</i> , 2016, 11, e0154878.	1.1	19
557	The Brain-Machine Interface (BMI) : A Novel Neurotechnology. <i>Japanese Journal of Neurosurgery</i> , 2016, 25, 964-972.	0.0	0
558	Neuroprosthetic Decoder Training as Imitation Learning. <i>PLoS Computational Biology</i> , 2016, 12, e1004948.	1.5	8
559	Independent Mobility Achieved through a Wireless Brain-Machine Interface. <i>PLoS ONE</i> , 2016, 11, e0165773.	1.1	30
560	Real-time Hand Motion Reconstruction System for Trans-Humeral Amputees Using EEG and EMG. <i>Frontiers in Robotics and AI</i> , 2016, 3, .	2.0	5
561	Enhancing Our Lives with Immersive Virtual Reality. <i>Frontiers in Robotics and AI</i> , 2016, 3, .	2.0	824
562	Extracellular voltage threshold settings can be tuned for optimal encoding of movement and stimulus parameters. <i>Journal of Neural Engineering</i> , 2016, 13, 036009.	1.8	30
563	Brain-machine interfaces for rehabilitation of poststroke hemiplegia. <i>Progress in Brain Research</i> , 2016, 228, 163-183.	0.9	41

#	ARTICLE	IF	CITATIONS
564	Neural Engineering. , 2016, , .		8
565	Biomimetic rehabilitation engineering: the importance of somatosensory feedback for brain-machine interfaces. Journal of Neural Engineering, 2016, 13, 041001.	1.8	26
566	Advances in implantable bionic devices for blindness: a review. ANZ Journal of Surgery, 2016, 86, 654-659.	0.3	77
567	Brain-Machine Interfaces: Restoring and Establishing Communication Channels. , 2016, , 227-259.		2
568	Guest Editorial An Overview of Biomedical Robotics and Bio-Mechatronics Systems and Applications. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2016, 46, 869-874.	5.9	25
569	Orientation estimation and grasp type detection of household objects for upper limb prostheses with dynamic vision sensor. , 2016, , .		3
570	Real-Time Control of a Neuroprosthetic Hand by Magnetoencephalographic Signals from Paralyzed Patients. Scientific Reports, 2016, 6, 21781.	1.6	44
571	Main parameters uniformity enhancement in multichannel integrated circuits dedicated to biomedical signals recordings. , 2016, , .		0
572	A miniaturized brain-machine-spinal cord interface (BMSI) for closed-loop intraspinal microstimulation. , 2016, , .		2
573	Investigation of the EEG scalp distribution for estimation of shoulder joint torque in the upper-limb power assistant system. , 2016, , .		1
574	Retrospectively supervised click decoder calibration for self-calibrating point-and-click brain-machine computer interfaces. Journal of Physiology (Paris), 2016, 110, 382-391.	2.1	17
575	Towards an EEG-based intelligent wheelchair driving system with vibro-tactile stimuli. , 2016, , .		11
576	ECoG data analyses to inform closed-loop BCI experiments for speech-based prosthetic applications. , 2016, 2016, 5713-5716.		5
577	Switching Markov decoders for asynchronous trajectory reconstruction from ECoG signals in monkeys for BCI applications. Journal of Physiology (Paris), 2016, 110, 348-360.	2.1	10
578	Using an Artificial Neural Bypass to Restore Cortical Control of Rhythmic Movements in a Human with Quadriplegia. Scientific Reports, 2016, 6, 33807.	1.6	49
579	Chapter 16 Functional Electrical Stimulation for the Treatment of Spinal Cord Injury. , 2016, , 283-310.		0
580	Feature selection based on modified genetic algorithm for optimization of functional near-infrared spectroscopy (fNIRS) signals for BCI. , 2016, , .		8
581	Comparison of classification performance for fNIRS-BCI system. , 2016, , .		6



#	ARTICLE	IF	CITATIONS
582	Common neural correlates of real and imagined movements contributing to the performance of brain-machine interfaces. Scientific Reports, 2016, 6, 24663.	1.6	18
583	Real-time decoding of brain activity by embedded Spiking Neural Networks using OxRAM synapses. , 2016, , .		3
584	Making brain-machine interfaces robust to future neural variability. Nature Communications, 2016, 7, 13749.	5.8	141
585	Noninvasive Electroencephalogram Based Control of a Robotic Arm for Reach and Grasp Tasks. Scientific Reports, 2016, 6, 38565.	1.6	333
586	Hybrid EEG/EOG-based brain/neural hand exoskeleton restores fully independent daily living activities after quadriplegia. Science Robotics, 2016, 1, .	9.9	163
587	The Effects of Closed-Loop Medical Devices on the Autonomy and Accountability of Persons and Systems. Cambridge Quarterly of Healthcare Ethics, 2016, 25, 623-633.	0.5	61
588	Informed consent in implantable BCI research: identification of research risks and recommendations for development of best practices. Journal of Neural Engineering, 2016, 13, 043001.	1.8	23
590	Design of a Passive Upper Limb Exoskeleton for Macaque Monkeys. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2016, 138, .	0.9	4
591	Design and Implementation of a Micro-rheometer for POC Applications. IFMBE Proceedings, 2016, , 457-461.	0.2	0
592	State of the Art and Future Prospects of Nanotechnologies in the Field of Brain-Computer Interfaces. IFMBE Proceedings, 2016, , 462-466.	0.2	0
593	When I am (almost) 64: The effect of normal ageing on implicit motor imagery in young elderlies. Behavioural Brain Research, 2016, 303, 137-151.	1.2	35
594	Restoring motor control and sensory feedback in people with upper extremity amputations using arrays of 96 microelectrodes implanted in the median and ulnar nerves. Journal of Neural Engineering, 2016, 13, 036001.	1.8	268
595	Insinuating electronics in the brain. Journal of the Royal College of Surgeons of Edinburgh, 2016, 14, 213-218.	0.8	3
596	Microwave communication links for brain interface applications. , 2016, , .		2
597	New Perspectives on Neuroengineering and Neurotechnologies: NSF-DFG Workshop Report. IEEE Transactions on Biomedical Engineering, 2016, 63, 1354-1367.	2.5	23
598	Implantable multi-functional flexible microelectrode combining electrical and chemical interface. , 2016, , .		0
599	Increasing N200 Potentials Via Visual Stimulus Depicting Humanoid Robot Behavior. International Journal of Neural Systems, 2016, 26, 1550039.	3.2	23
600	Restoring cortical control of functional movement in a human with quadriplegia. Nature, 2016, 533, 247-250.	13.7	723

#	ARTICLE	IF	CITATIONS
601	Hand motion reconstruction using EEG and EMG. , 2016, , .		3
602	Engineering and commercialization of human-device interfaces, from bone to brain. <i>Biomaterials</i> , 2016, 95, 35-46.	5.7	34
603	Brainâ€œcomputer interfaces for patients with disorders of consciousness. <i>Progress in Brain Research</i> , 2016, 228, 241-291.	0.9	20
604	Cell therapy for spinal cord injury informed by electromagnetic waves. <i>Regenerative Medicine</i> , 2016, 11, 675-691.	0.8	2
605	High data rate ultrasonic communications for wireless intra-body networks. , 2016, , .		31
609	Chronic<i>in vivo</i> stability assessment of carbon fiber microelectrode arrays. <i>Journal of Neural Engineering</i> , 2016, 13, 066002.	1.8	166
611	Brain Machine-Interfaces for Motor and Communication Control. , 2016, , 227-251.		1
612	SiC protective coating for photovoltaic retinal prosthesis. <i>Journal of Neural Engineering</i> , 2016, 13, 046016.	1.8	49
613	Restoration of Hand Function in Stroke and Spinal Cord Injury. , 2016, , 311-331.		8
614	BCI-Based Neuroprostheses and Physiotherapies for Stroke Motor Rehabilitation. , 2016, , 617-627.		3
615	Chronic impedance spectroscopy of an endovascular stent-electrode array. <i>Journal of Neural Engineering</i> , 2016, 13, 046020.	1.8	35
616	Stable long-term chronic brain mapping at the single-neuron level. <i>Nature Methods</i> , 2016, 13, 875-882.	9.0	256
617	Simulation of a Real-Time Brain Computer Interface for Detecting a Self-Paced Hitting Task. <i>Neuromodulation</i> , 2016, 19, 804-811.	0.4	2
618	Brainâ€œcomputer interfaces for communication and rehabilitation. <i>Nature Reviews Neurology</i> , 2016, 12, 513-525.	4.9	559
619	Multiscale brain-machine interface decoders. , 2016, 2016, 6361-6364.		12
620	Wireless Cortical Brain-Machine Interface for Whole-Body Navigation in Primates. <i>Scientific Reports</i> , 2016, 6, 22170.	1.6	61
621	Scientific profile of brainâ€œcomputer interfaces: Bibliometric analysis in a 10-year period. <i>Neuroscience Letters</i> , 2016, 635, 61-66.	1.0	15
622	Neural interfaces take another step forward. <i>Nature</i> , 2016, 539, 177-178.	13.7	17

#	ARTICLE	IF	CITATIONS
623	A brainâ€‘spine interface alleviating gait deficits after spinal cord injury in primates. <i>Nature</i> , 2016, 539, 284-288.	13.7	492
624	Decoding speech using the timing of neural signal modulation. , 2016, 2016, 1532-1535.		11
626	Frequency bandwidth correction circuit for multichannel integrated electronics dedicated to neurobiology Experiments. , 2016, , .		0
627	Heuristic feature extraction method for BCI with harmony search and discrete wavelet transform. <i>International Journal of Control, Automation and Systems</i> , 2016, 14, 1582-1587.	1.6	8
628	Maze learning by a hybrid brain-computer system. <i>Scientific Reports</i> , 2016, 6, 31746.	1.6	18
629	Neurobiochemical changes in the vicinity of a nanostructured neural implant. <i>Scientific Reports</i> , 2016, 6, 35944.	1.6	24
630	Clinical applications of penetrating neural interfaces and Utah Electrode Array technologies. <i>Journal of Neural Engineering</i> , 2016, 13, 061003.	1.8	101
631	Interfacing a salamander brain with a salamander-like robot: Control of speed and direction with calcium signals from brainstem reticulospinal neurons. , 2016, , .		8
632	Feasibility of a chronic, minimally invasive endovascular neural interface. , 2016, 2016, 4455-4458.		10
633	Somatosensory encoding with cuneate nucleus microstimulation: Detection of artificial stimuli. , 2016, 2016, 4719-4722.		11
634	Ultraflexible organic photonic skin. <i>Science Advances</i> , 2016, 2, e1501856.	4.7	788
635	Closed-Loop Neuroprostheticsâ††. , 2016, , 223-227.		2
636	Closed-Loop Stimulation in Emotional Circuits for Neuro-Psychiatric Disorders. , 2016, , 229-239.		2
637	Materials and technologies for soft implantable neuroprostheses. <i>Nature Reviews Materials</i> , 2016, 1, .	23.3	485
638	Long-Term Training with a Brain-Machine Interface-Based Gait Protocol Induces Partial Neurological Recovery in Paraplegic Patients. <i>Scientific Reports</i> , 2016, 6, 30383.	1.6	326
639	Review of real brain-controlled wheelchairs. <i>Journal of Neural Engineering</i> , 2016, 13, 061001.	1.8	66
643	Big data challenges in decoding cortical activity in a human with quadriplegia to inform a brain computer interface. , 2016, 2016, 3084-3087.		13
646	Adaptive decoding using local field potentials in a brain-machine interface. , 2016, 2016, 5721-5724.		1

#	ARTICLE	IF	CITATIONS
647	Bioelectric Medicine and Devices for the Treatment of Spinal Cord Injury. Cells Tissues Organs, 2016, 202, 6-22.	1.3	5
648	Toward a distributed free-floating wireless implantable neural recording system. , 2016, 2016, 4495-4498.		9
649	Key considerations in designing a somatosensory neuroprosthesis. Journal of Physiology (Paris), 2016, 110, 402-408.	2.1	31
650	A control-theoretic approach to brain-computer interface design. , 2016, , .		1
651	Auditory imagery classification with a non-invasive BCI. , 2016, , .		1
652	From point process observations to collective neural dynamics: Nonlinear Hawkes process GLMs, low-dimensional dynamics and coarse graining. Journal of Physiology (Paris), 2016, 110, 336-347.	2.1	28
653	Key considerations in designing a speech brain-computer interface. Journal of Physiology (Paris), 2016, 110, 392-401.	2.1	46
654	Micro/nanoscale needle technology for brain. , 2016, , .		0
655	Brain-machine interfaces: assistive, thought-controlled devices. Lab Animal, 2016, 45, 359-361.	0.2	3
656	Decoding EEG and LFP signals using deep learning. , 2016, , .		52
657	A flexible microchannel electrode array for peripheral nerves to interface with neural prosthetics. Proceedings of SPIE, 2016, , .	0.8	0
658	Neurorestoration after stroke. Neurosurgical Focus, 2016, 40, E2.	1.0	72
659	Blending of brain-machine interface and vision-guided autonomous robotics improves neuroprosthetic arm performance during grasping. Journal of NeuroEngineering and Rehabilitation, 2016, 13, 28.	2.4	78
660	Adaptive neuron-to-EMG decoder training for FES neuroprostheses. Journal of Neural Engineering, 2016, 13, 046009.	1.8	12
661	Multisession, noninvasive closed-loop neuroprosthetic control of grasping by upper limb amputees. Progress in Brain Research, 2016, 228, 107-128.	0.9	28
662	A four-dimensional virtual hand brain-machine interface using active dimension selection. Journal of Neural Engineering, 2016, 13, 036021.	1.8	8
663	Wireless communication links for brain-machine interface applications. Proceedings of SPIE, 2016, , .	0.8	0
664	Flexible, semi-autonomous grasping for assistive robotics. , 2016, , .		9

#	ARTICLE	IF	CITATIONS
665	Implantable neurotechnologies: a review of integrated circuit neural amplifiers. <i>Medical and Biological Engineering and Computing</i> , 2016, 54, 45-62.	1.6	69
666	Electrical stimulation of the brain and the development of cortical visual prostheses: An historical perspective. <i>Brain Research</i> , 2016, 1630, 208-224.	1.1	64
667	Long-term decoding of movement force and direction with a wireless myoelectric implant. <i>Journal of Neural Engineering</i> , 2016, 13, 016002.	1.8	29
668	Implantable neurotechnologies: bidirectional neural interfaces' applications and VLSI circuit implementations. <i>Medical and Biological Engineering and Computing</i> , 2016, 54, 1-17.	1.6	52
669	Brain-state classification and a dual-state decoder dramatically improve the control of cursor movement through a brain-machine interface. <i>Journal of Neural Engineering</i> , 2016, 13, 016009.	1.8	21
670	A 128-Channel Extreme Learning Machine-Based Neural Decoder for Brain Machine Interfaces. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2016, 10, 679-692.	2.7	91
671	Brain'Computer Interface Based Solutions for End-Users with Severe Communication Disorders. , 2016, , 217-240.		10
672	Influence of resveratrol release on the tissue response to mechanically adaptive cortical implants. <i>Acta Biomaterialia</i> , 2016, 29, 81-93.	4.1	57
673	Les neuroproth'ses. <i>Evolution Psychiatrique</i> , 2016, 81, 353-364.	0.1	1
674	Noise minimization limits in multichannel integrated circuits dedicated to neurobiology experiments. <i>Microelectronics Journal</i> , 2016, 51, 67-74.	1.1	2
675	Individual finger control of a modular prosthetic limb using high-density electrocorticography in a human subject. <i>Journal of Neural Engineering</i> , 2016, 13, 026017.	1.8	169
676	Interventions to Improve Recovery after Stroke. , 2016, , 972-980.e5.		4
677	Ethical issues in neuroprosthetics. <i>Journal of Neural Engineering</i> , 2016, 13, 021002.	1.8	35
678	Minimally invasive endovascular stent-electrode array for high-fidelity, chronic recordings of cortical neural activity. <i>Nature Biotechnology</i> , 2016, 34, 320-327.	9.4	210
679	Scanning electron microscopy of chronically implanted intracortical microelectrode arrays in non-human primates. <i>Journal of Neural Engineering</i> , 2016, 13, 026003.	1.8	127
680	Brain'computer interfaces for dissecting cognitive processes underlying sensorimotor control. <i>Current Opinion in Neurobiology</i> , 2016, 37, 53-58.	2.0	82
681	Relationship between the spatial pattern of P300 and performance of a P300-based brain-computer interface in amyotrophic lateral sclerosis. <i>Brain-Computer Interfaces</i> , 2016, 3, 1-8.	0.9	5
682	The repeatability of digital force waveform during natural grasping with five digits. <i>Measurement: Journal of the International Measurement Confederation</i> , 2016, 85, 124-131.	2.5	3

#	ARTICLE	IF	CITATIONS
683	Longitudinal Evaluation of Residual Cortical and Subcortical Motor Evoked Potentials in Spinal Cord Injured Rats. <i>Journal of Neurotrauma</i> , 2016, 33, 907-916.	1.7	29
684	EEG Source Imaging Enhances the Decoding of Complex Right-Hand Motor Imagery Tasks. <i>IEEE Transactions on Biomedical Engineering</i> , 2016, 63, 4-14.	2.5	277
685	Ideas in movement: The next wave of brain-computer interfaces. <i>Nature Medicine</i> , 2016, 22, 2-5.	15.2	15
686	Enabling Low-Power, Multi-Modal Neural Interfaces Through a Common, Low-Bandwidth Feature Space. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2016, 24, 521-531.	2.7	37
687	Informed Consent in Implantable BCI Research: Identifying Risks and Exploring Meaning. <i>Science and Engineering Ethics</i> , 2016, 22, 1299-1317.	1.7	38
688	Two-photon imaging of chronically implanted neural electrodes: Sealing methods and new insights. <i>Journal of Neuroscience Methods</i> , 2016, 258, 46-55.	1.3	83
689	Rehabilitation Technologies for Spinal Injury. <i>Biosystems and Biorobotics</i> , 2016, , 65-85.	0.2	1
690	Regenerative Electrode Interfaces for Neural Prostheses. <i>Tissue Engineering - Part B: Reviews</i> , 2016, 22, 125-135.	2.5	47
691	Inference and Decoding of Motor Cortex Low-Dimensional Dynamics via Latent State-Space Models. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2016, 24, 272-282.	2.7	56
692	Chronic <i>In Vivo</i> Evaluation of PEDOT/CNT for Stable Neural Recordings. <i>IEEE Transactions on Biomedical Engineering</i> , 2016, 63, 111-119.	2.5	153
693	A Battery-Less, Implantable Neuro-Electronic Interface for Studying the Mechanisms of Deep Brain Stimulation in Rat Models. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2016, 10, 98-112.	2.7	75
694	Give me a sign: decoding four complex hand gestures based on high-density ECoG. <i>Brain Structure and Function</i> , 2016, 221, 203-216.	1.2	78
695	A High-Performance Neural Prosthesis Incorporating Discrete State Selection With Hidden Markov Models. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 935-945.	2.5	63
696	Brain-Machine Interface and Visual Compressive Sensing-Based Teleoperation Control of an Exoskeleton Robot. <i>IEEE Transactions on Fuzzy Systems</i> , 2017, 25, 58-69.	6.5	84
697	Rapid control and feedback rates enhance neuroprosthetic control. <i>Nature Communications</i> , 2017, 8, 13825.	5.8	88
698	Local and Remote Cooperation With Virtual and Robotic Agents: A P300 BCI Study in Healthy and People Living With Spinal Cord Injury. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017, 25, 1622-1632.	2.7	40
699	A hybrid BMI-based exoskeleton for paresis: EMG control for assisting arm movements. <i>Journal of Neural Engineering</i> , 2017, 14, 016015.	1.8	65
700	A motion-classification strategy based on sEMG-EEG signal combination for upper-limb amputees. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2017, 14, 2.	2.4	144

#	ARTICLE	IF	CITATIONS
701	Workshops of the Sixth International Brain-Computer Interface Meeting: brain-computer interfaces past, present, and future. <i>Brain-Computer Interfaces</i> , 2017, 4, 3-36.	0.9	24
702	Classification of upper limb center-out reaching tasks by means of EEG-based continuous decoding techniques. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2017, 14, 9.	2.4	58
703	Delivering the Sense of Touch to the Human Brain. <i>Neuron</i> , 2017, 93, 728-730.	3.8	6
704	Design and evaluation of a P300-ERP based BCI system for real-time control of a mobile robot. , 2017, , .		22
705	Practical brain-machine interface system. , 2017, , .		0
706	System-Level Design of a 64-Channel Low Power Neural Spike Recording Sensor. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2017, 11, 420-433.	2.7	25
707	Hook and loop microfastener: Flexible microelectrodes tied to a nerve. , 2017, , .		2
708	Man/machine interface based on the discharge timings of spinal motor neurons after targeted muscle reinnervation. <i>Nature Biomedical Engineering</i> , 2017, 1, .	11.6	245
709	Does Neurotechnology Produce a Better Brain?. <i>Computer</i> , 2017, 50, 48-58.	1.2	53
710	Review: Human Intracortical Recording and Neural Decoding for Brain-Computer Interfaces. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017, 25, 1687-1696.	2.7	80
711	Signal-independent noise in intracortical brain-computer interfaces causes movement time properties inconsistent with Fitts' law. <i>Journal of Neural Engineering</i> , 2017, 14, 026010.	1.8	9
712	Autonomy infused teleoperation with application to brain computer interface controlled manipulation. <i>Autonomous Robots</i> , 2017, 41, 1401-1422.	3.2	64
713	EDAN. , 2017, , .		2
714	Emerging Technology and Architecture for Big-data Analytics. , 2017, , .		4
715	Neuro-inspired Computing Using Resistive Synaptic Devices. , 2017, , .		51
716	Cracking the neural code, treating paralysis and the future of bioelectronic medicine. <i>Journal of Internal Medicine</i> , 2017, 282, 37-45.	2.7	29
717	Classification of different reaching movements from the same limb using EEG. <i>Journal of Neural Engineering</i> , 2017, 14, 046018.	1.8	48
718	Brain-Machine Interface Development for Finger Movement Control. <i>Springer Briefs in Electrical and Computer Engineering</i> , 2017, , 31-49.	0.3	1

#	ARTICLE	IF	CITATIONS
719	Neuroprosthetics: Restoring multi-joint motor control. Nature Biomedical Engineering, 2017, 1, .	11.6	7
720	Big Data Management in Neural Implants: The Neuromorphic Approach. , 2017, , 293-311.		5
722	Continuous decoding of human grasp kinematics using epidural and subdural signals. Journal of Neural Engineering, 2017, 14, 016005.	1.8	64
723	Motor Cortical Visuomotor Feedback Activity Is Initially Isolated from Downstream Targets in Output-Null Neural State Space Dimensions. Neuron, 2017, 95, 195-208.e9.	3.8	90
724	Human-Robot Interaction and Neuroprosthetics: A review of new technologies. IEEE Consumer Electronics Magazine, 2017, 6, 24-33.	2.3	34
725	Physiological properties of brain-machine interface input signals. Journal of Neurophysiology, 2017, 118, 1329-1343.	0.9	38
726	Biomimetic neural network for modifying biological dynamics during hybrid experiments. Artificial Life and Robotics, 2017, 22, 398-403.	0.7	19
727	Robust tactile sensory responses in finger area of primate motor cortex relevant to prosthetic control. Journal of Neural Engineering, 2017, 14, 046016.	1.8	18
728	An engineered home environment for untethered data telemetry from nonhuman primates. Journal of Neuroscience Methods, 2017, 288, 72-81.	1.3	6
729	Syringe-injectable mesh electronics integrate seamlessly with minimal chronic immune response in the brain. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5894-5899.	3.3	181
730	Beyond intuitive anthropomorphic control: recent achievements using brain computer interface technologies. Proceedings of SPIE, 2017, , .	0.8	2
731	Error-Free Text Typing Performance of an Inductive Intra-Oral Tongue Computer Interface for Severely Disabled Individuals. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 2094-2104.	2.7	35
732	A Hardware-Efficient Scalable Spike Sorting Neural Signal Processor Module for Implantable High-Channel-Count Brain Machine Interfaces. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 743-754.	2.7	44
733	Modeling and simulation of a moving robotic arm mounted on wheelchair. , 2017, , .		2
734	A silicon carbide array for electrocorticography and peripheral nerve recording. Journal of Neural Engineering, 2017, 14, 056006.	1.8	46
735	Consequentialism and the Synthetic Biology Problem. Cambridge Quarterly of Healthcare Ethics, 2017, 26, 206-229.	0.5	6
736	Harnessing Prefrontal Cognitive Signals for Brain-€Machine Interfaces. Trends in Biotechnology, 2017, 35, 585-597.	4.9	28
737	<i>in vitro</i> biocompatibility and electrical stability of thick-film platinum/gold alloy electrodes printed on alumina. Journal of Neural Engineering, 2017, 14, 036012.	1.8	22



#	ARTICLE	IF	CITATIONS
738	Decoding Information for Grasping from the Macaque Dorsomedial Visual Stream. Journal of Neuroscience, 2017, 37, 4311-4322.	1.7	28
739	Interfacing to the brain's motor decisions. Journal of Neurophysiology, 2017, 117, 1305-1319.	0.9	36
740	Restoration of reaching and grasping movements through brain-controlled muscle stimulation in a person with tetraplegia: a proof-of-concept demonstration. Lancet, The, 2017, 389, 1821-1830.	6.3	632
741	Reaching again: a glimpse of the future with neuroprosthetics. Lancet, The, 2017, 389, 1777-1778.	6.3	2
742	Brain-Machine Interfaces: From Basic Science to Neuroprostheses and Neurorehabilitation. Physiological Reviews, 2017, 97, 767-837.	13.1	409
743	Cortical and subcortical mechanisms of brain-machine interfaces. Human Brain Mapping, 2017, 38, 2971-2989.	1.9	36
744	Feedback control policies employed by people using intracortical brain-computer interfaces. Journal of Neural Engineering, 2017, 14, 016001.	1.8	41
745	State-of-the-art MEMS and microsystem tools for brain research. Microsystems and Nanoengineering, 2017, 3, 16066.	3.4	169
746	Neural recording and modulation technologies. Nature Reviews Materials, 2017, 2, .	23.3	414
747	Psychophysical correspondence between vibrotactile intensity and intracortical microstimulation for tactile neuroprostheses in rats. Journal of Neural Engineering, 2017, 14, 016010.	1.8	14
748	Static Versus Dynamic Decoding Algorithms in a Non-Invasive Body-Machine Interface. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 893-905.	2.7	6
749	Design of a Closed-Loop, Bidirectional Brain Machine Interface System With Energy Efficient Neural Feature Extraction and PID Control. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 729-742.	2.7	85
750	Brain-Machine Interface Control Algorithms. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1725-1734.	2.7	58
751	Strategies for Autonomous Sensor-Brain Interfaces for Closed-Loop Sensory Reanimation of Paralyzed Limbs. Neurosurgery, 2017, 64, 11-20.	0.6	4
753	The History and Future of LEGS. , 2017, , 3-15.		0
754	Volitional Control Research. , 2017, , 137-150.		2
755	Central nervous system microstimulation: Towards selective micro-neuromodulation. Current Opinion in Biomedical Engineering, 2017, 4, 65-77.	1.8	12
756	High performance in brain-computer interface control of an avatar using the missing hand representation in long term amputees. , 2017, , .		2

#	ARTICLE	IF	CITATIONS
757	Eye motion triggered self-powered mechnosensational communication system using triboelectric nanogenerator. <i>Science Advances</i> , 2017, 3, e1700694.	4.7	491
758	Advances in BCI: A Neural Bypass Technology to Reconnect the Brain to the Body. <i>Springer Briefs in Electrical and Computer Engineering</i> , 2017, , 9-20.	0.3	3
759	Neuron-Type-Specific Utility in a Brain-Machine Interface: a Pilot Study. <i>Journal of Spinal Cord Medicine</i> , 2017, 40, 715-722.	0.7	2
760	Robotic arm control using hybrid brain-machine interface and augmented reality feedback. , 2017, , .		10
761	Neural control of finger movement via intracortical brain-machine interface. <i>Journal of Neural Engineering</i> , 2017, 14, 066004.	1.8	50
762	Microarrays in the Brain. , 2017, , 3-39.		0
763	Neuromodulation as a Bypass Spinal Cord Injury. , 2017, , 265-285.		0
764	A Practical Guide to Posthumans. <i>Journal of Posthuman Studies: Philosophy, Technology, Media</i> , 2017, 1, 61-74.	0.2	4
765	In vivo neuronal recordings using three-dimensional microneedle-electrode assembled on flexible substrate. , 2017, , .		1
766	Fourth Industrial Revolution: technological drivers, impacts and coping methods. <i>Chinese Geographical Science</i> , 2017, 27, 626-637.	1.2	237
767	Deep learning with convolutional neural networks for EEG decoding and visualization. <i>Human Brain Mapping</i> , 2017, 38, 5391-5420.	1.9	1,656
768	Micro-Hermetic Packaging Technology for Active Implantable Neural Interfaces. , 2017, , .		7
769	Syringe-Injectable Electronics with a Plug-and-Play Input/Output Interface. <i>Nano Letters</i> , 2017, 17, 5836-5842.	4.5	59
770	Leveraging neural dynamics to extend functional lifetime of brain-machine interfaces. <i>Scientific Reports</i> , 2017, 7, 7395.	1.6	33
771	Cryptographic decoding of movement. <i>Nature Biomedical Engineering</i> , 2017, 1, 929-930.	11.6	0
772	Changes in cortical network connectivity with long-term brain-machine interface exposure after chronic amputation. <i>Nature Communications</i> , 2017, 8, 1796.	5.8	19
773	Organismal engineering: Toward a robotic taxonomic key for devices using organic materials. <i>Science Robotics</i> , 2017, 2, .	9.9	61
774	In vivo characterization of the electrophysiological and astrocytic responses to a silicon neuroprobe implanted in the mouse neocortex. <i>Scientific Reports</i> , 2017, 7, 15642.	1.6	21

#	ARTICLE	IF	CITATIONS
775	From 3 fingers to 5 fingers dexterous hands. <i>Advanced Robotics</i> , 2017, 31, 1051-1070.	1.1	22
776	Microelectrode implantation in motor cortex causes fine motor deficit: Implications on potential considerations to Brain Computer Interfacing and Human Augmentation. <i>Scientific Reports</i> , 2017, 7, 15254.	1.6	55
777	Augmenting intracortical brain-machine interface with neurally driven error detectors. <i>Journal of Neural Engineering</i> , 2017, 14, 066007.	1.8	23
778	The Biocompatibility of Intracortical Microelectrode Recording Arrays for Brain Machine Interfacing. <i>Series on Bioengineering and Biomedical Engineering</i> , 2017, , 259-299.	0.1	3
779	CNS Recording: Devices and Techniques. <i>Series on Bioengineering and Biomedical Engineering</i> , 2017, , 467-488.	0.1	0
780	Editorial. Advancement in brain-machine interfaces for patients with tetraplegia: neurosurgical perspective. <i>Neurosurgical Focus</i> , 2017, 43, E5.	1.0	9
781	Staying in the Loop: Relational Agency and Identity in Next-Generation DBS for Psychiatry. <i>AJOB Neuroscience</i> , 2017, 8, 59-70.	0.6	92
782	Brain-Computer Interface application: auditory serial interface to control a two-class motor-imagery-based wheelchair. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2017, 14, 49.	2.4	39
783	Help, hope, and hype: Ethical dimensions of neuroprosthetics. <i>Science</i> , 2017, 356, 1338-1339.	6.0	83
784	Intelligent biohybrid systems for functional brain repair. <i>European Journal of Molecular and Clinical Medicine</i> , 2017, 3, 162.	0.5	9
785	The marmoset as a model system for studying voluntary motor control. <i>Developmental Neurobiology</i> , 2017, 77, 273-285.	1.5	39
786	Neurofeedback Control in Parkinsonian Patients Using Electroencephalography Signals Accessed Wirelessly With a Chronic, Fully Implanted Device. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017, 25, 1715-1724.	2.7	34
787	Control of a Robot Using Brain Computer Interface to Aid in Rehabilitation. <i>Biosystems and Biorobotics</i> , 2017, , 1239-1243.	0.2	0
788	Brain-Computer Interfacing and Virtual Reality. , 2017, , 151-171.		3
789	The need for calcium imaging in nonhuman primates: New motor neuroscience and brain-machine interfaces. <i>Experimental Neurology</i> , 2017, 287, 437-451.	2.0	45
790	Body ownership and a new proprioceptive role for muscle spindles. <i>Acta Physiologica</i> , 2017, 220, 19-27.	1.8	25
791	Dynamic training protocol improves the robustness of PR-based myoelectric control. <i>Biomedical Signal Processing and Control</i> , 2017, 31, 249-256.	3.5	26
792	Development and functional demonstration of a wireless intraoral inductive tongue computer interface for severely disabled persons. <i>Disability and Rehabilitation: Assistive Technology</i> , 2017, 12, 631-640.	1.3	40

#	ARTICLE	IF	CITATIONS
793	14 Brain-Computer Interfaces to Enhance Function After Spinal Cord Injury. , 2017, , .		0
794	Let There Be Light-Optoprobes for Neural Implants. Proceedings of the IEEE, 2017, 105, 101-138.	16.4	51
795	Generation of Stimulus Triggering From Intracortical Spike Activity for Brain-Machine-Body Interfaces (BMBIs). IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 998-1008.	2.7	2
796	Micro-CT and Histological Evaluation of an Neural Interface Implanted Within a Blood Vessel. IEEE Transactions on Biomedical Engineering, 2017, 64, 928-934.	2.5	35
797	Inverse models and robust parametric-step neuro-control of a Humanoid Robot. Neurocomputing, 2017, 233, 90-103.	3.5	5
798	Neuroadhesive L1 coating attenuates acute microglial attachment to neural electrodes as revealed by live two-photon microscopy. Biomaterials, 2017, 113, 279-292.	5.7	99
799	Reduction of the foreign body response and neuroprotection by apyrase and minocycline in chronic cannula implantation in the rat brain. Clinical and Experimental Pharmacology and Physiology, 2017, 44, 313-323.	0.9	7
800	A Nonhuman Primate Brain-Computer Typing Interface. Proceedings of the IEEE, 2017, 105, 66-72.	16.4	18
801	Control of Redundant Kinematic Degrees of Freedom in a Closed-Loop Brain-Machine Interface. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 750-760.	2.7	13
802	Controlling an electromyography-based power-assist device for the wrist using electroencephalography cortical currents. Advanced Robotics, 2017, 31, 88-96.	1.1	1
803	Visual Versus Kinesthetic Motor Imagery for BCI Control of Robotic Arms (Mercury 2.0). , 2017, , .		4
804	Human-robot cooperation via brain computer interface. , 2017, , .		5
805	Comparison of Alpha/Beta and high-gamma band for motor-imagery based BCI control: A qualitative study. , 2017, , .		6
806	Effects of Using Virtual Reality and Virtual Avatar on Hand Motion Reconstruction Accuracy and Brain Activity. IEEE Access, 2017, 5, 23736-23750.	2.6	14
807	High-channel-count impedance spectroscopy logger. , 2017, , .		3
808	A human-interactive robotic program for middle school STEM education. , 2017, , .		7
809	Commercial BCI Control and Functional Brain Networks in Spinal Cord Injury: A Proof-of-Concept. , 2017, , .		4
810	Real-Time Brain Machine Interaction via Social Robot Gesture Control. , 2017, , .		4

#	ARTICLE	IF	CITATIONS
811	Motor cortical activity changes during neuroprosthetic-controlled object interaction. Scientific Reports, 2017, 7, 16947.	1.6	52
812	Real Time EEG Based Cognitive Brain Computer Interface for Control Applications via Arduino Interfacing. Procedia Computer Science, 2017, 115, 812-820.	1.2	21
813	Brain-computer interface using high-density intracortical microelectrode arrays for robotic limb control and reliable communication. European Neuropsychopharmacology, 2017, 27, S556-S557.	0.3	1
814	An integrated multichannel neural recording analog front-end ASIC with area-efficient driven right leg circuit. , 2017, 2017, 217-220.		4
815	Direction control and speed control combined model of motor-imagery based brain-actuated vehicle. , 2017, , .		1
816	“Wink to grasp” comparing eye, voice & EMG gesture control of grasp with soft-robotic gloves. , 2017, 2017, 1043-1048.		21
817	Micro/nano-scale needle devices for the brain. , 2017, , .		0
818	Surgical Training for the Implantation of Neocortical Microelectrode Arrays Using a Formaldehyde-fixed Human Cadaver Model. Journal of Visualized Experiments, 2017, , .	0.2	2
819	Use of wavelet transform coefficients for spike detection for a Robust Intracortical Brain Machine Interface. , 2017, , .		2
820	Hybrid hermetic housings for active implantable neural device. , 2017, , .		0
821	A five degree-of-freedom body-machine interface for children with severe motor impairments. , 2017, , .		7
822	Comparison of tongue interface with keyboard for control of an assistive robotic arm. , 2017, 2017, 925-928.		6
823	Flexible pressure sensing system for tongue-based control of prosthetic hands. , 2017, , .		1
824	Cyborgs and Enhancement Technology. Philosophies, 2017, 2, 4.	0.4	21
825	High performance communication by people with paralysis using an intracortical brain-computer interface. ELife, 2017, 6, .	2.8	367
826	Hybrid EEG&fNIRS-Based Eight-Command Decoding for BCI: Application to Quadcopter Control. Frontiers in Neurobotics, 2017, 11, 6.	1.6	180
827	An Intention-Driven Semi-autonomous Intelligent Robotic System for Drinking. Frontiers in Neurobotics, 2017, 11, 48.	1.6	32
828	Closed-Loop Hybrid Gaze Brain-Machine Interface Based Robotic Arm Control with Augmented Reality Feedback. Frontiers in Neurobotics, 2017, 11, 60.	1.6	52

#	ARTICLE	IF	CITATIONS
829	Reaching and Grasping a Glass of Water by Locked-In ALS Patients through a BCI-Controlled Humanoid Robot. <i>Frontiers in Human Neuroscience</i> , 2017, 11, 68.	1.0	50
830	Decoding Lower Limb Muscle Activity and Kinematics from Cortical Neural Spike Trains during Monkey Performing Stand and Squat Movements. <i>Frontiers in Neuroscience</i> , 2017, 11, 44.	1.4	14
831	Constraints and Adaptation of Closed-Loop Neuroprosthetics for Functional Restoration. <i>Frontiers in Neuroscience</i> , 2017, 11, 111.	1.4	12
832	Improving Challenge/Skill Ratio in a Multimodal Interface by Simultaneously Adapting Game Difficulty and Haptic Assistance through Psychophysiological and Performance Feedback. <i>Frontiers in Neuroscience</i> , 2017, 11, 242.	1.4	22
833	Open-Source, Low Cost, Free-Behavior Monitoring, and Reward System for Neuroscience Research in Non-human Primates. <i>Frontiers in Neuroscience</i> , 2017, 11, 265.	1.4	11
834	State-Dependent Decoding Algorithms Improve the Performance of a Bidirectional BMI in Anesthetized Rats. <i>Frontiers in Neuroscience</i> , 2017, 11, 269.	1.4	1
835	High Amplitude EEG Motor Potential during Repetitive Foot Movement: Possible Use and Challenges for Futuristic BCIs That Restore Mobility after Spinal Cord Injury. <i>Frontiers in Neuroscience</i> , 2017, 11, 362.	1.4	7
836	Reconstruction of Arm Movement Directions from Human Motor Cortex Using fMRI. <i>Frontiers in Neuroscience</i> , 2017, 11, 434.	1.4	0
837	Recording Spikes Activity in Cultured Hippocampal Neurons Using Flexible or Transparent Graphene Transistors. <i>Frontiers in Neuroscience</i> , 2017, 11, 466.	1.4	33
838	Foreign Body Response to Intracortical Microelectrodes Is Not Altered with Dip-Coating of Polyethylene Glycol (PEG). <i>Frontiers in Neuroscience</i> , 2017, 11, 513.	1.4	32
839	Neural Interfaces for Intracortical Recording: Requirements, Fabrication Methods, and Characteristics. <i>Frontiers in Neuroscience</i> , 2017, 11, 665.	1.4	125
840	Restoration of Hindlimb Movements after Complete Spinal Cord Injury Using Brain-Controlled Functional Electrical Stimulation. <i>Frontiers in Neuroscience</i> , 2017, 11, 715.	1.4	16
841	Encoding and Decoding Models in Cognitive Electrophysiology. <i>Frontiers in Systems Neuroscience</i> , 2017, 11, 61.	1.2	116
842	Neurobionics and the brainâ€“computer interface: current applications and future horizons. <i>Medical Journal of Australia</i> , 2017, 206, 363-368.	0.8	52
843	Design of a gesture controlled robotic gripper arm using neural networks. , 2017, , .		2
844	Progress in EEG-Based Brain Robot Interaction Systems. <i>Computational Intelligence and Neuroscience</i> , 2017, 2017, 1-25.	1.1	50
845	Wireless Brain-Robot Interface: User Perception and Performance Assessment of Spinal Cord Injury Patients. <i>Wireless Communications and Mobile Computing</i> , 2017, 2017, 1-16.	0.8	9
846	Prior Knowledge of Target Direction and Intended Movement Selection Improves Indirect Reaching Movement Decoding. <i>Behavioural Neurology</i> , 2017, 2017, 1-11.	1.1	2

#	ARTICLE	IF	CITATIONS
847	Towards Rehabilitation Robotics: Off-the-Shelf BCI Control of Anthropomorphic Robotic Arms. BioMed Research International, 2017, 2017, 1-17.	0.9	31
848	Hybrid Cubature Kalman filtering for identifying nonlinear models from sampled recording: Estimation of neuronal dynamics. PLoS ONE, 2017, 12, e0181513.	1.1	4
849	Factors associated with interest in novel interfaces for upper limb prosthesis control. PLoS ONE, 2017, 12, e0182482.	1.1	20
850	EMG estimation from EEG for constructing a power assistance system. Transactions of the JSME (in) Tj ETQq1 1 0.784314 rgBT /Over 0.1	0.1	0
851	Brain-Computer Interface-Based Communication in the Completely Locked-In State. PLoS Biology, 2017, 15, e1002593.	2.6	176
852	Wireless intraoral tongue control of an assistive robotic arm for individuals with tetraplegia. Journal of NeuroEngineering and Rehabilitation, 2017, 14, 110.	2.4	39
853	Feasibility analysis of genetically-encoded calcium indicators as a neural signal source for all-optical brain-machine interfaces. , 2017, , .		4
854	Recursive Exponentially Weighted N-way Partial Least Squares Regression with Recursive-Validation of Hyper-Parameters in Brain-Computer Interface Applications. Scientific Reports, 2017, 7, 16281.	1.6	25
855	A real-time rodent neural interface for deciphering acute pain signals from neuronal ensemble spike activity. , 2017, , .		7
856	A fully implantable wireless neural interface for simultaneous recording from multiple sites of peripheral nerves in free moving animal. , 2017, , .		1
857	Electrical analysis of minocycline eluting layer-by-layer thin-films from functional micro-electrode arrays. , 2017, , .		3
858	Correlation of Impedance and Effective Electrode Area of Iridium Oxide Neural Electrodes. Australian Journal of Chemistry, 2017, 70, 1016.	0.5	8
859	Cyborgs. , 2017, , 705-715.		0
860	Advances in Implanted Brain-Computer Interfaces Allow for Independent Communication in a Locked-In Patient. Neurosurgery, 2017, 80, N30-N31.	0.6	1
862	Should patients with brain implants undergo MRI?. Journal of Neural Engineering, 2018, 15, 041002.	1.8	78
863	Blood brain barrier (BBB)-disruption in intracortical silicon microelectrode implants. Biomaterials, 2018, 164, 1-10.	5.7	59
864	A Comparison of Intention Estimation Methods for Decoder Calibration in Intracortical Brain-Computer Interfaces. IEEE Transactions on Biomedical Engineering, 2018, 65, 2066-2078.	2.5	19
865	Neural Representations Observed. Minds and Machines, 2018, 28, 191-235.	2.7	26

#	ARTICLE	IF	CITATIONS
866	A piecewise probabilistic regression model to decode hand movement trajectories from epidural and subdural ECoG signals. <i>Journal of Neural Engineering</i> , 2018, 15, 036020.	1.8	11
867	Volitional Modulation of Primary Visual Cortex Activity Requires the Basal Ganglia. <i>Neuron</i> , 2018, 97, 1356-1368.e4.	3.8	44
868	Prediction of Reach Goals in Depth and Direction from the Parietal Cortex. <i>Cell Reports</i> , 2018, 23, 725-732.	2.9	23
870	Control of a 7-DOF Robotic Arm System With an SSVEP-Based BCI. <i>International Journal of Neural Systems</i> , 2018, 28, 1850018.	3.2	123
871	Sequence-based manipulation of robotic arm control in brain machine interface. <i>International Journal of Intelligent Robotics and Applications</i> , 2018, 2, 149-160.	1.6	4
872	A noninvasive brain-computer interface approach for predicting motion intention of activities of daily living tasks for an upper-limb wearable robot. <i>International Journal of Advanced Robotic Systems</i> , 2018, 15, 172988141876731.	1.3	19
873	A fast intracortical brain-machine interface with patterned optogenetic feedback. <i>Journal of Neural Engineering</i> , 2018, 15, 046011.	1.8	18
874	Rethinking the Three R's in Animal Research. , 2018, , .		3
875	Object discrimination using electrotactile feedback. <i>Journal of Neural Engineering</i> , 2018, 15, 046007.	1.8	29
876	Adaptive motor cortex plasticity following grip reconstruction in individuals with tetraplegia. <i>Restorative Neurology and Neuroscience</i> , 2018, 36, 73-82.	0.4	9
877	Inhibition of the cluster of differentiation 14 innate immunity pathway with IAXO-101 improves chronic microelectrode performance. <i>Journal of Neural Engineering</i> , 2018, 15, 025002.	1.8	31
878	A well-organized graphene nanostructure for versatile strain-sensing application constructed by a covalently bonded graphene/rubber interface. <i>Journal of Materials Chemistry C</i> , 2018, 6, 2139-2147.	2.7	52
879	Signal Tracking Beyond the Time Resolution of an Atomic Sensor by Kalman Filtering. <i>Physical Review Letters</i> , 2018, 120, 040503.	2.9	34
880	Dynamic Poly(3,4-ethylenedioxythiophene)s Integrate Low Impedance with Redox-Switchable Biofunction. <i>Advanced Functional Materials</i> , 2018, 28, 1703890.	7.8	27
881	A Self-Powered Sensor Mimicking Slow and Fast Adapting Cutaneous Mechanoreceptors. <i>Advanced Materials</i> , 2018, 30, e1706299.	11.1	119
882	Triboelectric-Based Transparent Secret Code. <i>Advanced Science</i> , 2018, 5, 1700881.	5.6	27
883	Modeling task-specific neuronal ensembles improves decoding of grasp. <i>Journal of Neural Engineering</i> , 2018, 15, 036006.	1.8	0
884	Brain-machine interfaces for controlling lower-limb powered robotic systems. <i>Journal of Neural Engineering</i> , 2018, 15, 021004.	1.8	157



#	ARTICLE	IF	CITATIONS
885	Tri-Co Robot: a Chinese robotic research initiative for enhanced robot interaction capabilities. National Science Review, 2018, 5, 799-801.	4.6	69
886	A brain-spinal interface (BSI) system-on-chip (SoC) for closed-loop cortically-controlled intraspinal microstimulation. Analog Integrated Circuits and Signal Processing, 2018, 95, 1-16.	0.9	6
887	Decoder calibration with ultra small current sample set for intracortical brain-machine interface. Journal of Neural Engineering, 2018, 15, 026019.	1.8	17
888	Rapid calibration of an intracortical brain-computer interface for people with tetraplegia. Journal of Neural Engineering, 2018, 15, 026007.	1.8	95
889	Brain-Machine Interfaces. , 2018, , 197-218.		0
890	EEG Analysis from Motor Imagery to Control a Forestry Crane. Advances in Intelligent Systems and Computing, 2018, , 281-286.	0.5	0
891	Development and Characterization of a Sucrose Microneedle Neural Electrode Delivery System. Advanced Biology, 2018, 2, 1700187.	3.0	25
892	A Mosquito Inspired Strategy to Implant Microprobes into the Brain. Scientific Reports, 2018, 8, 122.	1.6	67
893	Dynamic Neuroscience. , 2018, , .		9
894	Current Researches and Future Development Trend of Intelligent Robot: A Review. International Journal of Automation and Computing, 2018, 15, 525-546.	4.5	94
895	Performance analysis of flexible printed sensors for robotic arm applications. Sensors and Actuators A: Physical, 2018, 276, 226-236.	2.0	35
896	Mind Reading and Writing: The Future of Neurotechnology. Trends in Cognitive Sciences, 2018, 22, 598-610.	4.0	65
897	Nanofabricated Ultraflexible Electrode Arrays for High-Density Intracortical Recording. Advanced Science, 2018, 5, 1700625.	5.6	109
898	A neural recording microimplants with wireless data and energy transfer link. , 2018, , .		1
899	Feasibility of Automatic Error Detect-and-Undo System in Human Intracortical Brain-Computer Interfaces. IEEE Transactions on Biomedical Engineering, 2018, 65, 1771-1784.	2.5	12
900	Fabrication of High Aspect Ratio Millimeter-Tall Free-Standing Carbon Nanotube-Based Microelectrode Arrays. ACS Biomaterials Science and Engineering, 2018, 4, 1900-1907.	2.6	16
901	Approaches to large scale neural recording by chronic implants for mobile BCIs. , 2018, , .		4
902	A Bit-Encoding Based New Data Structure for Time and Memory Efficient Handling of Spike Times in an Electrophysiological Setup. Neuroinformatics, 2018, 16, 217-229.	1.5	2

#	ARTICLE	IF	CITATIONS
903	Optimizing the Usability of Brain-Computer Interfaces. <i>Neural Computation</i> , 2018, 30, 1323-1358.	1.3	5
904	Brain-computer interfaces based on intracortical recordings of neural activity for restoration of movement and communication of people with paralysis. , 2018, , .		1
905	When the Brain Takes "BOLD" Steps: Real-Time fMRI Neurofeedback Can Further Enhance the Ability to Gradually Self-regulate Regional Brain Activation. <i>Neuroscience</i> , 2018, 378, 71-88.	1.1	42
906	A Novel EMG Interface for Individuals With Tetraplegia to Pilot Robot Hand Grasping. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2018, 26, 291-298.	2.7	23
907	Commanding a Brain-Controlled Wheelchair Using Steady-State Somatosensory Evoked Potentials. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2018, 26, 654-665.	2.7	111
908	An ovine model of cerebral catheter venography for implantation of an endovascular neural interface. <i>Journal of Neurosurgery</i> , 2018, 128, 1020-1027.	0.9	23
909	Decoding Grasping Movements from the Parieto-Frontal Reaching Circuit in the Nonhuman Primate. <i>Cerebral Cortex</i> , 2018, 28, 1245-1259.	1.6	33
910	Neuro-Nano Interfaces: Utilizing Nano-Coatings and Nanoparticles to Enable Next-Generation Electrophysiological Recording, Neural Stimulation, and Biochemical Modulation. <i>Advanced Functional Materials</i> , 2018, 28, 1700239.	7.8	38
911	Electrocorticographic Encoding of Human Gait in the Leg Primary Motor Cortex. <i>Cerebral Cortex</i> , 2018, 28, 2752-2762.	1.6	44
912	Digital implementation of Hodgkin-Huxley neuron model for neurological diseases studies. <i>Artificial Life and Robotics</i> , 2018, 23, 10-14.	0.7	24
914	The Impact of Different Visual Feedbacks in User Training on Motor Imagery Control in BCI. <i>Applied Psychophysiology Biofeedback</i> , 2018, 43, 23-35.	1.0	26
915	Electrophysiology in Disorders of Consciousness: From Conventional EEG Visual Analysis to Brain-Computer Interfaces. , 2018, , 51-75.		0
916	Brain Control of an External Device by Extracting the Highest Force-Related Contents of Local Field Potentials in Freely Moving Rats. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2018, 26, 18-25.	2.7	13
917	A Dual-Layered Microfluidic System for Long-Term Controlled In Situ Delivery of Multiple Anti-Inflammatory Factors for Chronic Neural Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1702009.	7.8	25
918	Biotolerability of Intracortical Microelectrodes. <i>Advanced Biology</i> , 2018, 2, 1700115.	3.0	7
919	Development of Biosignal Recording Board System with Agile Control of Circuit Characteristics for Various Biosignals. <i>Electronics and Communications in Japan</i> , 2018, 101, 47-54.	0.3	6
920	The Neuroinflammatory Response to Nanopatterning Parallel Grooves into the Surface Structure of Intracortical Microelectrodes. <i>Advanced Functional Materials</i> , 2018, 28, 1704420.	7.8	39
921	Signal processing methods for reducing artifacts in microelectrode brain recordings caused by functional electrical stimulation. <i>Journal of Neural Engineering</i> , 2018, 15, 026014.	1.8	26

#	ARTICLE	IF	CITATIONS
922	Potential for thermal damage to the blood-brain barrier during craniotomy: implications for intracortical recording microelectrodes. <i>Journal of Neural Engineering</i> , 2018, 15, 034001.	1.8	48
923	Where, When, and How: Are they all sensorimotor? Towards a unified view of the dorsal pathway in vision and audition. <i>Cortex</i> , 2018, 98, 262-268.	1.1	98
924	Remapping cortical modulation for electrocorticographic brain-computer interfaces: a somatotopy-based approach in individuals with upper-limb paralysis. <i>Journal of Neural Engineering</i> , 2018, 15, 026021.	1.8	38
925	Neural Prostheses for Reaching and Grasping. , 2018, , .		0
926	Noninvasive Brain-computer Interface Based High-level Control of a Robotic Arm for Pick and Place Tasks. , 2018, , .		2
927	Study of A Brain-Controlled Switch during Motor Imagery. , 2018, , .		1
928	Visual evoked potentials determine chronic signal quality in a stent-electrode endovascular neural interface. <i>Biomedical Physics and Engineering Express</i> , 2018, 4, 055018.	0.6	8
929	Neuromagnetic Geminoid Control by BCI Based on Four Bilateral Hand Movements. , 2018, , .		3
930	Real-Time MEG-Based Brain-Geminoid Control Using Single-trial SVM Classification. , 2018, , .		5
931	Tongue-Computer Interface Prototype Design Based on T-Type Magnet Localization for Smart Environment Control. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 2498.	1.3	5
932	Cortical Decoding of Individual Finger Group Motions Using ReFIT Kalman Filter. <i>Frontiers in Neuroscience</i> , 2018, 12, 751.	1.4	36
933	Robot-Assisted Rehabilitation System Based on SSVEP Brain-Computer Interface for Upper Extremity. , 2018, , .		4
934	A Comparative Study of Different Feature Extraction Methods for Motor Imagery EEG Decoding within the Same Upper Extremity. , 2018, , .		3
935	Neuroengineering and neuroprosthetics. <i>Brain and Neuroscience Advances</i> , 2018, 2, 239821281881749.	1.8	9
936	Brain signal acquisition methods in BCIs to estimate human motion intention - a survey. , 2018, , .		2
937	Near Perfect Neural Critic from Motor Cortical Activity Toward an Autonomously Updating Brain Machine Interface. , 2018, 2018, 73-76.		19
938	Trends and Future of Brain-Computer Interfaces. , 2018, , .		3
939	Object Sorting Automated System using Raspberry Pi. , 2018, , .		6

#	ARTICLE	IF	CITATIONS
940	Online Calibration of Intracortical Neural Interface Based on Transfer Learning. Journal of Physics: Conference Series, 2018, 1069, 012090.	0.3	0
941	Effect of Implant Duration, Anatomical Location and Electrode Orientation on Bandwidth Recorded with a Chronically Implanted Endovascular Stent-Electrode Array. , 2018, 2018, 1074-1077.		1
942	Silicon Valley new focus on brain computer interface: hype or hope for new applications?. F1000Research, 2018, 7, 1327.	0.8	9
943	Technical Challenges of Active Implantable Medical Devices for Neurotechnology. , 2018, , .		3
944	Innovations in electrical stimulation harness neural plasticity to restore motor function. Bioelectronics in Medicine, 2018, 1, 251-263.	2.0	5
945	Biomimetic extracellular matrix coatings improve the chronic biocompatibility of microfabricated subdural microelectrode arrays. PLoS ONE, 2018, 13, e0206137.	1.1	16
946	New Directions in Treatments Targeting Stroke Recovery. Stroke, 2018, 49, 3107-3114.	1.0	67
947	Tracking Human Engrams Using Multivariate Analysis Techniques. Handbook of Behavioral Neuroscience, 2018, , 481-508.	0.7	4
948	An sEMG-based Interface to give People with Severe Muscular Atrophy control over Assistive Devices. , 2018, 2018, 2136-2141.		10
949	A Meta-Analysis of Intracortical Device Stiffness and Its Correlation with Histological Outcomes. Micromachines, 2018, 9, 443.	1.4	47
950	Eyelid Drive System: An Assistive Technology Employing Inductive Sensing of Eyelid Movement. IEEE Transactions on Biomedical Circuits and Systems, 2018, 13, 1-1.	2.7	7
951	Functional Tasks Performed by People with Severe Muscular Atrophy Using an sEMG Controlled Robotic Manipulator. , 2018, 2018, 1713-1718.		12
952	Cortical control of a tablet computer by people with paralysis. PLoS ONE, 2018, 13, e0204566.	1.1	108
953	Understanding the Effects of Both CD14-Mediated Innate Immunity and Device/Tissue Mechanical Mismatch in the Neuroinflammatory Response to Intracortical Microelectrodes. Frontiers in Neuroscience, 2018, 12, 772.	1.4	17
954	Exploring representations of human grasping in neural, muscle and kinematic signals. Scientific Reports, 2018, 8, 16669.	1.6	32
955	Single Neuron Firing Rate Statistics in Motor Cortex During Execution and Observation of Movement. , 2018, 2018, 981-986.		0
956	Robust Local Field Potential-based Neural Decoding by Actively Selecting Discriminative Channels. , 2018, 2018, 1992-1995.		1
957	Brainâ€“Computer Interfaces. , 2018, , 341-356.		2

#	ARTICLE	IF	CITATIONS
958	Invasive Brain-Computer Interfaces for Functional Restoration. , 2018, , 379-391.		1
959	Prospects for a Robust Cortical Recording Interface. , 2018, , 393-413.		1
960	Invasive Brain-Computer Interfaces and Neural Recordings From Humans. Handbook of Behavioral Neuroscience, 2018, 28, 527-539.	0.7	7
961	A Distributed-Parameter Control System Using Electromagnetic Images Stimulation for Human-Machine Perception Interface. , 2018, , .		2
962	Mixed-domain analog frontend circuit design for power-efficient multi-channel sensor systems : (Invited Paper). , 2018, , .		2
963	Decoding Voluntary Movement of Single Hand Based on Analysis of Brain Connectivity by Using EEG Signals. Frontiers in Human Neuroscience, 2018, 12, 381.	1.0	29
964	Estimation of Viewed Image Categories via CCA Using Human Brain Activity. , 2018, , .		6
965	Watch, Imagine, Attempt: Motor Cortex Single-Unit Activity Reveals Context-Dependent Movement Encoding in Humans With Tetraplegia. Frontiers in Human Neuroscience, 2018, 12, 450.	1.0	24
966	Dissolvable material-sheathed microneedle-electrode device slid into a narrow gap of the brain. , 2018, , .		0
967	Progress towards restoring upper limb movement and sensation through intracortical brain-computer interfaces. Current Opinion in Biomedical Engineering, 2018, 8, 84-92.	1.8	35
968	Focal stimulation of the sheep motor cortex with a chronically implanted minimally invasive electrode array mounted on an endovascular stent. Nature Biomedical Engineering, 2018, 2, 907-914.	11.6	77
969	HD-EEG Based Classification of Motor-Imagery Related Activity in Patients With Spinal Cord Injury. Frontiers in Neurology, 2018, 9, 955.	1.1	9
970	The role of inflammation on the functionality of intracortical microelectrodes. Journal of Neural Engineering, 2018, 15, 066027.	1.8	25
971	Rodent Behavioral Testing to Assess Functional Deficits Caused by Microelectrode Implantation in the Rat Motor Cortex. Journal of Visualized Experiments, 2018, , .	0.2	5
972	Optimizing the learning rate for adaptive estimation of neural encoding models. PLoS Computational Biology, 2018, 14, e1006168.	1.5	32
973	Training in Use of Brain-Computer Machine Interface-Controlled Robotic Hand Improves Accuracy Decoding Two Types of Hand Movements. Frontiers in Neuroscience, 2018, 12, 478.	1.4	12
974	Intelligent Multimodal Framework for Human Assistive Robotics Based on Computer Vision Algorithms. Sensors, 2018, 18, 2408.	2.1	10
975	Microfabricated intracortical extracellular matrix-microelectrodes for improving neural interfaces. Microsystems and Nanoengineering, 2018, 4, 30.	3.4	22

#	ARTICLE	IF	CITATIONS
976	Brain Computer Interfaces in Rehabilitation Medicine. <i>PM and R</i> , 2018, 10, S233-S243.	0.9	59
977	Decoding Cognitive Processes from Neural Ensembles. <i>Trends in Cognitive Sciences</i> , 2018, 22, 1091-1102.	4.0	25
978	Paradigm Shift in Sensorimotor Control Research and Brain Machine Interface Control: The Influence of Context on Sensorimotor Representations. <i>Frontiers in Neuroscience</i> , 2018, 12, 579.	1.4	19
979	Meeting brainâ€™computer interface user performance expectations using a deep neural network decoding framework. <i>Nature Medicine</i> , 2018, 24, 1669-1676.	15.2	123
980	Neurolinguistics Research Advancing Development of a Direct-Speech Brain-Computer Interface. <i>IScience</i> , 2018, 8, 103-125.	1.9	58
981	Implicit Grasp Force Representation in Human Motor Cortical Recordings. <i>Frontiers in Neuroscience</i> , 2018, 12, 801.	1.4	20
982	A microfabricated nerve-on-a-chip platform for rapid assessment of neural conduction in explanted peripheral nerve fibers. <i>Nature Communications</i> , 2018, 9, 4403.	5.8	38
983	Single-Finger Neural Basis Information-Based Neural Decoder for Multi-Finger Movements. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2018, 26, 2240-2248.	2.7	1
984	Is Lower Extremity Transplantation a Superior Alternative to Prostheses? Noâ€™At Least Not Yet. <i>Current Transplantation Reports</i> , 2018, 5, 349-357.	0.9	0
985	Latent Factors and Dynamics in Motor Cortex and Their Application to Brainâ€™Machine Interfaces. <i>Journal of Neuroscience</i> , 2018, 38, 9390-9401.	1.7	81
986	A Characterization of Brain-Computer Interface Performance Trade-Offs Using Support Vector Machines and Deep Neural Networks to Decode Movement Intent. <i>Frontiers in Neuroscience</i> , 2018, 12, 763.	1.4	31
987	Blending Electronics with the Human Body: A Pathway toward a Cybernetic Future. <i>Advanced Science</i> , 2018, 5, 1700931.	5.6	83
988	Biomimetic microfluidic neurons for bio-hybrid experiments. <i>Artificial Life and Robotics</i> , 2018, 23, 402-408.	0.7	1
989	Motor Control and Sensory Feedback Enhance Prosthesis Embodiment and Reduce Phantom Pain After Long-Term Hand Amputation. <i>Frontiers in Human Neuroscience</i> , 2018, 12, 352.	1.0	134
990	The History and Horizons of Microscale Neural Interfaces. <i>Micromachines</i> , 2018, 9, 445.	1.4	17
991	Neuromodulation in the restoration of function after spinal cord injury. <i>Lancet Neurology</i> , The, 2018, 17, 905-917.	4.9	119
992	A CSPAM-BA-SVM Approach for Motor Imagery BCI System. <i>IEEE Access</i> , 2018, 6, 49192-49208.	2.6	98
993	Robust Closed-Loop Control of a Cursor in a Person with Tetraplegia using Gaussian Process Regression. <i>Neural Computation</i> , 2018, 30, 2986-3008.	1.3	20

#	ARTICLE	IF	CITATIONS
994	Communication Mattersâ€”Pitfalls and Promise of Hightech Communication Devices in Palliative Care of Severely Physically Disabled Patients With Amyotrophic Lateral Sclerosis. <i>Frontiers in Neurology</i> , 2018, 9, 603.	1.1	40
995	Liquid Crystal Elastomer-Based Microelectrode Array for In Vitro Neuronal Recordings. <i>Micromachines</i> , 2018, 9, 416.	1.4	24
996	A Fully Implantable Wireless ECoG 128-Channel Recording Device for Human Brainâ€”Machine Interfaces: W-HERBS. <i>Frontiers in Neuroscience</i> , 2018, 12, 511.	1.4	34
997	Directly printed wearable electronic sensing textiles towards humanâ€”machine interfaces. <i>Journal of Materials Chemistry C</i> , 2018, 6, 12841-12848.	2.7	54
998	Decoding Motor Imagery through Common Spatial Pattern Filters at the EEG Source Space. <i>Computational Intelligence and Neuroscience</i> , 2018, 2018, 1-10.	1.1	41
1000	Neuromagnetic Decoding of Simultaneous Bilateral Hand Movements for Multidimensional Brainâ€”Machine Interfaces. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2018, 26, 1301-1310.	2.7	36
1001	A simple, inexpensive method for subcortical stereotactic targeting in nonhuman primates. <i>Journal of Neuroscience Methods</i> , 2018, 305, 89-97.	1.3	6
1002	Optimization of sampling rate and smoothing improves classification of high frequency power in electrocorticographic brain signals. <i>Biomedical Physics and Engineering Express</i> , 2018, 4, 045012.	0.6	6
1003	A fingertip force prediction model for grasp patterns characterised from the chaotic behaviour of EEG. <i>Medical and Biological Engineering and Computing</i> , 2018, 56, 2095-2107.	1.6	14
1004	Projection Mapping User Interface for Disabled People. <i>Journal of Healthcare Engineering</i> , 2018, 2018, 1-6.	1.1	3
1005	Decoding Pigeon Behavior Outcomes Using Functional Connections among Local Field Potentials. <i>Computational Intelligence and Neuroscience</i> , 2018, 2018, 1-13.	1.1	10
1006	Brain-controlled modulation of spinal circuits improves recovery from spinal cord injury. <i>Nature Communications</i> , 2018, 9, 3015.	5.8	108
1007	Extracting wavelet based neural features from human intracortical recordings for neuroprosthetics applications. <i>Bioelectronic Medicine</i> , 2018, 4, 11.	1.0	27
1008	Advances in Invasive Brainâ€”Computer Interface Technology and Decoding Methods for Restoring Movement and Future Applications. , 2018, , 415-425.		3
1009	Hierarchically distributed microstructure design of haptic sensors for personalized fingertip mechanosensational manipulation. <i>Materials Horizons</i> , 2018, 5, 920-931.	6.4	37
1010	Brain-machine interfaces for rehabilitation in stroke: A review. <i>NeuroRehabilitation</i> , 2018, 43, 77-97.	0.5	87
1011	Syringe-injectable Mesh Electronics for Stable Chronic Rodent Electrophysiology. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	22
1012	Decoding of Ankle Flexion and Extension from Cortical Current Sources Estimated from Non-invasive Brain Activity Recording Methods. <i>Frontiers in Neuroscience</i> , 2017, 11, 733.	1.4	8



#	ARTICLE	IF	CITATIONS
1013	Characterization of Hand Clenching in Human Sensorimotor Cortex Using High-, and Ultra-High Frequency Band Modulations of Electroencephalogram. <i>Frontiers in Neuroscience</i> , 2018, 12, 110.	1.4	18
1014	Research of Mobile Robot Control System Based on SSVEP Brain Computer Interaction. , 2018, , .		2
1015	Rehabilitation robots for the treatment of sensorimotor deficits: a neurophysiological perspective. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2018, 15, 46.	2.4	240
1016	Robotic Rehabilitation and Spinal Cord Injury: a Narrative Review. <i>Neurotherapeutics</i> , 2018, 15, 604-617.	2.1	123
1017	Decoding unconstrained arm movements in primates using high-density electrocorticography signals for brain-machine interface use. <i>Scientific Reports</i> , 2018, 8, 10583.	1.6	15
1018	The Monkey Question. , 2018, , 71-101.		0
1019	Feasibility and safety of shared EEG/EOG and vision-guided autonomous whole-arm exoskeleton control to perform activities of daily living. <i>Scientific Reports</i> , 2018, 8, 10823.	1.6	61
1020	Feasibility of Nitrogen Doped Ultrananocrystalline Diamond Microelectrodes for Electrophysiological Recording From Neural Tissue. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018, 6, 85.	2.0	8
1021	A simulation study on the effects of neuronal ensemble properties on decoding algorithms for intracortical brain-machine interfaces. <i>BioMedical Engineering OnLine</i> , 2018, 17, 28.	1.3	2
1022	Evaluation of classification performance of functional near infrared spectroscopy signals during movement execution for developing a brain-computer interface application using optimal channels. <i>Journal of Near Infrared Spectroscopy</i> , 2018, 26, 209-221.	0.8	8
1023	Phase reorganization leads to transient $\beta$ -LFP spatial wave patterns in motor cortex during steady-state movement preparation. <i>Journal of Neurophysiology</i> , 2018, 119, 2212-2228.	0.9	26
1024	Stable long-term BCI-enabled communication in ALS and locked-in syndrome using LFP signals. <i>Journal of Neurophysiology</i> , 2018, 120, 343-360.	0.9	91
1025	The role of oligodendrocytes and their progenitors on neural interface technology: A novel perspective on tissue regeneration and repair. <i>Biomaterials</i> , 2018, 183, 200-217.	5.7	30
1026	Design of Isometric and Isotonic Soft Hand for Rehabilitation Combining with Noninvasive Brain Machine Interface. , 2018, , .		1
1027	Analysis of User Interaction with a Brain-Computer Interface Based on Steady-State Visually Evoked Potentials: Case Study of a Game. <i>Computational Intelligence and Neuroscience</i> , 2018, 2018, 1-10.	1.1	17
1028	Progress in Neuroengineering for brain repair: New challenges and open issues. <i>Brain and Neuroscience Advances</i> , 2018, 2, 239821281877647.	1.8	27
1029	Data-Driven Transducer Design and Identification for Internally-Paced Motor Brain Computer Interfaces: A Review. <i>Frontiers in Neuroscience</i> , 2018, 12, 540.	1.4	5
1030	Long-term stability of neural signals from microwire arrays implanted in common marmoset motor cortex and striatum. <i>Biomedical Physics and Engineering Express</i> , 2018, 4, 055025.	0.6	16



#	ARTICLE	IF	CITATIONS
1031	Towards Real-Time, Continuous Decoding of Gripping Force From Deep Brain Local Field Potentials. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1460-1468.	2.7	19
1032	A rodent brain-machine interface paradigm to study the impact of paraplegia on BMI performance. Journal of Neuroscience Methods, 2018, 306, 103-114.	1.3	7
1033	Electrocorticogram based brain-computer interfaces. , 2018, , 197-227.		3
1034	Extinction as a deficit of the decision-making circuitry in the posterior parietal cortex. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2018, 151, 163-182.	1.0	2
1035	Brain-actuated functional electrical stimulation elicits lasting arm motor recovery after stroke. Nature Communications, 2018, 9, 2421.	5.8	342
1036	Soft Hydrogel Zwitterionic Coatings Minimize Fibroblast and Macrophage Adhesion on Polyimide Substrates. Langmuir, 2019, 35, 1085-1099.	1.6	31
1037	Toward Functional Restoration of the Central Nervous System: A Review of Translational Neuroscience Principles. Neurosurgery, 2019, 84, 30-40.	0.6	20
1038	Brain-Machine Interfaces: Powerful Tools for Clinical Treatment and Neuroscientific Investigations. Neuroscientist, 2019, 25, 139-154.	2.6	51
1039	Developing a Three- to Six-State EEG-Based Brain-Computer Interface for a Virtual Robotic Manipulator Control. IEEE Transactions on Biomedical Engineering, 2019, 66, 977-987.	2.5	24
1040	A High Definition Noninvasive Neuromuscular Electrical Stimulation System for Cortical Control of Combinatorial Rotary Hand Movements in a Human With Tetraplegia. IEEE Transactions on Biomedical Engineering, 2019, 66, 910-919.	2.5	26
1041	Control of a robotic prosthesis simulation by a closed-loop intracortical brain-machine interface. , 2019, , .		1
1042	Emerging Encapsulation Technologies for Long-Term Reliability of Microfabricated Implantable Devices. Micromachines, 2019, 10, 508.	1.4	56
1043	Monolayer Graphene Coating of Intracortical Probes for Long-Lasting Neural Activity Monitoring. Advanced Healthcare Materials, 2019, 8, e1801331.	3.9	25
1044	Personalized adaptive instruction design (PAID) for brain-computer interface using reinforcement learning and deep learning: simulated data study. Brain-Computer Interfaces, 2019, 6, 36-48.	0.9	3
1045	Decoding Hidden Cognitive States From Behavior and Physiology Using a Bayesian Approach. Neural Computation, 2019, 31, 1751-1788.	1.3	23
1046	Decoding task engagement from distributed network electrophysiology in humans. Journal of Neural Engineering, 2019, 16, 056015.	1.8	22
1047	Clustering Neural Patterns in Kernel Reinforcement Learning Assists Fast Brain Control in Brain-Machine Interfaces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1684-1694.	2.7	19
1048	Viral-Mediated Optogenetic Stimulation of Peripheral Motor Nerves in Non-human Primates. Frontiers in Neuroscience, 2019, 13, 759.	1.4	11

#	ARTICLE	IF	CITATIONS
1049	Auditory imagery classification with a non-invasive Brain Computer Interface. , 2019, , .		4
1050	Clinical neuroprosthetics: Today and tomorrow. <i>Journal of Clinical Neuroscience</i> , 2019, 68, 13-19.	0.8	13
1051	Removing the need for invasive brain surgery: the potential of stent electrodes. <i>Bioelectronics in Medicine</i> , 2019, 2, 9-11.	2.0	3
1052	Neurorestorative interventions involving bioelectronic implants after spinal cord injury. <i>Bioelectronic Medicine</i> , 2019, 5, 10.	1.0	22
1053	Strategies for neural control of prosthetic limbs: from electrode interfacing to 3D printing. <i>Materials</i> , 2019, 12, 1927.	1.3	12
1054	Brain-Computer Interface Research. <i>Springer Briefs in Electrical and Computer Engineering</i> , 2019, , .	0.3	4
1055	Restoration of Finger and Arm Movements Using Hybrid Brain/Neural Assistive Technology in Everyday Life Environments. <i>Springer Briefs in Electrical and Computer Engineering</i> , 2019, , 53-61.	0.3	13
1056	Real-Time InÂVivo Control of Neural Membrane Potential by Electro-Ionic Modulation. <i>IScience</i> , 2019, 17, 347-358.	1.9	3
1057	A Passivity-Based Nonlinear Admittance Control With Application to Powered Upper-Limb Control Under Unknown Environmental Interactions. <i>IEEE/ASME Transactions on Mechatronics</i> , 2019, 24, 1473-1484.	3.7	27
1058	Neural correlates of unstructured motor behaviors. <i>Journal of Neural Engineering</i> , 2019, 16, 066026.	1.8	9
1059	Learning outside the box. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15316-15318.	3.3	1
1060	Electrical connectors for neural implants: design, state of the art and future challenges of an underestimated component. <i>Journal of Neural Engineering</i> , 2019, 16, 061002.	1.8	28
1061	Sensor Modalities for Brain-Computer Interface Technology: A Comprehensive Literature Review. <i>Neurosurgery</i> , 2020, 86, E108-E117.	0.6	47
1062	Transcending the brain: is there a cost to hacking the nervous system?. <i>Brain Communications</i> , 2019, 1, fcz015.	1.5	8
1063	Bypassing stroke-damaged neural pathways via a neural interface induces targeted cortical adaptation. <i>Nature Communications</i> , 2019, 10, 4699.	5.8	22
1064	Classification of Articulator Movements and Movement Direction from Sensorimotor Cortex Activity. <i>Scientific Reports</i> , 2019, 9, 14165.	1.6	17
1065	An exoskeleton controlled by an epidural wireless brainâ€“machine interface in a tetraplegic patient: a proof-of-concept demonstration. <i>Lancet Neurology</i> , The, 2019, 18, 1112-1122.	4.9	212
1066	Enhancing VAEs for collaborative filtering. , 2019, , .		24

#	ARTICLE	IF	CITATIONS
1067	Human motor decoding from neural signals: a review. BMC Biomedical Engineering, 2019, 1, 22.	1.7	44
1068	Bond Slip Law and Micropore Structure of Freeze-thaw Concrete. IOP Conference Series: Earth and Environmental Science, 2019, 304, 052055.	0.2	1
1069	Chronic stability of local field potentials from standard and modified Blackrock microelectrode arrays implanted in the rat motor cortex. Biomedical Physics and Engineering Express, 2019, 5, 065017.	0.6	4
1070	Character input system based on EMG signals generated by eye blinks. , 2019, , .		0
1071	Reconstructing Degree of Forearm Rotation from Imagined movements for BCI-based Robot Hand Control. , 2019, 2019, 3014-3017.		0
1072	Electronic skin for healthcare monitoring. , 2019, , .		0
1073	The rise of flexible electronics in neuroscience, from materials selection to in vitro and in vivo applications. Advances in Physics: X, 2019, 4, 1664319.	1.5	12
1074	Hybrid Brain/Muscle Signals Powered Wearable Walking Exoskeleton Enhancing Motor Ability in Climbing Stairs Activity. IEEE Transactions on Medical Robotics and Bionics, 2019, 1, 218-227.	2.1	104
1075	A benchtop system to assess the feasibility of a fully independent and implantable brain-machine interface. Journal of Neural Engineering, 2019, 16, 066043.	1.8	13
1076	Hybrid LAE-CMOS Force-Sensing System Employing TFT-Based Compressed Sensing for Scalability of Tactile Sensing Skins. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 1264-1276.	2.7	14
1077	Dimensions of Ethical Direct-to-Consumer Neurotechnologies. AJOB Neuroscience, 2019, 10, 152-166.	0.6	49
1078	Learning active sensing strategies using a sensory brain-machine interface. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17509-17514.	3.3	17
1079	Decoding elbow movement with Kalman Filter using non-invasive EEG. , 2019, , .		1
1080	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
1081	Semi-Autonomous Tongue Control of an Assistive Robotic Arm for Individuals with Quadriplegia. , 2019, 2019, 157-162.		5
1082	Method for spike detection from microelectrode array recordings contaminated by artifacts of simultaneous two-photon imaging. PLoS ONE, 2019, 14, e0221510.	1.1	3
1083	Investigation of Insertion Method to Achieve Chronic Recording Stability of a Semi-Rigid Implantable Neural Probe. , 2019, , .		5
1084	A 25 Mbps, 12.4 Mbps/b DQPSK Backscatter Data Uplink for the NeuroDisc Brain-machine Computer Interface. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 858-867.	2.7	15

#	ARTICLE	IF	CITATIONS
1085	Precision electronic medicine in the brain. <i>Nature Biotechnology</i> , 2019, 37, 1007-1012.	9.4	62
1086	Upper limb sensorimotor restoration through brain-computer interface technology in tetraparesis. <i>Current Opinion in Biomedical Engineering</i> , 2019, 11, 85-101.	1.8	13
1087	Single-cell selectivity and functional architecture of human lateral occipital complex. <i>PLoS Biology</i> , 2019, 17, e3000280.	2.6	9
1088	Return of cybernetics. <i>Nature Machine Intelligence</i> , 2019, 1, 385-385.	8.3	6
1089	DESIGN OF CONTROL SYSTEM FOR MOTOR IMAGERY BASED NEURO-AID APPLICATION. <i>Biomedical Engineering - Applications, Basis and Communications</i> , 2019, 31, 1950031.	0.3	2
1090	Brain-machine interfaces from motor to mood. <i>Nature Neuroscience</i> , 2019, 22, 1554-1564.	7.1	157
1091	A graphical user interface to assess the neuroinflammatory response to intracortical microelectrodes. <i>Journal of Neuroscience Methods</i> , 2019, 317, 141-148.	1.3	4
1092	Human-Robot Cooperation via Brain Computer Interface in Assistive Scenario. <i>Lecture Notes in Electrical Engineering</i> , 2019, , 115-131.	0.3	4
1093	Mixed Spatial and Movement Representations in the Primate Posterior Parietal Cortex. <i>Frontiers in Neural Circuits</i> , 2019, 13, 15.	1.4	31
1094	Pairwise and variance based signal compression algorithm (PVBSC) in the P300 based speller systems using EEG signals. <i>Computer Methods and Programs in Biomedicine</i> , 2019, 176, 149-157.	2.6	10
1095	Ultracompact Multielectrode Array for Neurological Monitoring. <i>Sensors</i> , 2019, 19, 2286.	2.1	4
1096	Noninvasive neuroimaging enhances continuous neural tracking for robotic device control. <i>Science Robotics</i> , 2019, 4, .	9.9	227
1097	Principled BCI Decoder Design and Parameter Selection Using a Feedback Control Model. <i>Scientific Reports</i> , 2019, 9, 8881.	1.6	28
1098	Single-paradigm and hybrid brain computing interfaces and their use by disabled patients. <i>Journal of Neural Engineering</i> , 2019, 16, 061001.	1.8	13
1099	Accurate Estimation of Neural Population Dynamics without Spike Sorting. <i>Neuron</i> , 2019, 103, 292-308.e4.	3.8	195
1100	Spinal cord repair: advances in biology and technology. <i>Nature Medicine</i> , 2019, 25, 898-908.	15.2	323
1101	Stimulated activity in the neural tissue. <i>Journal of Applied Physics</i> , 2019, 125, 211101.	1.1	5
1102	In vivo Recording Quality of Mechanically Decoupled Floating Versus Skull-Fixed Silicon-Based Neural Probes. <i>Frontiers in Neuroscience</i> , 2019, 13, 464.	1.4	13

#	ARTICLE	IF	CITATIONS
1103	Biomimetic Spiking Neural Network (SNN) Systems for "In Vitro" Cells Stimulation. , 2019, , .		0
1104	In Vitro Neuronal Networks. <i>Advances in Neurobiology</i> , 2019, , .	1.3	12
1105	Two-stage regression of high-density scalp electroencephalograms visualizes force regulation signaling during muscle contraction. <i>Journal of Neural Engineering</i> , 2019, 16, 056020.	1.8	10
1106	Bioactive Neuroelectronic Interfaces. <i>Frontiers in Neuroscience</i> , 2019, 13, 269.	1.4	26
1107	Attempted Arm and Hand Movements can be Decoded from Low-Frequency EEG from Persons with Spinal Cord Injury. <i>Scientific Reports</i> , 2019, 9, 7134.	1.6	91
1108	Closed-Loop Systems and In Vitro Neuronal Cultures: Overview and Applications. <i>Advances in Neurobiology</i> , 2019, 22, 351-387.	1.3	10
1110	Chronic recording and electrochemical performance of amorphous silicon carbide-coated Utah electrode arrays implanted in rat motor cortex. <i>Journal of Neural Engineering</i> , 2019, 16, 046006.	1.8	24
1111	Estimating Viewed Image Categories from Human Brain Activity via Semi-supervised Fuzzy Discriminative Canonical Correlation Analysis. , 2019, , .		5
1112	Real-Time Performance of a Tactile Neuroprosthesis on Awake Behaving Rats. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2019, 27, 1053-1062.	2.7	17
1113	Decoding Movements from Cortical Ensemble Activity Using a Long Short-Term Memory Recurrent Network. <i>Neural Computation</i> , 2019, 31, 1085-1113.	1.3	30
1114	Durable soft neural micro-electrode coating by an electrochemical synthesis of PEDOT:PSS / graphene oxide composites. <i>Electrochimica Acta</i> , 2019, 313, 79-90.	2.6	43
1115	Precise Tubular Braid Structures of Ultrafine Microwires as Neural Probes: Significantly Reduced Chronic Immune Response and Greater Local Neural Survival in Rat Cortex. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2019, 27, 846-856.	2.7	4
1116	Brain-Computer Interfaces in Quadriplegic Patients. <i>Neurosurgery Clinics of North America</i> , 2019, 30, 275-281.	0.8	11
1117	Intrinsic Variable Learning for Brain-Machine Interface Control by Human Anterior Intraparietal Cortex. <i>Neuron</i> , 2019, 102, 694-705.e3.	3.8	31
1118	Reliability of motor and sensory neural decoding by threshold crossings for intracortical brain-machine interface. <i>Journal of Neural Engineering</i> , 2019, 16, 036011.	1.8	21
1119	Electrochemically Controlled Drug Release from a Conducting Polymer Hydrogel (PDMAAp/PEDOT) for Local Therapy and Bioelectronics. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801488.	3.9	71
1120	In-home and remote use of robotic body surrogates by people with profound motor deficits. <i>PLoS ONE</i> , 2019, 14, e0212904.	1.1	18
1121	Towards neural co-processors for the brain: combining decoding and encoding in brain-machine computer interfaces. <i>Current Opinion in Neurobiology</i> , 2019, 55, 142-151.	2.0	36

#	ARTICLE	IF	CITATIONS
1122	Optimized Real-Time Biomimetic Neural Network on FPGA for Bio-hybridization. <i>Frontiers in Neuroscience</i> , 2019, 13, 377.	1.4	33
1123	Direct Neural Interface. , 2019, , 139-174.		0
1124	Priorities for the design and control of upper limb prostheses: A focus group study. <i>Disability and Health Journal</i> , 2019, 12, 706-711.	1.6	11
1125	Biomarkers for closed-loop deep brain stimulation in Parkinson disease and beyond. <i>Nature Reviews Neurology</i> , 2019, 15, 343-352.	4.9	132
1126	Adaptive Artifact Removal From Intracortical Channels for Accurate Decoding of a Force Signal in Freely Moving Rats. <i>Frontiers in Neuroscience</i> , 2019, 13, 350.	1.4	13
1127	Volitional control of single-electrode high gamma local field potentials by people with paralysis. <i>Journal of Neurophysiology</i> , 2019, 121, 1428-1450.	0.9	12
1128	Evaluating If Children Can Use Simple Brain Computer Interfaces. <i>Frontiers in Human Neuroscience</i> , 2019, 13, 24.	1.0	38
1129	Bioinspired Adhesive Architectures: From Skin Patch to Integrated Bioelectronics. <i>Advanced Materials</i> , 2019, 31, e1803309.	11.1	203
1130	Shared control of a robotic arm using non-invasive brain-computer interface and computer vision guidance. <i>Robotics and Autonomous Systems</i> , 2019, 115, 121-129.	3.0	59
1131	Combined Sensing, Cognition, Learning, and Control for Developing Future Neuro-Robotics Systems: A Survey. <i>IEEE Transactions on Cognitive and Developmental Systems</i> , 2019, 11, 148-161.	2.6	22
1132	Vision-aided brain-machine interface training system for robotic arm control and clinical application on two patients with cervical spinal cord injury. <i>BioMedical Engineering OnLine</i> , 2019, 18, 14.	1.3	11
1133	Distinct types of neural reorganization during long-term learning. <i>Journal of Neurophysiology</i> , 2019, 121, 1329-1341.	0.9	40
1134	Restoring Movement in Paralysis with a Bioelectronic Neural Bypass Approach: Current State and Future Directions. <i>Cold Spring Harbor Perspectives in Medicine</i> , 2019, 9, a034306.	2.9	7
1135	Fixed muscle synergies and their potential to improve the intuitive control of myoelectric assistive technology for upper extremities. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2019, 16, 6.	2.4	21
1136	Human Brain/Cloud Interface. <i>Frontiers in Neuroscience</i> , 2019, 13, 112.	1.4	47
1138	Flexible fiber-based optoelectronics for neural interfaces. <i>Chemical Society Reviews</i> , 2019, 48, 1826-1852.	18.7	100
1139	Decoding neural activity to predict rat locomotion using intracortical and epidural arrays. <i>Journal of Neural Engineering</i> , 2019, 16, 036005.	1.8	9
1140	Design and testing of a 96-channel neural interface module for the Networked Neuroprosthesis system. <i>Bioelectronic Medicine</i> , 2019, 5, 3.	1.0	19

#	ARTICLE	IF	CITATIONS
1141	Age-dependent differences in learning to control a robot arm using a body-machine interface. Scientific Reports, 2019, 9, 1960.	1.6	10
1142	A Reconfigurable Neural Recording Front-End IC for Multimodal Operation. , 2019, , .		2
1143	Single Relay Selection in the Cognitive Cooperative Network: Toward Bandwidth Efficiency Improvement. , 2019, , .		7
1144	Super Long Interval Time-Lapse Image Generation for Proactive Preservation of Cultural Heritage Using Crowdsourcing. , 2019, , .		1
1145	A Spatially Consistent Geometric D2D Small-Scale Fading Model for Multiple Frequencies. , 2019, , .		2
1146	Experimental Characterization of Rectifier Made of Pump-Charge and DCâ€“DC Converter for Receiver of Wireless Power Transfer. , 2019, , .		2
1147	Prediction of Cardiovascular Disease using Data Mining Technique. , 2019, , .		1
1148	Photoplethysmography: Light Emitter Diode Wavelength Derivation from the Absorption Spectra of Haemoglobin. , 2019, , .		1
1149	Application of Piezoresistive Stress Sensor in Mold-1st Fan-out Wafer Level Packaging Processes. , 2019, , .		2
1150	Criteria for Selection Envelope Tracking Power Supply Parameters for High Peak-to-Average Power Ratio Applications. , 2019, , .		14
1151	Novel Runner-Root Algorithm based Maximum Power Point Tracking Approach for Permanent-Magnet Synchronous Generator Direct-Driven Wind Energy Conversion Systems. , 2019, , .		0
1152	neomento SAD - VR Treatment For Social Anxiety. , 2019, , .		3
1153	State Space Models with Dynamical and Sparse Variances, and Inference by EM Message Passing. , 2019, , .		3
1154	Discussion on the Rotation Transformation in Fully Polarimetric Synthetic Aperture Radar DARA Interpretation. , 2019, , .		0
1155	Design and Automatic Generation of High-Speed Circuits for Wireline Communications. , 2019, , .		0
1157	Construction of Environmental Map Based on Lidar Based Tracking System. , 2019, , .		1
1158	Fast Continuous Wavelet Transform for Brain Computer Interface using piecewise polynomials. , 2019, , .		3
1159	Digital and Accessible Library: Inclusive Innovation for the Digitization of Educational Materials and Libraries. , 2019, , .		1

#	ARTICLE	IF	CITATIONS
1160	FPGA-based LED Display Technology. , 2019, , .		2
1161	A simple and practical approach to development of the fast algorithms for matrix-vector multiplication. , 2019, , .		0
1162	Optimizing Secrecy Performance of Trusted RF Relay against External Eavesdropping. , 2019, , .		1
1163	Research on the Wheel Model Automatic Identification System. , 2019, , .		2
1164	A SSVEP-Based BCI for Controlling a 4-DOF Robotic Manipulator. , 2019, , .		1
1165	Synchronous approach for modeling spiking neurons. , 2019, , .		0
1166	Survey on Automatic Script Identification Techniques. , 2019, , .		1
1167	On Discharge Inception Voltage for Insulators under Non-uniform Field with AC Voltage. , 2019, , .		1
1168	A Design of APFC Module Applied in Induction Machine Driver. , 2019, , .		0
1169	User-state Prediction using Brain Connectivity. , 2019, , .		1
1170	Speech Care System for Stroke Based on Asynchronous Brain-Computer Interface (BCI). , 2019, , .		1
1171	From thought to action: The brainâ€“machine interface in posterior parietal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26274-26279.	3.3	49
1172	An Investigation of System Architecture for Autonomous Vehicle: Modeling and Simulation. , 2019, , .		0
1173	EVER 2019 List of Reviewers Page. , 2019, , .		0
1175	A Trial Robotic Wheel Unit for Mobile Platform. , 2019, , .		0
1176	Multiple Biological Network Alignment through Network Generation and Feature Weight Annotations. , 2019, , .		1
1177	A Permissioned Blockchain Approach to the Authorization Process in Electronic Health Records. , 2019, , .		9
1179	Fine-grained Image Caption based on Multi-level Attention. , 2019, , .		0



#	ARTICLE	IF	CITATIONS
1180	Radio Frequency Interference Devices: the SMOS Experience. , 2019, , .		3
1181	Accurate Lane Detection with Atrous Convolution and Spatial Pyramid Pooling for Autonomous Driving. , 2019, , .		8
1182	Website Log Statistical Testing and Analysis. , 2019, , .		0
1183	AR Brain-Shift Display for Computer-Assisted Neurosurgery. , 2019, , .		3
1184	ICACC 2019 TOC. , 2019, , .		0
1185	Emerging micro and nanotechnologies in neuroscience: Devices, fabrication methods, and implementation in monitoring of neural activity and drug delivery. Technology, 2019, 07, 57-83.	1.4	5
1186	Distributed processing of movement signaling. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 26266-26273.	3.3	5
1187	Employing Whole-Body Control in Assistive Robotics. , 2019, , .		20
1188	Towards a Modular Brain-Machine Interface for Intelligent Vehicle Systems Control â€” A CARLA Demonstration. , 2019, , .		0
1189	Attitude Control of Satellites Actuated by Hybrid Actuators. , 2019, , .		1
1190	First Vertically Stacked Tensily Strained Ge <sub>0.98</sub> Si <sub>0.02</sub> nGAAFETs with No Parasitic Channel and L <sub>G</sub> = 40 nm Featuring Record I <sub>ON</sub> = 48 $\frac{1}{4}$ A at V <sub>OV</sub> =V <sub>DS</sub> =0.5V and Record G <sub>m,max</sub> ( $\frac{1}{4}$ S/ $\frac{1}{4}$ m)/SS <sub>SAT</sub> (mV/dec) = 8.3 at V <sub>DS</sub> =0.5V. , 2019, , .		5
1191	Paintable Wireless Passive Sensor based on Electromagnetic Waveguide to Detect Loose Bolts for Remote Infrastructure Inspection. , 2019, , .		3
1192	Microwave Heating Study of Dielectric Material Placed at the Injection Port of an E-Plane Bend. , 2019, , .		0
1193	Unraveling the Brain With High-Density CMOS Neural Probes: Tackling the Challenges of Neural Interfacing. IEEE Solid-State Circuits Magazine, 2019, 11, 43-50.	0.5	23
1194	Decoding Movement From Electrocorticographic Activity: A Review. Frontiers in Neuroinformatics, 2019, 13, 74.	1.3	61
1195	The translational landscape in spinal cord injury: focus on neuroplasticity and regeneration. Nature Reviews Neurology, 2019, 15, 732-745.	4.9	180
1196	Development of a closed-loop BMI for elbow movement assistance based on kinematical decoding. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	0.8	0
1197	Electrochemical Evaluation of Layer-by-Layer Drug Delivery Coating for Neural Interfaces. ACS Applied Bio Materials, 2019, 2, 5597-5607.	2.3	5

#	ARTICLE	IF	CITATIONS
1198	7 Closed-Loop Stimulation Methods: Current Practice and Future Promise. , 2019, , .		1
1199	The Ethical Imperative for Neuro-Entrepreneurs. <i>AJOB Neuroscience</i> , 2019, 10, 205-207.	0.6	3
1200	Demonstration of a portable intracortical brain-computer interface. <i>Brain-Computer Interfaces</i> , 2019, 6, 106-117.	0.9	14
1201	Discrimination of Movement-Related Cortical Potentials Exploiting Unsupervised Learned Representations From ECoGs. <i>Frontiers in Neuroscience</i> , 2019, 13, 1248.	1.4	1
1202	Implantable Neural Interfaces and Wearable Tactile Systems for Bidirectional Neuroprosthetic Systems. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801345.	3.9	32
1203	Assistive Robotic Arm Control based on Brain-Machine Interface with Vision Guidance using Convolution Neural Network. , 2019, , .		7
1204	Workshops of the seventh international brain-computer interface meeting: not getting lost in translation. <i>Brain-Computer Interfaces</i> , 2019, 6, 71-101.	0.9	8
1205	Towards Development of an Autonomous Robotic System for Beard Shaving Assistance for Disabled People. , 2019, , .		4
1206	Brain-Computer Interface-Based Stochastic Navigation and Control of a Semiautonomous Mobile Robot in Indoor Environments. <i>IEEE Transactions on Cognitive and Developmental Systems</i> , 2019, 11, 129-141.	2.6	15
1207	Regenerative Medicine in the Digital Age. <i>Computers in Health Care</i> , 2019, , 71-83.	0.2	1
1208	Factors affecting human hand grasp type in tomato fruit-picking: A statistical investigation for ergonomic development of harvesting robot. <i>Computers and Electronics in Agriculture</i> , 2019, 157, 90-97.	3.7	43
1209	Disturbance Observer-Based Fault-Tolerant Adaptive Control for Nonlinearly Parameterized Systems. <i>IEEE Transactions on Industrial Electronics</i> , 2019, 66, 8681-8691.	5.2	67
1210	Brain-Computer Interface (BCI). , 2019, , 143-152.		1
1211	Optimizing fMRI experimental design for MVPA-based BCI control: Combining the strengths of block and event-related designs. <i>NeuroImage</i> , 2019, 186, 369-381.	2.1	23
1212	Coupling Cortical Neurons through Electronic Memristive Synapse. <i>Advanced Materials Technologies</i> , 2019, 4, 1800350.	3.0	63
1213	A comprehensive review of EEG-based brain-computer interface paradigms. <i>Journal of Neural Engineering</i> , 2019, 16, 011001.	1.8	512
1214	Alumina in bionic feedthroughs: The bionic eye and the future. , 2019, , 283-319.		0
1215	Nanowire Electronics. <i>Nanostructure Science and Technology</i> , 2019, , .	0.1	4

#	ARTICLE	IF	CITATIONS
1216	Decoding Native Cortical Representations for Flexion and Extension at Upper Limb Joints Using Electro-corticography. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 293-303.	2.7	18
1217	Encoding of kinetic and kinematic movement parameters in the sensorimotor cortex: A Brain-Computer Interface perspective. European Journal of Neuroscience, 2019, 50, 2755-2772.	1.2	23
1218	An EOG-based wheelchair robotic arm system for assisting patients with severe spinal cord injuries. Journal of Neural Engineering, 2019, 16, 026021.	1.8	27
1219	Motor-Imagery-Based Teleoperation of a Dual-Arm Robot Performing Manipulation Tasks. IEEE Transactions on Cognitive and Developmental Systems, 2019, 11, 414-424.	2.6	56
1220	Adaptive Neural Control of a Kinematically Redundant Exoskeleton Robot Using Brain-Computer Interfaces. IEEE Transactions on Neural Networks and Learning Systems, 2019, 30, 3558-3571.	7.2	111
1221	Neuroinflammation, oxidative stress, and blood-brain barrier (BBB) disruption in acute Utah electrode array implants and the effect of deferoxamine as an iron chelator on acute foreign body response. Biomaterials, 2019, 188, 144-159.	5.7	51
1223	Multiscale modeling and decoding algorithms for spike-field activity. Journal of Neural Engineering, 2019, 16, 016018.	1.8	22
1224	Soft Poly-Limbs: Toward a New Paradigm of Mobile Manipulation for Daily Living Tasks. Soft Robotics, 2019, 6, 38-53.	4.6	59
1225	Closed-loop cortical control of virtual reach and posture using Cartesian and joint velocity commands. Journal of Neural Engineering, 2019, 16, 026011.	1.8	14
1226	Biomechatronic Applications of Brain-Computer Interfaces. , 2019, , 129-175.		6
1227	Cognitive Reasoning for Compliant Robot Manipulation. Springer Tracts in Advanced Robotics, 2019, , .	0.3	18
1228	Digital Medicine. Computers in Health Care, 2019, , .	0.2	2
1229	An automated behavioral apparatus to combine parameterized reaching and grasping movements in 3D space. Journal of Neuroscience Methods, 2019, 312, 139-147.	1.3	4
1230	Nanowire Bioelectronics. Nanostructure Science and Technology, 2019, , 337-352.	0.1	0
1231	Flexible and Implantable Microelectrodes for Chronically Stable Neural Interfaces. Advanced Materials, 2019, 31, e1804895.	11.1	66
1232	Using High-Frequency Local Field Potentials From Multicortex to Decode Reaching and Grasping Movements in Monkey. IEEE Transactions on Cognitive and Developmental Systems, 2019, 11, 270-280.	2.6	7
1233	Interfacing with the nervous system: a review of current bioelectric technologies. Neurosurgical Review, 2019, 42, 227-241.	1.2	19
1234	Acquisition of a mental strategy to control a virtual tail via brain-computer interface. Cognitive Neuroscience, 2019, 10, 30-43.	0.6	3

#	ARTICLE	IF	CITATIONS
1235	The use of intracranial recordings to decode human language: Challenges and opportunities. <i>Brain and Language</i> , 2019, 193, 73-83.	0.8	34
1236	Citation analysis of the most influential articles on traumatic spinal cord injury. <i>Journal of Spinal Cord Medicine</i> , 2020, 43, 31-38.	0.7	7
1237	The history of BCI: From a vision for the future to real support for personhood in people with locked-in syndrome. <i>Neuroethics</i> , 2020, 13, 163-180.	1.7	50
1238	Reconfiguring Motor Circuits for a Joint Manual and BCI Task. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2020, 28, 248-257.	2.7	7
1239	Fabrication and validation of flexible 3D pillar electrodes for neural electrophysiological recording. <i>Engineering Research Express</i> , 2020, 2, 025025.	0.8	4
1240	Spinal cord neural interfacing in common marmosets ( <i>Callithrix jacchus</i> ). <i>Journal of Neural Engineering</i> , 2020, 17, 016031.	1.8	9
1241	Spike detection and sorting with deep learning. <i>Journal of Neural Engineering</i> , 2020, 17, 016038.	1.8	39
1242	A versatile robotic platform for the design of natural, three-dimensional reaching and grasping tasks in monkeys. <i>Journal of Neural Engineering</i> , 2020, 17, 016004.	1.8	10
1243	Advanced technologies for intuitive control and sensation of prosthetics. <i>Biomedical Engineering Letters</i> , 2020, 10, 119-128.	2.1	19
1244	Printing Flexible and Hybrid Electronics for Human Skin and Eye-Interfaced Health Monitoring Systems. <i>Advanced Materials</i> , 2020, 32, e1902051.	11.1	83
1245	Hand gesture recognition based on motor unit spike trains decoded from high-density electromyography. <i>Biomedical Signal Processing and Control</i> , 2020, 55, 101637.	3.5	65
1246	Early Detection of Human Epileptic Seizures Based on Intracortical Microelectrode Array Signals. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 817-831.	2.5	20
1247	Subject-Independent Brain-Computer Interfaces Based on Deep Convolutional Neural Networks. <i>IEEE Transactions on Neural Networks and Learning Systems</i> , 2020, 31, 3839-3852.	7.2	204
1248	Wearable electroencephalography technologies for brain-computer interfacing. , 2020, , 55-78.		11
1249	Exploring speed-accuracy tradeoff in reaching movements: a neurocomputational model. <i>Neural Computing and Applications</i> , 2020, 32, 13377-13403.	3.2	10
1250	An Integrated Multi-Channel Biopotential Recording Analog Front-End IC With Area-Efficient Driven-Right-Leg Circuit. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2020, 14, 297-304.	2.7	13
1251	Deep Learning Neural Encoders for Motor Cortex. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 2145-2158.	2.5	7
1252	Brain-Machine Interface Induced Morpho-Functional Remodeling of the Neural Motor System in Severe Chronic Stroke. <i>Neurotherapeutics</i> , 2020, 17, 635-650.	2.1	13

#	ARTICLE	IF	CITATIONS
1253	Short reaction times in response to multi-electrode intracortical microstimulation may provide a basis for rapid movement-related feedback. <i>Journal of Neural Engineering</i> , 2020, 17, 016013.	1.8	16
1254	Nanoelectronics for Minimally Invasive Cellular Recordings. <i>Advanced Functional Materials</i> , 2020, 30, 1906210.	7.8	13
1255	Estimating Risk for Future Intracranial, Fully Implanted, Modular Neuroprosthetic Systems: A Systematic Review of Hardware Complications in Clinical Deep Brain Stimulation and Experimental Human Intracortical Arrays. <i>Neuromodulation</i> , 2020, 23, 411-426.	0.4	40
1256	Sensing and Control for Prosthetic Hands in Clinical and Research Applications. , 2020, , 445-468.		12
1257	Reconstruction of hand, elbow and shoulder actual and imagined trajectories in 3D space using EEG slow cortical potentials. <i>Journal of Neural Engineering</i> , 2020, 17, 016065.	1.8	21
1258	A Review of Different Stimulation Methods for Functional Reconstruction and Comparison of Respiratory Function after Cervical Spinal Cord Injury. <i>Applied Bionics and Biomechanics</i> , 2020, 2020, 1-12.	0.5	8
1259	Evaluation of Non-located Force Feedback Driven by Signal-independent Noise. , 2020, , .		0
1260	Tutorial: guidelines for standardized performance tests for electrodes intended for neural interfaces and bioelectronics. <i>Nature Protocols</i> , 2020, 15, 3557-3578.	5.5	142
1261	Bioinspired and Biomimetic Design of Multilayered and Multiscale Structures. , 2020, , 3-19.		1
1262	Bioinspired Design for Energy Storage Devices. , 2020, , 193-211.		0
1263	Bioinspired Underwater Propulsors. , 2020, , 113-139.		6
1264	Investigating the Association between Motor Function, Neuroinflammation, and Recording Metrics in the Performance of Intracortical Microelectrode Implanted in Motor Cortex. <i>Micromachines</i> , 2020, 11, 838.	1.4	1
1265	Aquatic Animals Operating at High Reynolds Numbers. , 2020, , 235-270.		1
1266	Review article: the key technologies of brain-computer interface. <i>Journal of Physics: Conference Series</i> , 2020, 1544, 012190.	0.3	0
1267	Recent advances in bioelectronics chemistry. <i>Chemical Society Reviews</i> , 2020, 49, 7978-8035.	18.7	54
1268	Intra-cortical brain-machine interfaces for controlling upper-limb powered muscle and robotic systems in spinal cord injury. <i>Clinical Neurology and Neurosurgery</i> , 2020, 196, 106069.	0.6	11
1269	Mechanically Robust, Softening Shape Memory Polymer Probes for Intracortical Recording. <i>Micromachines</i> , 2020, 11, 619.	1.4	23
1270	Electronic assistive technology. , 2020, , 437-471.		0

#	ARTICLE	IF	CITATIONS
1271	Classifying Intracortical Brain-Machine Interface Signal Disruptions Based on System Performance and Applicable Compensatory Strategies: A Review. <i>Frontiers in Neurorobotics</i> , 2020, 14, 558987.	1.6	14
1272	Development of a Shoulder Disarticulation Prosthesis System Intuitively Controlled With the Trunk Surface Electromyogram. <i>Frontiers in Neurorobotics</i> , 2020, 14, 542033.	1.6	3
1273	Toward Shared Autonomy Control Schemes for Human-Robot Systems: Action Primitive Recognition Using Eye Gaze Features. <i>Frontiers in Neurorobotics</i> , 2020, 14, 567571.	1.6	9
1274	Scalp electroencephalograms over ipsilateral sensorimotor cortex reflect contraction patterns of unilateral finger muscles. <i>NeuroImage</i> , 2020, 222, 117249.	2.1	9
1275	Shape perception via a high-channel-count neuroprosthesis in monkey visual cortex. <i>Science</i> , 2020, 370, 1191-1196.	6.0	146
1276	Improved Classification Accuracy of Four Class FNIRS-BCI. , 2020, , .		0
1277	HYGRIP: Full-Stack Characterization of Neurobehavioral Signals (fNIRS, EEG, EMG, Force, and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 502	1.4	11
1278	Development of a Polydimethylsiloxane-Based Electrode Array for Electrocorticography. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001152.	1.9	15
1279	A Compliant Ionic Adhesive Electrode with Ultralow Bioelectronic Impedance. <i>Advanced Materials</i> , 2020, 32, e2003723.	11.1	86
1281	Power-saving design opportunities for wireless intracortical brain-computer interfaces. <i>Nature Biomedical Engineering</i> , 2020, 4, 984-996.	11.6	66
1282	Controlling a robotic arm for functional tasks using a wireless head-joystick: A case study of a child with congenital absence of upper and lower limbs. <i>PLoS ONE</i> , 2020, 15, e0226052.	1.1	4
1283	Structure in Neural Activity during Observed and Executed Movements Is Shared at the Neural Population Level, Not in Single Neurons. <i>Cell Reports</i> , 2020, 32, 108006.	2.9	30
1284	Dorsal Column Nuclei Neural Signal Features Permit Robust Machine-Learning of Natural Tactile- and Proprioception-Dominated Stimuli. <i>Frontiers in Systems Neuroscience</i> , 2020, 14, 46.	1.2	2
1285	Brain-Machine Interfaces: A Tale of Two Learners. <i>IEEE Systems, Man, and Cybernetics Magazine</i> , 2020, 6, 12-19.	1.2	45
1286	Adenosine A2A receptor blockade improves neuroprosthetic learning by volitional control of population calcium signal in M1 cortical neurons. <i>Neuropharmacology</i> , 2020, 178, 108250.	2.0	5
1287	A low-power band of neuronal spiking activity dominated by local single units improves the performance of brain-machine interfaces. <i>Nature Biomedical Engineering</i> , 2020, 4, 973-983.	11.6	73
1288	Mechanical suitability of an endovascular braincomputer interface. , 2020, , .		2
1289	Challenges for Large-Scale Cortical Interfaces. <i>Neuron</i> , 2020, 108, 259-269.	3.8	51

#	ARTICLE	IF	CITATIONS
1291	Bioinspired Design of Dental Functionally Graded Multilayer Structures. , 2020, , 140-166.		0
1292	Bionic Organs. , 2020, , 167-192.		1
1293	Bioinspired Design of Nanostructures. , 2020, , 212-232.		0
1294	Flying of Insects. , 2020, , 271-299.		5
1295	Bioinspired Building Envelopes. , 2020, , 343-354.		0
1297	Brain Automation, Panacea for Physical Disabilities. , 2020, , .		0
1299	Increasing power efficiency. Nature Biomedical Engineering, 2020, 4, 937-938.	11.6	2
1300	Human Cortical Bone as a Structural Material. , 2020, , 20-44.		0
1301	Bamboo-Inspired Materials and Structures. , 2020, , 89-110.		5
1302	Designing Nature-Inspired Liquid-Repellent Surfaces. , 2020, , 300-319.		1
1304	Non-linear online low-frequency EEG decoding of arm movements during a pursuit tracking task. , 2020, 2020, 2981-2985.		10
1305	Biomimetic and Soft Robotics. , 2020, , 320-342.		0
1306	Hands-Free Accessible Digital Musical Instruments: Conceptual Framework, Challenges, and Perspectives. IEEE Access, 2020, 8, 163975-163995.	2.6	7
1307	Superhuman Enhancements via Implants: Beyond the Human Mind. Philosophies, 2020, 5, 14.	0.4	6
1308	Neural signal analysis with memristor arrays towards high-efficiency brain-machine interfaces. Nature Communications, 2020, 11, 4234.	5.8	82
1309	State-Based Decoding of Force Signals From Multi-Channel Local Field Potentials. IEEE Access, 2020, 8, 159089-159099.	2.6	12
1310	Bioinspired Design of Multilayered Composites. , 2020, , 45-88.		0
1311	Hardware-Software Co-Design for Brain-Computer Interfaces. , 2020, , .		9

#	ARTICLE	IF	CITATIONS
1312	Operant conditioning of motor cortex neurons reveals neuron-subtype-specific responses in a brain-machine interface task. <i>Scientific Reports</i> , 2020, 10, 19992.	1.6	6
1313	Combination of Augmented Reality Based Brain- Computer Interface and Computer Vision for High-Level Control of a Robotic Arm. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2020, 28, 3140-3147.	2.7	58
1314	Feasibility and Safety of Bilateral Hybrid EEG/EOG Brain/Neural Machine Interaction. <i>Frontiers in Human Neuroscience</i> , 2020, 14, 580105.	1.0	14
1315	Performance Analysis of a Head and Eye Motion-Based Control Interface for Assistive Robots. <i>Sensors</i> , 2020, 20, 7162.	2.1	3
1316	CLoSES: A platform for closed-loop intracranial stimulation in humans. <i>NeuroImage</i> , 2020, 223, 117314.	2.1	21
1317	Reinforcement Learning Based Fast Self-Recalibrating Decoder for Intracortical Brain Machine Interface. <i>Sensors</i> , 2020, 20, 5528.	2.1	2
1318	Toward Standardization of Electrophysiology and Computational Tissue Strain in Rodent Intracortical Microelectrode Models. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 416.	2.0	12
1319	Zwitterionic Polymer Coating Suppresses Microglial Encapsulation to Neural Implants In Vitro and In Vivo. <i>Advanced Biology</i> , 2020, 4, e1900287.	3.0	23
1320	Sliding Mode Control With PID Sliding Surface for Active Vibration Damping of Pneumatically Actuated Soft Robots. <i>IEEE Access</i> , 2020, 8, 88793-88800.	2.6	42
1321	Replay of Learned Neural Firing Sequences during Rest in Human Motor Cortex. <i>Cell Reports</i> , 2020, 31, 107581.	2.9	37
1322	The future of upper extremity rehabilitation robotics: research and practice. <i>Muscle and Nerve</i> , 2020, 61, 708-718.	1.0	22
1323	A Brute-Force CNN Model Selection for Accurate Classification of Sensorimotor Rhythms in BCIs. <i>IEEE Access</i> , 2020, 8, 101014-101023.	2.6	14
1324	Sensitive Brain-Computer Interface to help manoeuvre a Miniature Wheelchair using Electroencephalography. , 2020, , .		4
1325	Multimaterial and multifunctional neural interfaces: from surface-type and implantable electrodes to fiber-based devices. <i>Journal of Materials Chemistry B</i> , 2020, 8, 6624-6666.	2.9	41
1326	Citizen Neuroscience: Brain Computer Interface Researcher Perspectives on Do-It-Yourself Brain Research. <i>Science and Engineering Ethics</i> , 2020, 26, 2769-2790.	1.7	3
1327	Bioinspired flexible electronics for seamless neural interfacing and chronic recording. <i>Nanoscale Advances</i> , 2020, 2, 3095-3102.	2.2	20
1328	The combination of brain-computer interfaces and artificial intelligence: applications and challenges. <i>Annals of Translational Medicine</i> , 2020, 8, 712-712.	0.7	31
1329	Nationwide survey of 780 Japanese patients with amyotrophic lateral sclerosis: their status and expectations from brain machine interfaces. <i>Journal of Neurology</i> , 2020, 267, 2932-2940.	1.8	7



#	ARTICLE	IF	CITATIONS
1330	The Motor Cortex Has Independent Representations for Ipsilateral and Contralateral Arm Movements But Correlated Representations for Grasping. <i>Cerebral Cortex</i> , 2020, 30, 5400-5409.	1.6	19
1331	Focal Electrical Stimulation of Cortical Functional Networks. <i>Cerebral Cortex</i> , 2020, 30, 5532-5543.	1.6	15
1332	Progress and Prospects of Multimodal Fusion Methods in Physical Human-Robot Interaction: A Review. <i>IEEE Sensors Journal</i> , 2020, 20, 10355-10370.	2.4	30
1333	Surface Modifications of an Organic Polymer-Based Microwire Platform for Sustained Release of an Anti-Inflammatory Drug. <i>ACS Applied Bio Materials</i> , 2020, 3, 4613-4625.	2.3	2
1334	Review on motor imagery based BCI systems for upper limb post-stroke neurorehabilitation: From designing to application. <i>Computers in Biology and Medicine</i> , 2020, 123, 103843.	3.9	115
1335	Strategies and prospects of effective neural circuits reconstruction after spinal cord injury. <i>Cell Death and Disease</i> , 2020, 11, 439.	2.7	56
1336	The Potential of Stereotactic-EEG for Brain-Computer Interfaces: Current Progress and Future Directions. <i>Frontiers in Neuroscience</i> , 2020, 14, 123.	1.4	79
1337	Brain-computer interfaces in neurologic rehabilitation practice. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2020, 168, 101-116.	1.0	43
1338	Classification of Individual Finger Movements Using Intracortical Recordings in Human Motor Cortex. <i>Neurosurgery</i> , 2020, 87, 630-638.	0.6	14
1339	Brain-computer interfaces for basic neuroscience. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2020, 168, 233-247.	1.0	2
1340	General principles of machine learning for brain-computer interfacing. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2020, 168, 311-328.	1.0	10
1341	A supertough electro-tendon based on spider silk composites. <i>Nature Communications</i> , 2020, 11, 1332.	5.8	73
1342	Multifield Coupled Dynamics of Power Supply Arc Based on Image 3D Reconstruction Mathematical Model. <i>IEEE Sensors Journal</i> , 2020, 20, 12024-12031.	2.4	1
1343	Random Cropping Ensemble Neural Network for Image Classification in a Robotic Arm Grasping System. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, 69, 6795-6806.	2.4	23
1344	Dilated Causal Convolutional Model For RF Fingerprinting. , 2020, , .		43
1345	The Discriminative Kalman Filter for Bayesian Filtering with Nonlinear and Nongaussian Observation Models. <i>Neural Computation</i> , 2020, 32, 969-1017.	1.3	13
1346	Load-Leveling Trainer for Demand Side Management on a 45kW Cyber-Physical Microgrid. , 2020, , .		1
1347	Hand Knob Area of Premotor Cortex Represents the Whole Body in a Compositional Way. <i>Cell</i> , 2020, 181, 396-409.e26.	13.5	101

#	ARTICLE	IF	CITATIONS
1348	Small-Dimension Feature Matrix Construction Method for Decoding Repetitive Finger Movements From Electroencephalogram Signals. <i>IEEE Access</i> , 2020, 8, 56060-56071.	2.6	4
1349	A state-based probabilistic method for decoding hand position during movement from ECoG signals in non-human primate. <i>Journal of Neural Engineering</i> , 2020, 17, 026042.	1.8	6
1350	Brain-computer interfaces for communication. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2020, 168, 67-85.	1.0	23
1351	Applications of brain-computer interfaces to the control of robotic and prosthetic arms. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2020, 168, 87-99.	1.0	37
1352	Merging brain-computer interface and functional electrical stimulation technologies for movement restoration. <i>Handbook of Clinical Neurology</i> / Edited By P J Vinken and G W Bruyn, 2020, 168, 303-309.	1.0	11
1353	NanoPtâ€”A Nanostructured Electrode Coating for Neural Recording and Microstimulation. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 14855-14865.	4.0	44
1354	Compliance Control of Slave Manipulator Using EMG Signal for Telemanipulation. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 1431.	1.3	7
1355	Exploring Stiffness Modulation in Prosthetic Hands and Its Perceived Function in Manipulation and Social Interaction. <i>Frontiers in Neurorobotics</i> , 2020, 14, 33.	1.6	12
1356	A Multitasking-Oriented Robot Arm Motion Planning Scheme Based on Deep Reinforcement Learning and Twin Synchro-Control. <i>Sensors</i> , 2020, 20, 3515.	2.1	19
1357	Brain-Computer Interface-Based Humanoid Control: A Review. <i>Sensors</i> , 2020, 20, 3620.	2.1	63
1358	An Artificial Neural Network Processor With a Custom Instruction Set Architecture for Embedded Applications. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2020, 67, 5200-5210.	3.5	10
1359	A framework for on-implant spike sorting based on salient feature selection. <i>Nature Communications</i> , 2020, 11, 3278.	5.8	11
1360	Speech-related dorsal motor cortex activity does not interfere with iBCI cursor control. <i>Journal of Neural Engineering</i> , 2020, 17, 016049.	1.8	21
1361	Multi-Channel Neural Recording Implants: A Review. <i>Sensors</i> , 2020, 20, 904.	2.1	30
1362	AMiCUS 2.0â€”System Presentation and Demonstration of Adaptability to Personal Needs by the Example of an Individual with Progressed Multiple Sclerosis. <i>Sensors</i> , 2020, 20, 1194.	2.1	5
1363	A neural network for online spike classification that improves decoding accuracy. <i>Journal of Neurophysiology</i> , 2020, 123, 1472-1485.	0.9	11
1364	LSTM Improves Accuracy of Reaching Trajectory Prediction From Magnetoencephalography Signals. <i>IEEE Access</i> , 2020, 8, 20146-20150.	2.6	10
1365	Control and Ownership of Neuroprosthetic Speech. <i>Philosophy and Technology</i> , 2021, 34, 425-445.	2.6	7

#	ARTICLE	IF	CITATIONS
1366	Self-Adaptive Secondary Frequency Regulation Strategy of Micro-Grid With Multiple Virtual Synchronous Generators. IEEE Transactions on Industry Applications, 2020, 56, 6007-6018.	3.3	33
1367	Inference of Manipulation Intent in Teleoperation for Robotic Assistance. Journal of Intelligent and Robotic Systems: Theory and Applications, 2020, 99, 29-43.	2.0	4
1368	A Bayesian Shared Control Approach for Wheelchair Robot With Brain Machine Interface. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 328-338.	2.7	44
1369	Brain mechanisms in motor control during reaching movements: Transition of functional connectivity according to movement states. Scientific Reports, 2020, 10, 567.	1.6	24
1370	Toward guiding principles for the design of biologically-integrated electrodes for the central nervous system. Journal of Neural Engineering, 2020, 17, 021001.	1.8	22
1371	Power Modulations of ECoG Alpha/Beta and Gamma Bands Correlate With Time-Derivative of Force During Hand Grasp. Frontiers in Neuroscience, 2020, 14, 100.	1.4	21
1372	Clinician awareness of brain computer interfaces: a Canadian national survey. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 2.	2.4	16
1373	A bioinspired analogous nerve towards artificial intelligence. Nature Communications, 2020, 11, 268.	5.8	80
1374	When Thinking is Doing: Responsibility for BCI-Mediated Action. AJOB Neuroscience, 2020, 11, 46-58.	0.6	21
1375	Fusion of EEG and EMG signals for classification of unilateral foot movements. Biomedical Signal Processing and Control, 2020, 60, 101990.	3.5	34
1376	Flexible sliding sensor for simultaneous monitoring deformation and displacement on a robotic hand/arm. Nano Energy, 2020, 73, 104764.	8.2	58
1377	Bacomics: a comprehensive cross area originating in the studies of various brain-machine apparatus conversations. Cognitive Neurodynamics, 2020, 14, 425-442.	2.3	11
1378	Brain-machine interfaces. , 2020, , 1037-1045.		0
1379	Brain-computer interface speller system design from electroencephalogram signals with channel selection algorithms. Medical Hypotheses, 2020, 141, 109690.	0.8	3
1380	Self-reorganization of neuronal activation patterns in the cortex under brain-machine interface and neural operant conditioning. Neuroscience Research, 2020, 156, 279-292.	1.0	7
1381	Skill transfer learning for autonomous robots and human-robot cooperation: A survey. Robotics and Autonomous Systems, 2020, 128, 103515.	3.0	50
1382	Fault diagnosis of circuit breakers based on time-frequency and chaotic vibration analysis. IET Generation, Transmission and Distribution, 2020, 14, 1214-1221.	1.4	17
1383	Therapeutic hypothermia reduces cortical inflammation associated with utah array implants. Journal of Neural Engineering, 2020, 17, 026035.	1.8	6

#	ARTICLE	IF	CITATIONS
1384	Pseudorandom Number Generators with Predetermined Period and Pre-period. , 2020, , .		1
1385	A Mongrel Technique for the Reducation of Sidelobes in OFDM â€œ Based Cognitive Radio System. , 2020, , .		3
1386	Restoring the Sense of Touch Using a Sensorimotor Demultiplexing Neural Interface. Cell, 2020, 181, 763-773.e12.	13.5	94
1387	Toward the Next Generation of Retinal Neuroprosthesis: Visual Computation with Spikes. Engineering, 2020, 6, 449-461.	3.2	23
1388	Improved Sliding Mode Control With Time Delay Estimation for Motion Tracking of Cell Puncture Mechanism. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 3199-3210.	3.5	14
1389	Agency and Performance of Reach-to-Grasp With Modified Control of a Virtual Hand: Implications for Rehabilitation. Frontiers in Human Neuroscience, 2020, 14, 126.	1.0	16
1390	3D Printed, Customizable, and Multifunctional Smart Electronic Eyeglasses for Wearable Healthcare Systems and Humanâ€œMachine Interfaces. ACS Applied Materials & Interfaces, 2020, 12, 21424-21432.	4.0	68
1391	Motor learning. , 2020, , 453-466.		3
1392	Glymphatic clearance of simulated silicon dispersion in mouse brain analyzed by laser induced breakdown spectroscopy. Heliyon, 2020, 6, e03702.	1.4	2
1393	Stabilization of a brainâ€œcomputer interface via the alignment of low-dimensional spaces of neural activity. Nature Biomedical Engineering, 2020, 4, 672-685.	11.6	118
1394	Neural decoding of electrocorticographic signals using dynamic mode decomposition. Journal of Neural Engineering, 2020, 17, 036009.	1.8	19
1395	Security Analysis of Russian Transport Cards. , 2020, , .		0
1396	A new numerical approach to the calibration and interpretation of PEA measurements. IEEE Transactions on Dielectrics and Electrical Insulation, 2020, 27, 666-674.	1.8	11
1397	A Review on Human-Computer Interaction and Intelligent Robots. International Journal of Information Technology and Decision Making, 2020, 19, 5-47.	2.3	69
1398	Statistical Loss and Analysis for Deep Learning in Hyperspectral Image Classification. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 322-333.	7.2	44
1399	BCI-Controlled Assistive Manipulator: Developed Architecture and Experimental Results. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 91-104.	2.6	12
1400	Neuropsychological and neurophysiological aspects of brainâ€œcomputerâ€œinterface (BCI) control in paralysis. Journal of Physiology, 2021, 599, 2351-2359.	1.3	45
1401	A Fully Integrated Sensor-Brainâ€œMachine Interface System for Restoring Somatosensation. IEEE Sensors Journal, 2021, 21, 4764-4775.	2.4	18

#	ARTICLE	IF	CITATIONS
1402	Activity Planning for Assistive Robots Using Chance-Constrained Stochastic Programming. IEEE Transactions on Industrial Informatics, 2021, 17, 3950-3961.	7.2	2
1403	Implementation of an SSVEP-based intelligent home service robot system. Technology and Health Care, 2021, 29, 541-556.	0.5	2
1404	Human-machine shared control: New avenue to dexterous prosthetic hand manipulation. Science China Technological Sciences, 2021, 64, 767-773.	2.0	12
1405	Brain-computer interface for human-multirobot strategic consensus with a differential world model. Applied Intelligence, 2021, 51, 3645-3663.	3.3	3
1406	Feature-Selection-Based Transfer Learning for Intracortical Brain-Computer Interface Decoding. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 60-73.	2.7	5
1407	The sensory representation of causally controlled objects. Neuron, 2021, 109, 677-689.e4.	3.8	18
1408	Motor neuroprosthesis implanted with neurointerventional surgery improves capacity for activities of daily living tasks in severe paralysis: first in-human experience. Journal of NeuroInterventional Surgery, 2021, 13, 102-108.	2.0	106
1409	Dealing with the Foreign-Body Response to Implanted Biomaterials: Strategies and Applications of New Materials. Advanced Functional Materials, 2021, 31, 2007226.	7.8	114
1410	Plug-and-play control of a brain-computer interface through neural map stabilization. Nature Biotechnology, 2021, 39, 326-335.	9.4	60
1411	Agency and responsibility over virtual movements controlled through different paradigms of brain-computer interface. Journal of Physiology, 2021, 599, 2419-2434.	1.3	26
1412	Introducing a biomimetic coating for graphene neuroelectronics: toward in-vivo applications. Biomedical Physics and Engineering Express, 2021, 7, 015006.	0.6	3
1413	Challenges in neural interface electronics: miniaturization and wireless operation. , 2021, , 537-559.		1
1414	Design of intracortical microstimulation patterns to control the location, intensity, and quality of evoked sensations in human and animal models. , 2021, , 479-506.		0
1415	Accurate Offline Asynchronous Detection of Individual Finger Movement From Intracranial Brain Signals Using a Novel Multiway Approach. IEEE Transactions on Biomedical Engineering, 2021, 68, 2176-2187.	2.5	3
1417	Wearable and non-invasive assistive technologies. , 2021, , 593-627.		2
1418	Restoring the Sense of Touch Using a Sensorimotor Demultiplexing Neural Interface: "Disentangling"™ Sensorimotor Events During Brain-Computer Interface Control. Springer Briefs in Electrical and Computer Engineering, 2021, , 75-85.	0.3	1
1419	Using Neuralink by Humans: A Process Which Brings Humanity Closer to the Future. Advances in Intelligent Systems and Computing, 2021, , 233-238.	0.5	1
1420	Implantable Device Fabrication and Packaging. , 2021, , 1-49.		2

#	ARTICLE	IF	CITATIONS
1421	Decoding and perturbing decision states in real time. <i>Nature</i> , 2021, 591, 604-609.	13.7	64
1422	Liquid Crystalline Polymers: Opportunities to Shape Neural Interfaces. <i>Neuromodulation</i> , 2022, 25, 1259-1267.	0.4	8
1423	Sensing implants. , 2021, , 329-352.		0
1425	Auditory cues reveal intended movement information in middle frontal gyrus neuronal ensemble activity of a person with tetraplegia. <i>Scientific Reports</i> , 2021, 11, 98.	1.6	12
1426	Intracortical microstimulation for tactile feedback in awake behaving rats. , 2021, , 379-411.		1
1427	Restoring the sense of touch with electrical stimulation of the nerve and brain. , 2021, , 349-378.		2
1428	A Support Vector Neural Network for P300 EEG Signal Classification. <i>IEEE Transactions on Artificial Intelligence</i> , 2022, 3, 309-321.	3.4	7
1429	A Virtual Mouse Based on Parallel Cooperation of Eye Tracker and Motor Imagery. <i>Lecture Notes in Computer Science</i> , 2021, , 647-658.	1.0	0
1430	A Roadmap Towards Standards for Neurally Controlled End Effectors. <i>IEEE Open Journal of Engineering in Medicine and Biology</i> , 2021, 2, 84-90.	1.7	8
1431	Power Modulations of Gamma Band in Sensorimotor Cortex Correlate with Time-Derivative of Grasp Force in Human Subjects. <i>Springer Briefs in Electrical and Computer Engineering</i> , 2021, , 89-102.	0.3	0
1433	Neural electrodes for long-term tissue interfaces. , 2021, , 509-536.		2
1434	Touch restoration through electrical cortical stimulation in humans. , 2021, , 443-478.		2
1435	Restoring upper extremity function with brain-machine interfaces. <i>International Review of Neurobiology</i> , 2021, 159, 153-186.	0.9	0
1436	The Neural Representation of Force across Grasp Types in Motor Cortex of Humans with Tetraplegia. <i>ENeuro</i> , 2021, 8, ENEURO.0231-20.2020.	0.9	9
1438	Toward Non-invasive BCI-Based Movement Decoding. , 2021, , 233-249.		0
1439	Effects of Peripheral Haptic Feedback on Intracortical Brain-Computer Interface Control and Associated Sensory Responses in Motor Cortex. <i>IEEE Transactions on Haptics</i> , 2021, 14, 762-775.	1.8	5
1440	K�nstliche Intelligenz mit K�rper. <i>Springer Reference Geisteswissenschaften</i> , 2021, , 1-17.	0.0	2
1441	Closing the Loop Between Body Compensations and Upper Limb Prosthetic Movements: A Feasibility Study. <i>IEEE Transactions on Medical Robotics and Bionics</i> , 2021, 3, 230-240.	2.1	8

#	ARTICLE	IF	CITATIONS
1442	Trends of Multimodal Neural Engineering Study: A Bibliometric Review. Archives of Computational Methods in Engineering, 2021, 28, 4487-4501.	6.0	9
1443	Quantifying the alignment error and the effect of incomplete somatosensory feedback on motor performance in a virtual brain-computer-interface setup. Scientific Reports, 2021, 11, 4614.	1.6	1
1444	Multimodal Neural Interface Circuits for Diverse Interaction With Neuronal Cell Population in Human Brain. IEEE Transactions on Circuits and Systems II: Express Briefs, 2021, 68, 574-580.	2.2	4
1445	The Spectrum of Responsibility Ascription for End Users of Neurotechnologies. Neuroethics, 2021, 14, 423-435.	1.7	6
1446	Brain connectomics applied to oncological neuroscience: from a traditional surgical strategy focusing on glioma topography to a meta-network approach. Acta Neurochirurgica, 2021, 163, 905-917.	0.9	34
1449	Robust and accurate decoding of hand kinematics from entire spiking activity using deep learning. Journal of Neural Engineering, 2021, 18, 026011.	1.8	27
1450	Inhibition of Na <sup>+</sup> /H <sup>+</sup> exchanger modulates microglial activation and scar formation following microelectrode implantation. Journal of Neural Engineering, 2021, 18, 045001.	1.8	8
1451	A novel motor imagery EEG decoding method based on feature separation. Journal of Neural Engineering, 2021, 18, 036022.	1.8	13
1452	Adaptive latent state modeling of brain network dynamics with real-time learning rate optimization. Journal of Neural Engineering, 2021, 18, 036013.	1.8	25
1453	High-density mapping of primate digit representations with a 1152-channel $\mu$ ECOG array. Journal of Neural Engineering, 2021, 18, 036025.	1.8	20
1454	A novel SSVEP-BCI approach combining visual detection and tracking for dynamic target selection. , 2021, , .		1
1455	Bioelectronic medicine for the autonomic nervous system: clinical applications and perspectives. Journal of Neural Engineering, 2021, 18, 041002.	1.8	37
1456	Defining Surgical Terminology and Risk for Brain Computer Interface Technologies. Frontiers in Neuroscience, 2021, 15, 599549.	1.4	19
1457	An Examination of Prospective Uses and Future Directions of Neuralink: The Brain-Machine Interface. Cureus, 2021, 13, e14192.	0.2	6
1459	Rat Locomotion Detection Based on Brain Functional Directed Connectivity from Implanted Electroencephalography Signals. Brain Sciences, 2021, 11, 345.	1.1	2
1460	Neurotechnology ethics and relational agency. Philosophy Compass, 2021, 16, e12734.	0.7	9
1461	Analysis and Reduction of Nonlinear Distortion in AC-Coupled CMOS Neural Amplifiers with Tunable Cutoff Frequencies. Sensors, 2021, 21, 3116.	2.1	0
1462	A distributed-parameter control system using electromagnetic neural stimulation for human-machine perception interface. Journal of Control and Decision, 2022, 9, 23-34.	0.7	0



#	ARTICLE	IF	CITATIONS
1463	Hierarchical Dynamical Model for Multiple Cortical Neural Decoding. <i>Neural Computation</i> , 2021, 33, 1372-1401.	1.3	4
1464	Three-micrometer-diameter needle electrode with an amplifier for extracellular in vivo recordings. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	6
1465	Leaf-inspired homeostatic cellulose biosensors. <i>Science Advances</i> , 2021, 7, .	4.7	29
1466	The Riemannian spatial pattern method: mapping and clustering movement imagery using Riemannian geometry. <i>Journal of Neural Engineering</i> , 2021, 18, 056014.	1.8	8
1467	Asynchronous Robotic Arm System Based on Augmented Reality and SSVEP-based BCI. , 2021, , .		0
1468	Continuous sensorimotor rhythm based brain computer interface learning in a large population. <i>Scientific Data</i> , 2021, 8, 98.	2.4	21
1469	User State Classification Based on Functional Brain Connectivity Using a Convolutional Neural Network. <i>Electronics (Switzerland)</i> , 2021, 10, 1158.	1.8	2
1471	An artificial intelligence that increases simulated brain-computer interface performance. <i>Journal of Neural Engineering</i> , 2021, 18, 046053.	1.8	6
1472	Brain-Machine Interfaces: Closed-Loop Control in an Adaptive System. <i>Annual Review of Control, Robotics, and Autonomous Systems</i> , 2021, 4, 167-189.	7.5	10
1473	Decoding different working memory states during an operation span task from prefrontal fNIRS signals. <i>Biomedical Optics Express</i> , 2021, 12, 3495.	1.5	4
1474	A brain-actuated robotic arm system using non-invasive hybrid brain-computer interface and shared control strategy. <i>Journal of Neural Engineering</i> , 2021, 18, 046045.	1.8	24
1475	Towards an Artificial Intelligence-based Smart Ward Control using Speech and EEG Signals. , 2021, , .		0
1476	Non-invasive Cognitive-level Human Interfacing for the Robotic Restoration of Reaching & Grasping. , 2021, , .		3
1477	Neural interface translates thoughts into type. <i>Nature</i> , 2021, 593, 197-198.	13.7	3
1478	Putting touch into action. <i>Science</i> , 2021, 372, 791-792.	6.0	1
1479	Single-trial decoding of movement intentions using functional ultrasound neuroimaging. <i>Neuron</i> , 2021, 109, 1554-1566.e4.	3.8	51
1480	Review of Research and Development of Supernumerary Robotic Limbs. <i>IEEE/CAA Journal of Automatica Sinica</i> , 2021, 8, 929-952.	8.5	33
1481	Flexible Electrodes for In Vivo and In Vitro Electrophysiological Signal Recording. <i>Advanced Healthcare Materials</i> , 2021, 10, e2100646.	3.9	62



#	ARTICLE	IF	CITATIONS
1482	High-performance brain-to-text communication via handwriting. <i>Nature</i> , 2021, 593, 249-254.	13.7	409
1483	A brain-computer interface that evokes tactile sensations improves robotic arm control. <i>Science</i> , 2021, 372, 831-836.	6.0	245
1484	Physical principles of brain-computer interfaces and their applications for rehabilitation, robotics and control of human brain states. <i>Physics Reports</i> , 2021, 918, 1-133.	10.3	88
1485	A Nonlinear Maximum Correntropy Information Filter for High-Dimensional Neural Decoding. <i>Entropy</i> , 2021, 23, 743.	1.1	5
1486	Concerns in the Blurred Divisions Between Medical and Consumer Neurotechnology. <i>IEEE Systems Journal</i> , 2021, 15, 3069-3080.	2.9	9
1488	Deep Learning-Based Approaches for Decoding Motor Intent From Peripheral Nerve Signals. <i>Frontiers in Neuroscience</i> , 2021, 15, 667907.	1.4	10
1489	The Treachery of Images: How Realism Influences Brain and Behavior. <i>Trends in Cognitive Sciences</i> , 2021, 25, 506-519.	4.0	49
1490	An omnidirectional WPT platform for distributed fully implanted neural recording systems. <i>International Journal of Applied Electromagnetics and Mechanics</i> , 2021, 66, 339-357.	0.3	0
1491	Laser ablation of the pia mater for insertion of high-density microelectrode arrays in a translational sheep model. <i>Journal of Neural Engineering</i> , 2021, 18, 045008.	1.8	3
1492	A prototype closed-loop brain-machine interface for the study and treatment of pain. <i>Nature Biomedical Engineering</i> , 2023, 7, 533-545.	11.6	29
1494	Can Children With Perinatal Stroke Use a Simple Brain Computer Interface?. <i>Stroke</i> , 2021, 52, 2363-2370.	1.0	13
1495	Brain-Computer Interface, Neuromodulation, and Neurorehabilitation Strategies for Spinal Cord Injury. <i>Neurosurgery Clinics of North America</i> , 2021, 32, 407-417.	0.8	3
1497	Chronic recordings from the marmoset motor cortex reveals modulation of neural firing and local field potentials overlap with macaques. <i>Journal of Neural Engineering</i> , 2021, 18, 0460b2.	1.8	0
1498	Reinforcement Learning in Reproducing Kernel Hilbert Spaces. <i>IEEE Signal Processing Magazine</i> , 2021, 38, 34-45.	4.6	3
1499	Self-supervised Contrastive Learning for EEG-based Sleep Staging. , 2021, , .		29
1500	Electrode Design for Electrotactile Feedback With Reduced Interference to Myoelectric Signal. <i>IEEE Sensors Journal</i> , 2021, 21, 16350-16358.	2.4	1
1501	Neuropathological effects of chronically implanted, intracortical microelectrodes in a tetraplegic patient. <i>Journal of Neural Engineering</i> , 2021, 18, 0460b9.	1.8	24
1502	Home Use of a Percutaneous Wireless Intracortical Brain-Computer Interface by Individuals With Tetraplegia. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 2313-2325.	2.5	83

#	ARTICLE	IF	CITATIONS
1503	Therapies to Restore Consciousness in Patients with Severe Brain Injuries: A Gap Analysis and Future Directions. <i>Neurocritical Care</i> , 2021, 35, 68-85.	1.2	60
1504	Peripheral Neuroergonomics – An Elegant Way to Improve Human-Robot Interaction?. <i>Frontiers in Neurorobotics</i> , 2021, 15, 691508.	1.6	3
1505	Generalizable cursor click decoding using grasp-related neural transients. <i>Journal of Neural Engineering</i> , 2021, 18, 0460e9.	1.8	8
1506	Brain-Machine Interfaces. <i>Hand Clinics</i> , 2021, 37, 391-399.	0.4	1
1507	Education 4.0: Teaching the Basis of Motor Imagery Classification Algorithms for Brain-Computer Interfaces. <i>Future Internet</i> , 2021, 13, 202.	2.4	4
1508	Multi-scale neural decoding and analysis. <i>Journal of Neural Engineering</i> , 2021, 18, 045013.	1.8	16
1509	Neurally driven synthesis of learned, complex vocalizations. <i>Current Biology</i> , 2021, 31, 3419-3425.e5.	1.8	4
1510	Corticospinal Motor Circuit Plasticity After Spinal Cord Injury: Harnessing Neuroplasticity to Improve Functional Outcomes. <i>Molecular Neurobiology</i> , 2021, 58, 5494-5516.	1.9	17
1511	Long-term intracortical microelectrode array performance in a human: a 5 year retrospective analysis. <i>Journal of Neural Engineering</i> , 2021, 18, 0460d7.	1.8	27
1512	Intracortical Microelectrode Array Unit Yield under Chronic Conditions: A Comparative Evaluation. <i>Micromachines</i> , 2021, 12, 972.	1.4	16
1514	Grand challenges and emergent modes of convergence science. <i>Humanities and Social Sciences Communications</i> , 2021, 8, .	1.3	18
1515	Brain-Computer Interfaces: Neurorehabilitation of Voluntary Movement after Stroke and Spinal Cord Injury. <i>Synthesis Lectures on Assistive Rehabilitative and Health-Preserving Technologies</i> , 2021, 10, i-133.	0.2	0
1516	A bibliometric analysis of global research on spinal cord injury: 1999-2019. <i>Spinal Cord</i> , 2022, 60, 281-287.	0.9	6
1517	The science and engineering behind sensitized brain-controlled bionic hands. <i>Physiological Reviews</i> , 2022, 102, 551-604.	13.1	32
1518	Case Study: Mapping Evoked Fields in Primary Motor and Sensory Areas via Magnetoencephalography in Tetraplegia. <i>Frontiers in Neurology</i> , 2021, 12, 739693.	1.1	2
1519	The death of localizationism: The concepts of functional connectome and neuroplasticity deciphered by awake mapping, and their implications for best care of brain-damaged patients. <i>Revue Neurologique</i> , 2021, 177, 1093-1103.	0.6	12
1520	Signal Generation, Acquisition, and Processing in Brain Machine Interfaces: A Unified Review. <i>Frontiers in Neuroscience</i> , 2021, 15, 728178.	1.4	9
1521	An Ecosystem for Heterogeneous Robotic Assistants in Caregiving: Core Functionalities and Use Cases. <i>IEEE Robotics and Automation Magazine</i> , 2021, 28, 12-28.	2.2	16

#	ARTICLE	IF	CITATIONS
1522	Historical perspectives, challenges, and future directions of implantable brain-computer interfaces for sensorimotor applications. <i>Bioelectronic Medicine</i> , 2021, 7, 14.	1.0	11
1523	Long-term stability of the chronic epidural wireless recorder WIMAGINE in tetraplegic patients. <i>Journal of Neural Engineering</i> , 2021, 18, 056026.	1.8	16
1524	On the Implementation of a Low-Cost Mind-Voice-and-Gesture-Controlled Humanoid Robotic Arm Using Leap Motion and Neurosky Sensor. <i>Journal of Electrical Engineering and Technology</i> , 2022, 17, 665-683.	1.2	3
1526	The impact of distractions on intracortical brain-computer interface control of a robotic arm. <i>Brain-Computer Interfaces</i> , 2022, 9, 23-35.	0.9	2
1527	Global Research Trends in Robotic Applications in Spinal Medicine: A Systematic Bibliometric Analysis. <i>World Neurosurgery</i> , 2021, 155, e778-e785.	0.7	11
1528	Evoking highly focal percepts in the fingertips through targeted stimulation of sulcal regions of the brain for sensory restoration. <i>Brain Stimulation</i> , 2021, 14, 1184-1196.	0.7	16
1530	Real-time synthesis of imagined speech processes from minimally invasive recordings of neural activity. <i>Communications Biology</i> , 2021, 4, 1055.	2.0	46
1531	Force Decoding of Caudal Forelimb Area and Rostral Forelimb Area in Chronic Stroke Rats. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 3078-3086.	2.5	3
1532	A Novel and Efficient Feature Extraction Method for Deep Learning Based Continuous Estimation. <i>IEEE Robotics and Automation Letters</i> , 2021, 6, 7341-7348.	3.3	13
1533	A Shared Control Framework for Human-Multirobot Foraging With Brain-Computer Interface. <i>IEEE Robotics and Automation Letters</i> , 2021, 6, 6305-6312.	3.3	5
1534	To know the brain and to protect the brain. <i>Tenri Medical Bulletin</i> , 2021, 24, 1-14.	0.1	0
1535	Interventions to Improve Recovery After Stroke. , 2022, , 888-899.e6.		0
1536	Replacing EEG Sensors by AI Based Emulation. <i>Lecture Notes in Computer Science</i> , 2021, , 66-80.	1.0	1
1537	Motorische Neurorehabilitation. , 2021, , 1-24.		0
1538	Summary of over Fifty Years with Brain-Computer Interfaces—A Review. <i>Brain Sciences</i> , 2021, 11, 43.	1.1	93
1539	Incorporating Task-Related Information in Dimensionality Reduction of Neural Population Using Autoencoders. <i>Communications in Computer and Information Science</i> , 2021, , 56-71.	0.4	0
1540	What Is It Like to Be a Cyborg?. , 2021, , 400-410.		0
1541	Brain Co-processors: Using AI to Restore and Augment Brain Function. , 2021, , 1-36.		2

#	ARTICLE	IF	CITATIONS
1542	Learning Robust Features From Nonstationary Brain Signals by Multiscale Domain Adaptation Networks for Seizure Prediction. IEEE Transactions on Cognitive and Developmental Systems, 2022, 14, 1208-1216.	2.6	13
1543	Information and Communication Theoretical Understanding and Treatment of Spinal Cord Injuries: State-of-The-Art and Research Challenges. IEEE Reviews in Biomedical Engineering, 2023, 16, 332-347.	13.1	9
1544	Design a Novel BCI for Neurorehabilitation Using Concurrent LFP and EEG Features: A Case Study. IEEE Transactions on Biomedical Engineering, 2022, 69, 1554-1563.	2.5	12
1545	Wearable Sensorsâ€Enabled Humanâ€Machine Interaction Systems: From Design to Application. Advanced Functional Materials, 2021, 31, 2008936.	7.8	322
1546	Bioinspired Prosthetic Interfaces. Advanced Materials Technologies, 2020, 5, 1900856.	3.0	42
1548	Can BCI Paradigms Induce Feelings of Agency and Responsibility Over Movements?. Springer Briefs in Electrical and Computer Engineering, 2019, , 103-114.	0.3	4
1549	An Extended Framework for Characterizing Social Robots. Springer Series on Bio- and Neurosystems, 2020, , 21-64.	0.2	32
1550	Intracortical Brainâ€Machine Interfaces. , 2020, , 185-221.		5
1551	Brain-Computer Interfaces for Motor Rehabilitation. , 2017, , 1-31.		1
1552	Developing an Optical Brain-Computer Interface for Humanoid Robot Control. Lecture Notes in Computer Science, 2016, , 3-13.	1.0	5
1553	Neuroprosthetics. , 2017, , 689-720.		3
1554	Binary OxRAM/CBRAM Memories for Efficient Implementations of Embedded Neuromorphic Circuits. , 2017, , 253-269.		2
1555	The Evolution of Neuroethics. , 2017, , 19-44.		6
1556	Neural-gesteuerte Robotik fÃ¼r Assistenz und Rehabilitation im Alltag. , 2020, , 117-131.		3
1557	Clinical Systems Neuroscience. , 2015, , 89-114.		1
1558	Ethical Implications of Brainâ€Computer Interfacing. , 2015, , 699-704.		4
1559	Brainâ€Machine Interfaces for Communication in Complete Paralysis: Ethical Implications and Challenges. , 2015, , 705-724.		10
1560	Effective Neural Representations for Brain-Mediated Human-Robot Interactions. Trends in Augmentation of Human Performance, 2014, , 207-237.	0.4	1

#	ARTICLE	IF	CITATIONS
1561	Advances in Penetrating Multichannel Microelectrodes Based on the Utah Array Platform. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1101, 1-40.	0.8	12
1562	Invasive Brain Machine Interface System. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1101, 67-89.	0.8	5
1563	Future of Neural Interfaces. <i>Advances in Experimental Medicine and Biology</i> , 2019, 1101, 225-241.	0.8	7
1564	Dimension Reduction Techniques in a Brain-Computer Interface Application. <i>Smart Innovation, Systems and Technologies</i> , 2020, , 107-118.	0.5	3
1565	Brain-Computer Interfacing and Virtual Reality. , 2015, , 1-22.		14
1566	Deployable, liquid crystal elastomer-based intracortical probes. <i>Acta Biomaterialia</i> , 2020, 111, 54-64.	4.1	11
1567	Mesh electronics: a new paradigm for tissue-like brain probes. <i>Current Opinion in Neurobiology</i> , 2018, 50, 33-41.	2.0	131
1570	Temperament Predictors of Motor Imagery Control in BCI. <i>Journal of Psychophysiology</i> , 2020, 34, 246-254.	0.3	6
1571	Neural Representation of Observed, Imagined, and Attempted Grasping Force in Motor Cortex of Individuals with Chronic Tetraplegia. <i>Scientific Reports</i> , 2020, 10, 1429.	1.6	16
1572	A large electroencephalographic motor imagery dataset for electroencephalographic brain computer interfaces. <i>Scientific Data</i> , 2018, 5, 180211.	2.4	94
1573	A dual-trigger-mode ionic hydrogel sensor for contact or contactless motion recognition. <i>Materials Horizons</i> , 2020, 7, 2673-2682.	6.4	30
1575	Decoding hand kinematics from population responses in sensorimotor cortex during grasping. <i>Journal of Neural Engineering</i> , 2020, 17, 046035.	1.8	26
1576	Continuous low-frequency EEG decoding of arm movement for closed-loop, natural control of a robotic arm. <i>Journal of Neural Engineering</i> , 2020, 17, 046031.	1.8	43
1577	Gels, jets, mosquitoes, and magnets: a review of implantation strategies for soft neural probes. <i>Journal of Neural Engineering</i> , 2020, 17, 041002.	1.8	17
1578	A comprehensive model-based framework for optimal design of biomimetic patterns of electrical stimulation for prosthetic sensation. <i>Journal of Neural Engineering</i> , 2020, 17, 046045.	1.8	23
1579	Decoding spoken English from intracortical electrode arrays in dorsal precentral gyrus. <i>Journal of Neural Engineering</i> , 2020, 17, 066007.	1.8	52
1580	A bioelectric neural interface towards intuitive prosthetic control for amputees. <i>Journal of Neural Engineering</i> , 2020, 17, 066001.	1.8	28
1581	Motor imagery recognition with automatic EEG channel selection and deep learning. <i>Journal of Neural Engineering</i> , 2020, , .	1.8	23

#	ARTICLE	IF	CITATIONS
1582	The Argo: a high channel count recording system for neural recording in vivo. <i>Journal of Neural Engineering</i> , 2021, 18, 015002.	1.8	46
1604	A Shared Control Strategy for Reach and Grasp of Multiple Objects Using Robot Vision and Noninvasive Brain-Computer Interface. <i>IEEE Transactions on Automation Science and Engineering</i> , 2022, 19, 360-372.	3.4	16
1605	Mechanics Strategies for Implantation of Flexible Neural Probes. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2021, 88, .	1.1	14
1606	Longitudinal multimodal assessment of neurodegeneration and vascular remodeling correlated with signal degradation in chronic cortical silicon microelectrodes. <i>Neurophotonics</i> , 2020, 7, 1.	1.7	6
1607	Information theoretic analysis of proprioceptive encoding during finger flexion in the monkey sensorimotor system. <i>Journal of Neurophysiology</i> , 2015, 113, 295-306.	0.9	3
1608	Emerging ideas and tools to study the emergent properties of the cortical neural circuits for voluntary motor control in non-human primates. <i>F1000Research</i> , 2019, 8, 749.	0.8	18
1609	Robust Brain-Machine Interface Design Using Optimal Feedback Control Modeling and Adaptive Point Process Filtering. <i>PLoS Computational Biology</i> , 2016, 12, e1004730.	1.5	94
1610	Real-Time Control of an Articulatory-Based Speech Synthesizer for Brain Computer Interfaces. <i>PLoS Computational Biology</i> , 2016, 12, e1005119.	1.5	67
1611	Neural Population Dynamics during Reaching Are Better Explained by a Dynamical System than Representational Tuning. <i>PLoS Computational Biology</i> , 2016, 12, e1005175.	1.5	128
1612	Studies in RF Power Communication, SAR, and Temperature Elevation in Wireless Implantable Neural Interfaces. <i>PLoS ONE</i> , 2013, 8, e77759.	1.1	15
1613	Investigation of a New Electrode Array Technology for a Central Auditory Prosthesis. <i>PLoS ONE</i> , 2013, 8, e82148.	1.1	11
1614	A Brain-Machine-Muscle Interface for Restoring Hindlimb Locomotion after Complete Spinal Transection in Rats. <i>PLoS ONE</i> , 2014, 9, e103764.	1.1	14
1615	Conscious Brain-to-Brain Communication in Humans Using Non-Invasive Technologies. <i>PLoS ONE</i> , 2014, 9, e105225.	1.1	160
1616	Assessing Movement Factors in Upper Limb Kinematics Decoding from EEG Signals. <i>PLoS ONE</i> , 2015, 10, e0128456.	1.1	23
1617	Decoding Sensorimotor Rhythms during Robotic-Assisted Treadmill Walking for Brain Computer Interface (BCI) Applications. <i>PLoS ONE</i> , 2015, 10, e0137910.	1.1	47
1618	The Limited Utility of Multiunit Data in Differentiating Neuronal Population Activity. <i>PLoS ONE</i> , 2016, 11, e0153154.	1.1	7
1619	Thought-Controlled Nanoscale Robots in a Living Host. <i>PLoS ONE</i> , 2016, 11, e0161227.	1.1	38
1620	Upper limb movements can be decoded from the time-domain of low-frequency EEG. <i>PLoS ONE</i> , 2017, 12, e0182578.	1.1	161

#	ARTICLE	IF	CITATIONS
1621	Prediction of movement intention using connectivity within motor-related network: An electrocorticography study. PLoS ONE, 2018, 13, e0191480.	1.1	8
1622	The Representation of Finger Movement and Force in Human Motor and Premotor Cortices. ENeuro, 2020, 7, ENEURO.0063-20.2020.	0.9	15
1623	Action Monitoring Cortical Activity Coupled to Submovements. ENeuro, 2017, 4, ENEURO.0241-17.2017.	0.9	20
1624	Autonomy Infused Teleoperation with Application to BCI Manipulation. , 0, , .		26
1625	Opportunities in rehabilitation research. Journal of Rehabilitation Research and Development, 2013, 50, vii-xxxii.	1.6	7
1626	An Integrated Brain-Machine Interface Platform With Thousands of Channels. Journal of Medical Internet Research, 2019, 21, e16194.	2.1	526
1627	The Connection Between the Nervous System and Machines: Commentary. Journal of Medical Internet Research, 2019, 21, e16344.	2.1	7
1628	From Novel Technology to Novel Applications: Comment on "An Integrated Brain-Machine Interface Platform With Thousands of Channels" by Elon Musk and Neuralink. Journal of Medical Internet Research, 2019, 21, e16356.	2.1	41
1629	A System for 256-Channel in Vitro Recording of the Electrophysiological Activity of Brain Tissue. Metrology and Measurement Systems, 2013, 20, 371-384.	1.4	3
1630	Current advancements in the management of spinal cord injury: A comprehensive review of literature. , 2020, 11, 2.		37
1631	Review of clinical neurorestorative strategies for spinal cord injury: Exploring history and latest progresses. Journal of Neurorestoratology, 2018, 6, 171-178.	1.1	21
1632	State-of-the-art non-invasive brain-computer interface for neural rehabilitation: A review. Journal of Neurorestoratology, 2020, 8, 12-25.	1.1	39
1634	Lower-Limb Neuroprostheses. Advances in Bioinformatics and Biomedical Engineering Book Series, 0, , 153-180.	0.2	4
1635	A Mobile Navigation System Based on Visual Cues for Pedestrians with Cognitive Disabilities. Advances in Medical Technologies and Clinical Practice Book Series, 2015, , 173-190.	0.3	2
1636	Brain-Computer Interfaces for Control of Upper Extremity Neuroprostheses in Individuals with High Spinal Cord Injury. , 2018, , 809-836.		2
1637	What Is It Like to Be a Cyborg?. Advances in Computational Intelligence and Robotics Book Series, 2018, , 68-78.	0.4	1
1638	Can I Consider the Pong Racket as a Part of My Body?. International Journal of Digital Literacy and Digital Competence, 2012, 3, 58-63.	0.1	4
1639	An open-source and cross-platform framework for Brain Computer Interface-guided robotic arm control. , 2012, 3, 149.		4

#	ARTICLE	IF	CITATIONS
1640	On Similarities and Differences of Invasive and Non-Invasive Electrical Brain Signals in Brain-Computer Interfacing. <i>Journal of Biomedical Science and Engineering</i> , 2016, 09, 393-398.	0.2	18
1641	Teleoperation with Intelligent and Customizable Interfaces. <i>Journal of Human-robot Interaction</i> , 2013, 2, .	2.0	33
1642	Wireless recording from unrestrained monkeys reveals motor goal encoding beyond immediate reach in frontoparietal cortex. <i>ELife</i> , 2020, 9, .	2.8	35
1643	There and back again: putting the vectorial movement planning hypothesis to a critical test. <i>PeerJ</i> , 2014, 2, e342.	0.9	2
1644	P-Rob Six-Degree-of-Freedom Robot Manipulator Dynamics Modeling and Anti-Disturbance Control. <i>IEEE Access</i> , 2021, 9, 141403-141420.	2.6	7
1645	EEG Characteristic Investigation of the Sixth-Finger Motor Imagery. <i>Lecture Notes in Computer Science</i> , 2021, , 654-663.	1.0	1
1646	Emerging trends in BCI-robotics for motor control and rehabilitation. <i>Current Opinion in Biomedical Engineering</i> , 2021, 20, 100354.	1.8	22
1647	A perspective on flexible sensors in developing diagnostic devices. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	23
1648	Neural tissue-microelectrode interaction: Brain micromotion, electrical impedance, and flexible microelectrode insertion. <i>Journal of Neuroscience Methods</i> , 2022, 365, 109388.	1.3	29
1649	Complex Electrical Stimulation Systems in Motor Function Rehabilitation after Spinal Cord Injury. <i>Complexity</i> , 2021, 2021, 1-16.	0.9	3
1650	Neurofeedback for cognitive enhancement and intervention and brain plasticity. <i>Revue Neurologique</i> , 2021, 177, 1133-1144.	0.6	24
1651	Restoring Sensorimotor Function Through Neuromodulation After Spinal Cord Injury: Progress and Remaining Challenges. <i>Frontiers in Neuroscience</i> , 2021, 15, 749465.	1.4	11
1652	Implantable brain-computer interface for neuroprosthetic-enabled volitional hand grasp restoration in spinal cord injury. <i>Brain Communications</i> , 2021, 3, fcab248.	1.5	18
1653	Improving reaching with functional electrical stimulation by incorporating stiffness modulation. <i>Journal of Neural Engineering</i> , 2021, 18, 055009.	1.8	1
1654	Recent advancement of electrocorticography (ECoG) electrodes for chronic neural recording/stimulation. <i>Materials Today Communications</i> , 2021, 29, 102853.	0.9	19
1655	Summary and Some Future Directions. , 2013, , 421-428.		0
1656	Functional Neuroscience: Cortical Control of Limb Prosthesis. , 2013, , 1-16.		0
1657	Somatosensory Prosthesis. , 2013, , 1-4.		0



#	ARTICLE	IF	CITATIONS
1658	Analysis of the Relationship between Load and EEG by Wavelet Transform for BMI. Lecture Notes in Computer Science, 2013, , 459-468.	1.0	0
1659	Brain-Machine Interfaces : Principles and Clinical Application. Japanese Journal of Neurosurgery, 2013, 22, 192-199.	0.0	0
1660	Robotic Grasp Initiation by Gaze Independent Brain-controlled Selection of Virtual Reality Objects. , 2013, , .		2
1661	Cortically Controlled Electrical Stimulation for Locomotion of the Spinal Cord Injured. Biosystems and Biorobotics, 2013, , 35-40.	0.2	4
1662	Decoding Grasp Types from the Monkey Motor Cortex and On-Line Control of a Dexterous Artificial Hand. Biosystems and Biorobotics, 2013, , 67-71.	0.2	1
1663	Unchained Mind. ASHA Leader, 2013, 18, 48-53.	0.2	0
1664	Transparent Micro-Optrode Arrays for Simultaneous Multichannel Optical Stimulation and Electrical Recording. , 2013, , .		0
1665	ANALIZA SZUMOWA KANAŁU ODCZYTOWEGO PRZEZNACZONEGO DO WIELOKANAŁOWYCH UKŁADÓW SCALONYCH DEDYKOWANYCH DO EKSPERYMENTÓW NEUROBIOLOGICZNYCH. Informatyka Automatyka Pomiary W Gospodarce I Ochronie Środowiska, 2013, 3, 21-23.	0.2	0
1666	Responsabilidade moral depois da neurociência. Filosofia Unisinos, 2013, 14, .	0.1	0
1667	Implementation Issues in Brain Implantable Neural Interface Microsystem. Journal of the Institute of Electronics and Information Engineers, 2013, 50, 229-235.	0.0	0
1670	Managing Communication for People with Amyotrophic Lateral Sclerosis: The Role of the Brain-Computer Interface. Communications in Medical and Care Compunetics, 2014, , 215-235.	0.2	1
1671	Give Me a Sign: Studies on the Decodability of Hand Gestures Using Activity of the Sensorimotor Cortex as a Potential Control Signal for Implanted Brain Computer Interfaces. Springer Briefs in Electrical and Computer Engineering, 2014, , 7-17.	0.3	3
1672	Brain Machine Interface and Neuroimaging. , 2014, , 1-3.		0
1673	The Extended Body in the Teaching-Learning Process. Advances in Educational Technologies and Instructional Design Book Series, 2014, , 261-268.	0.2	0
1674	Decoding of Kinetic and Kinematic Information from Electrooculograms in Sensorimotor Cortex: A Review. International Journal of Neurorehabilitation, 2014, 01, .	0.1	0
1675	Brain-Machine Interface: Overview. , 2014, , 1-10.		1
1676	Neural Decoding. , 2014, , 1-16.		1
1677	A Learning-Based Approach to Artificial Sensory Feedback. Springer Briefs in Electrical and Computer Engineering, 2014, , 31-46.	0.3	0

#	ARTICLE	IF	CITATIONS
1678	Electrocorticographic Control of a Prosthetic Hand in Paralyzed Patients. Biosystems and Biorobotics, 2014, , 95-103.	0.2	0
1679	Cortical Motor Prosthesis. , 2014, , 1-17.		0
1681	A Study on Applying Guidance Laws in Developing Algorithm which Enables Robot Arm to Trace 3D Coordinates Derived from Brain Signal. Journal of Biomedical Engineering Research, 2014, 35, 50-54.	0.1	0
1682	Human Single Unit Activity for Reach and Grasp Motor Prostheses. , 2014, , 305-326.		0
1683	Ethical Issues in Brain-Computer Interface Research and Systems for Motor Control. , 2015, , 725-740.		3
1684	Robust articulatory speech synthesis using deep neural networks for BCI applications. , 0, ,		12
1685	Theoretical Basis for Closed-Loop Stimulation as a Therapeutic Approach to Brain Injury. , 2015, , 101-119.		0
1686	Brain-Machine Interface and Neuroimaging. , 2015, , 441-443.		0
1688	Brain-Controlled Selection of Objects Combined with Autonomous Robotic Grasping. Springer Series in Computational Neuroscience, 2015, , 65-77.	0.3	0
1689	Brain-Computer Interfaces for Communication and Rehabilitation Using Intracortical Neuronal Activity from the Prefrontal Cortex and Basal Ganglia in Humans. Springer Briefs in Electrical and Computer Engineering, 2015, , 19-27.	0.3	0
1690	Cortical Motor Prosthesis. , 2015, , 892-905.		0
1691	Implantable Neural Sensors for Brain Machine Interface. KAIST Research Series, 2015, , 51-73.	1.5	0
1692	Brain-Computer Interface (BMI) as a Tool for Understanding Human-Computer Cooperation. , 2015, , 138-160.		1
1695	A Review of Research Trends on Brain Computer Interface(BCI) Games using Brain Wave. Journal of Digital Convergence, 2015, 13, 177-184.	0.1	3
1697	Medical Robotics. , 2015, , 3-35.		0
1698	Bewusstsein wirkt auf Gehirn und Körper. , 2016, , 293-318.		0
1699	From Neuroscience to Neurotechnology : The Decoding of Brain Information and Its Application by Neurocommunicator. Japanese Journal of Neurosurgery, 2016, 25, 497-503.	0.0	2
1700	Advance in Rehabilitative Intuitive Robotics. Journal of Applied Biotechnology & Bioengineering, 2016, 1, .	0.0	0

#	ARTICLE	IF	CITATIONS
1701	Man-Machine Interface for Autonomous Robots and Multi-Agent Robotic Systems. Mekhatronika, Avtomatizatsiya, Upravlenie, 2016, 17, 606-614.	0.2	3
1702	Analysis of circuits for effective stimulation in neurobiological experiments. Przegląd Elektrotechniczny, 2016, 1, 109-112.	0.1	1
1703	Neuroprothesen und Gehirn-Computer-Schnittstellen. , 2017, , 151-161.		0
1704	Output Device for Brain Machine Interface. Journal of the Japan Society for Precision Engineering, 2017, 83, 1000-1005.	0.0	0
1705	Research on Feature Recognition on mVEP BCI. , 2017, , .		0
1706	Development of Biosignal Recording Board System with Agile Control of Circuit Characteristics for Various Biosignals. IEEJ Transactions on Electronics, Information and Systems, 2017, 137, 348-353.	0.1	0
1709	Inside the Mind's Eye: An International Perspective on Data Privacy Law in the Age of Brain-Machine Interfaces. SSRN Electronic Journal, 0, , .	0.4	4
1710	Brain-Computer Interfaces for Motor Rehabilitation. , 2018, , 1471-1501.		0
1711	Functional Neuroscience: Cortical Control of Limb Protheses. , 2018, , 1-13.		0
1712	Journal of the Society of Biomechanics. Journal of the Society of Biomechanics, 2018, 42, 1-13.		0
1713	Network structure reconstruction using packets of spikes in cultured neuronal networks coupled to microelectrode arrays. Nonlinear Theory and Its Applications IEICE, 2018, 9, 281-294.	0.4	0
1716	Line Spectrum Representation of Neural and Myoelectric Signals for Brain-Machine Interface Applications. Proceedings of the ISCIE International Symposium on Stochastic Systems Theory and Its Applications, 2018, 2018, 153-157.	0.1	0
1718	DECODING IMAGINARY ELBOW MOVEMENT WITH KALMAN FILTER USING NON-INVASIVE EEG. , 2019, , .		0
1719	Brain-Machine Interfaces. , 2019, , 1-4.		0
1720	Influences of the Trained State Model into the Decoding of Elbow Motion Using Kalman Filter. Communications in Computer and Information Science, 2019, , 55-68.	0.4	0
1721	Interfacing Biology Systems with Nanoelectronics for Nanodevices. Advanced Structured Materials, 2019, , 701-759.	0.3	2
1722	Execution and Performance Evaluation of Cognitive and Expressive Event on a robotic Arm. Communications in Computer and Information Science, 2019, , 121-131.	0.4	0
1725	ICT, Data and Design Issues. PoliTO Springer Series, 2020, , 1-38.	0.3	0

#	ARTICLE	IF	CITATIONS
1726	Grasp-Pose Prediction for Hand-Held Objects. Advances in Intelligent Systems and Computing, 2020, , 191-202.	0.5	2
1731	Ultra-flexible organic imager and sensors. Proceedings of the International Display Workshops, 2019, , 1596.	0.1	0
1735	Neural Spike Detection Based on 1T1R Memristor. , 2020, , .		0
1737	Decoding of standard and non-standard visuomotor associations from parietal cortex. Journal of Neural Engineering, 2020, 17, 046027.	1.8	4
1741	Introduction of brain computer interface to neurologists. Annals of Clinical Neurophysiology, 2021, 23, 92-98.	0.1	1
1742	Ethical and social aspects of neural prosthetics. Progress in Biomedical Engineering, 2022, 4, 012004.	2.8	2
1743	The neural mechanisms of manual dexterity. Nature Reviews Neuroscience, 2021, 22, 741-757.	4.9	73
1744	Closed-loop enhancement and neural decoding of cognitive control in humans. Nature Biomedical Engineering, 2023, 7, 576-588.	11.6	29
1745	Brain-Machine Interface: Overview. , 2021, , 1-8.		1
1746	Gene Expression Analysis of Innate Immune Compromised Mice Reveals Secondary Target Genes in Response to Intracortical Microelectrode Implantation. SSRN Electronic Journal, 0, , .	0.4	0
1747	Biopotential Measurements and Electrodes. , 2020, , 65-96.		6
1748	Neurorestoration: Advances in human brainâ€“computer interface using microelectrode arrays. Journal of Neurorestoratology, 2020, 8, 32-39.	1.1	4
1749	Limitations for Extraterrestrial Colonisation and Civilisation Built and the Potential for Human Enhancements. Space and Society, 2020, , 71-93.	1.6	4
1750	Neuropharmacology: Looking Forward to the Future. , 2020, , 185-194.		0
1751	Towards Speech Synthesis from Intracranial Signals. Springer Briefs in Electrical and Computer Engineering, 2020, , 47-54.	0.3	0
1752	Intracortical Electrodes. , 2020, , 67-94.		0
1753	Restoring Functional Reach-to-Grasp in a Person with Chronic Tetraplegia Using Implanted Functional Electrical Stimulation and Intracortical Brain-Computer Interfaces. Springer Briefs in Electrical and Computer Engineering, 2020, , 35-45.	0.3	0
1756	Robust neural decoding by kernel regression with Siamese representation learning. Journal of Neural Engineering, 2021, 18, 056062.	1.8	6

#	ARTICLE	IF	CITATIONS
1758	The effect of deposition parameters on microstructure and electrochemical performance of reactively sputtered iridium oxide coatings. <i>Materials Today Communications</i> , 2021, 29, 102967.	0.9	3
1759	A systematic review of endovascular stent-electrode arrays, a minimally invasive approach to brain-machine interfaces. <i>Neurosurgical Focus</i> , 2020, 49, E3.	1.0	13
1760	Orthonormal Wavelet Transform for Efficient Feature Extraction for Sensory-Motor Imagery Electroencephalogram Brain-Computer Interface. <i>Advances in Intelligent Systems and Computing</i> , 2021, , 611-622.	0.5	1
1761	Are We the Robots?. <i>Advances in Bioinformatics and Biomedical Engineering Book Series</i> , 0, , 81-100.	0.2	1
1762	Brain-Computer Interfaces for Control of Upper Extremity Neuroprostheses in Individuals with High Spinal Cord Injury. <i>Advances in Bioinformatics and Biomedical Engineering Book Series</i> , 0, , 237-264.	0.2	3
1764	Neural Interface Devices: Connecting Electronics to the Brain. <i>Journal of the Institute of Electrical Engineers of Japan</i> , 2020, 140, 668-671.	0.0	0
1765	Mechanisms, Evidences, and Meta-analysis in Brain-Machine Interface Based Motor Exercise. <i>The Japanese Journal of Rehabilitation Medicine</i> , 2020, 57, 956-964.	0.0	0
1767	Neuronal Activity Distributed in Multiple Cortical Areas during Voluntary Control of the Native Arm or a Brain-Computer Interface. <i>ENeuro</i> , 2020, 7, .	0.9	2
1768	Agency and Accountability: Ethical Considerations for Brain-Computer Interfaces. <i>The Rutgers Journal of Bioethics</i> , 2020, 11, 9-20.	0.0	1
1769	Backstepping-based control for a manipulator system with disturbances and input quantization. , 2021, , .		0
1771	Long-term in-vivo recording performance of flexible penetrating microelectrode arrays. <i>Journal of Neural Engineering</i> , 2021, 18, 066018.	1.8	10
1772	Controlling Clinical States Governed by Different Temporal Dynamics With Closed-Loop Deep Brain Stimulation: A Principled Framework. <i>Frontiers in Neuroscience</i> , 2021, 15, 734186.	1.4	20
1775	A Review of Human-Machine Cooperation in the Robotics Domain. <i>IEEE Transactions on Human-Machine Systems</i> , 2022, 52, 12-25.	2.5	27
1776	Miniaturized Wireless Neural Interfaces: A tutorial. <i>IEEE Solid-State Circuits Magazine</i> , 2021, 13, 88-97.	0.5	4
1777	Quantitative Modeling on Nonstationary Neural Spikes: From Reinforcement Learning to Point Process. , 2021, , 1-60.		1
1778	Imagined speech can be decoded from low- and cross-frequency intracranial EEG features. <i>Nature Communications</i> , 2022, 13, 48.	5.8	50
1779	SISTEMAS DE INTERFAZ NEURONAL Y SU DESARROLLO EN LAS NEUROCIENCIAS: REVISI3N BIBLIOGRÁFICA SISTEMÁTICA ACERCA DE SU APLICACI3N EN PERSONAS CON PARÁLISIS. <i>Ciencias Psicol3gicas</i> , 0, , 187-197.	0.0	0
1780	Quand les machines d3codent nos intentions. <i>Pourlascience Fr</i> , 2019, N3o 501 - juillet, 72-79.	0.0	0

#	ARTICLE	IF	CITATIONS
1781	Quand les machines dÃ©codent nos intentions. , 2019, NÂ° 112, 14-21.		0
1782	Neuronal Activity Distributed in Multiple Cortical Areas during Voluntary Control of the Native Arm or a Brain-Computer Interface. ENeuro, 2020, 7, ENEURO.0376-20.2020.	0.9	4
1783	EDAN: An EMG-controlled Daily Assistant to Help People With Physical Disabilities. , 2020, , .		16
1784	Decoding of Intuitive Visual Motion Imagery Using Convolutional Neural Network under 3D-BCI Training Environment. , 2020, , .		8
1785	Removal of Ocular Artifacts from the Electroencephalogram Signal Flow using Median Filtering. , 2021, , .		0
1786	Neurointerface implemented with Oscillator Motifs. , 2021, , .		4
1787	Reinforcement Learning-based Kalman Filter for Adaptive Brain Control in Brain-Machine Interface. , 2021, 2021, 6619-6622.		1
1789	An Impending Paradigm Shift in Motor Imagery Based Brain-Computer Interfaces. Frontiers in Neuroscience, 2021, 15, 824759.	1.4	5
1790	2022 roadmap on neuromorphic computing and engineering. Neuromorphic Computing and Engineering, 2022, 2, 022501.	2.8	217
1791	Large-scale neural recordings with single neuron resolution using Neuropixels probes in human cortex. Nature Neuroscience, 2022, 25, 252-263.	7.1	112
1792	Exploring Cognition with Brainâ€“Machine Interfaces. Annual Review of Psychology, 2022, 73, 131-158.	9.9	12
1793	EEG characteristic investigation of the sixth-finger motor imagery and optimal channel selection for classification. Journal of Neural Engineering, 2022, 19, 016001.	1.8	4
1794	Alumina: Implantable Bionics and Tissue Scaffolds. Springer Series in Biomaterials Science and Engineering, 2022, , 281-318.	0.7	1
1795	Biology-guided engineering of bioelectrical interfaces. Nanoscale Horizons, 2022, 7, 94-111.	4.1	5
1796	Decoding motor imagery tasks using ESI and hybrid feature CNN. Journal of Neural Engineering, 2022, 19, 016022.	1.8	9
1797	Regularized RKHS-Based Subspace Learning for Motor Imagery Classification. Entropy, 2022, 24, 195.	1.1	1
1798	A Multimodal Neural-Recording IC With Reconfigurable Analog Front-Ends for Improved Availability and Usability for Recording Channels. IEEE Transactions on Biomedical Circuits and Systems, 2022, 16, 185-199.	2.7	8
1799	Sense of agency for intracortical brainâ€“machine interfaces. Nature Human Behaviour, 2022, 6, 565-578.	6.2	15

#	ARTICLE	IF	CITATIONS
1800	Human brain mapping with multithousand-channel PtNRGrids resolves spatiotemporal dynamics. <i>Science Translational Medicine</i> , 2022, 14, eabj1441.	5.8	46
1801	Conductive Polymer Enabled Biostable Liquid Metal Electrodes for Bioelectronic Applications. <i>Advanced Healthcare Materials</i> , 2022, 11, e2102382.	3.9	23
1802	Quantum Computing: The Future of Big Data and Artificial Intelligence in Spine. <i>Spine Surgery and Related Research</i> , 2022, 6, 93-98.	0.4	9
1803	Anodic-Bonding-Assisted Silicon Microelectrode Array For Neural Applications. , 2022, , .		0
1804	Motor BMIs Have Entered the Clinical Realm. , 2022, , 1-37.		1
1805	Workshops of the eighth international brain-computer interface meeting: BCIs: the next frontier. <i>Brain-Computer Interfaces</i> , 2022, 9, 69-101.	0.9	4
1806	Algorithm and hardware considerations for real-time neural signal on-implant processing. <i>Journal of Neural Engineering</i> , 2022, 19, 016029.	1.8	10
1807	Hand dominance in the performance and perceptions of virtual reach control. <i>Acta Psychologica</i> , 2022, 223, 103494.	0.7	6
1810	Improved Spike-Based Brain-Machine Interface Using Bayesian Adaptive Kernel Smoother and Deep Learning. <i>IEEE Access</i> , 2022, 10, 29341-29356.	2.6	5
1812	A 16-Channel Neural Recording System-on-Chip With CHT Feature Extraction Processor in 65-nm CMOS. <i>IEEE Journal of Solid-State Circuits</i> , 2022, 57, 2752-2763.	3.5	4
1813	Brain-Computer Interface Speaks Up. <i>Engineering</i> , 2022, 9, 3-5.	3.2	0
1814	Continuous Hybrid BCI Control for Robotic Arm Using Noninvasive Electroencephalogram, Computer Vision, and Eye Tracking. <i>Mathematics</i> , 2022, 10, 618.	1.1	26
1815	Flexible Electronics and Devices as Human-Machine Interfaces for Medical Robotics. <i>Advanced Materials</i> , 2022, 34, e2107902.	11.1	211
1816	Recent advances in wireless epicortical and intracortical neuronal recording systems. <i>Science China Information Sciences</i> , 2022, 65, 1.	2.7	12
1818	Spinal cord bioelectronic interfaces: opportunities in neural recording and clinical challenges. <i>Journal of Neural Engineering</i> , 2022, 19, 021003.	1.8	2
1819	Evaluating the clinical benefit of brain-computer interfaces for control of a personal computer. <i>Journal of Neural Engineering</i> , 2022, , .	1.8	4
1820	An adaptive closed-loop ECoG decoder for long-term and stable bimanual control of an exoskeleton by a tetraplegic. <i>Journal of Neural Engineering</i> , 2022, 19, 026021.	1.8	13
1821	Decoding ECoG signal into 3D hand translation using deep learning. <i>Journal of Neural Engineering</i> , 2022, 19, 026023.	1.8	15

#	ARTICLE	IF	CITATIONS
1822	Studies to Overcome Brain-Computer Interface Challenges. Applied Sciences (Switzerland), 2022, 12, 2598.	1.3	9
1823	A wireless millimetric magnetolectric implant for the endovascular stimulation of peripheral nerves. Nature Biomedical Engineering, 2022, 6, 706-716.	11.6	80
1824	Applying Dimensionality Reduction Techniques in Source-Space Electroencephalography via Template and Magnetic Resonance Imaging-Derived Head Models to Continuously Decode Hand Trajectories. Frontiers in Human Neuroscience, 2022, 16, 830221.	1.0	5
1825	Transparent, Low-Impedance Inkjet-Printed PEDOT:PSS Microelectrodes for Multimodal Neuroscience. Physica Status Solidi (A) Applications and Materials Science, 0, , 2100683.	0.8	10
1826	Neuromotor prosthetic to treat stroke-related paresis: N-of-1 trial. Communications Medicine, 2022, 2, .	1.9	3
1827	Characterizing the short-latency evoked response to intracortical microstimulation across a multi-electrode array. Journal of Neural Engineering, 2022, 19, 026044.	1.8	17
1828	A behavioral paradigm for cortical control of a robotic actuator by freely moving rats in a one-dimensional two-target reaching task. Journal of Neuroscience Methods, 2022, 373, 109555.	1.3	1
1830	The motion planning of Six-Degree-of-Freedom manipulator based on P-Rob. , 2021, , .		1
1831	Brain-computer interfaces for human gait restoration. Control Theory and Technology, 2021, 19, 516-528.	1.0	1
1832	A Brain Biometric-based Identification Approach Using Local Field Potentials. , 2021, 2021, 1116-1119.		1
1833	Continuously Decoding Grasping Movements using Stereotactic Depth Electrodes. , 2021, 2021, 6098-6101.		3
1834	Object segmentation in cluttered environment based on gaze tracing and gaze blinking. ROBOMECH Journal, 2021, 8, .	0.9	0
1835	Brain-Computer Interface Training Based on Brain Activity Can Induce Motor Recovery in Patients With Stroke: A Meta-Analysis. Neurorehabilitation and Neural Repair, 2022, 36, 83-96.	1.4	16
1836	Adaptation Strategies for Personalized Gait Neuroprosthetics. Frontiers in Neurorobotics, 2021, 15, 750519.	1.6	1
1837	Customizing skills for assistive robotic manipulators, an inverse reinforcement learning approach with error-related potentials. Communications Biology, 2021, 4, 1406.	2.0	23
1838	A 1D CNN for high accuracy classification and transfer learning in motor imagery EEG-based brain-computer interface. Journal of Neural Engineering, 2021, 18, 066053.	1.8	55
1840	Highly Configurable 100 Channel Recording and Stimulating Integrated Circuit for Biomedical Experiments. Sensors, 2021, 21, 8482.	2.1	0
1841	F-Value Time-Frequency Analysis: Between-Within Variance Analysis. Frontiers in Neuroscience, 2021, 15, 729449.	1.4	5



#	ARTICLE	IF	CITATIONS
1842	A Multifunctional Adaptive and Interactive AI system to support people living with stroke, acquired brain or spinal cord injuries: A study protocol. PLoS ONE, 2022, 17, e0266702.	1.1	4
1843	From sensing to control of lower limb exoskeleton: a systematic review. Annual Reviews in Control, 2022, 53, 83-96.	4.4	42
1844	Real-time recognition of different imagined actions on the same side of a single limb based on the fNIRS correlation coefficient. Biomedizinische Technik, 2022, 67, 173-183.	0.9	2
1845	Continuous 2D trajectory decoding from attempted movement: across-session performance in able-bodied and feasibility in a spinal cord injured participant. Journal of Neural Engineering, 2022, 19, 036005.	1.8	7
1862	A 3D in vitro model of the device-tissue interface: functional and structural symptoms of innate neuroinflammation are mitigated by antioxidant ceria nanoparticles. Journal of Neural Engineering, 2022, 19, 036004.	1.8	4
1863	Non-Invasive Human-Machine Interface (HMI) Systems With Hybrid On-Body Sensors for Controlling Upper-Limb Prosthesis: A Review. IEEE Sensors Journal, 2022, 22, 10292-10307.	2.4	15
1864	Increasing Robustness of Brain-Computer Interfaces Through Automatic Detection and Removal of Corrupted Input Signals. Frontiers in Neuroscience, 2022, 16, 858377.	1.4	2
1865	ROS-Neuro: An Open-Source Platform for Neurorobotics. Frontiers in Neurorobotics, 2022, 16, .	1.6	5
1866	Preserved cortical somatotopic and motor representations in tetraplegic humans. Current Opinion in Neurobiology, 2022, 74, 102547.	2.0	7
1867	An Ensemble Approach for Classification of Reach and Grasp Movements based on EEG Signals. , 2021, , .		1
1869	Noninvasively recorded high-gamma signals improve synchrony of force feedback in a novel neurorehabilitation brain-machine interface for brain injury. Journal of Neural Engineering, 2022, 19, 036024.	1.8	3
1870	A Power-Efficient Brain-Machine Interface System With a Sub-mw Feature Extraction and Decoding ASIC Demonstrated in Nonhuman Primates. IEEE Transactions on Biomedical Circuits and Systems, 2022, 16, 395-408.	2.7	6
1871	Learned Motor Patterns Are Replayed in Human Motor Cortex during Sleep. Journal of Neuroscience, 2022, 42, 5007-5020.	1.7	27
1872	Short report: surgery for implantable brain-computer interface assisted by robotic navigation system. Acta Neurochirurgica, 2022, 164, 2299-2302.	0.9	2
1873	Methods for Measuring Social and Conceptual Dimensions of Convergence Science. SSRN Electronic Journal, 0, , .	0.4	0
1875	An electroencephalography-based human-machine interface combined with contralateral C7 transfer in the treatment of brachial plexus injury. Neural Regeneration Research, 2022, 17, 2600.	1.6	4
1876	A low-power communication scheme for wireless, 1000 channel brain-machine interfaces. Journal of Neural Engineering, 2022, 19, 036037.	1.8	6
1877	Semi-Implantable Bioelectronics. Nano-Micro Letters, 2022, 14, .	14.4	14

#	ARTICLE	IF	CITATIONS
1878	Design-development of an at-home modular brain-computer interface (BCI) platform in a case study of cervical spinal cord injury. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2022, 19, .	2.4	5
1880	Dynamic Ensemble Bayesian Filter for Robust Control of a Human Brain-Machine Interface. <i>IEEE Transactions on Biomedical Engineering</i> , 2022, 69, 3825-3835.	2.5	8
1883	A Wireless Universal Brain-Machine Interface (BMI) System for Epileptic Diseases. , 2022, , .		2
1884	Development of a Sensing Platform Based on Hands-Free Interfaces for Controlling Electronic Devices. <i>Frontiers in Human Neuroscience</i> , 0, 16, .	1.0	3
1885	Wireless interfaces for brain neurotechnologies. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2022, 380, .	1.6	1
1886	Characteristics and stability of sensorimotor activity driven by isolated-muscle group activation in a human with tetraplegia. <i>Scientific Reports</i> , 2022, 12, .	1.6	0
1887	Body Temperature Enhanced Adhesive, Antibacterial, and Recyclable Ionic Hydrogel for Epidermal Electrophysiological Monitoring. <i>Advanced Healthcare Materials</i> , 2022, 11, .	3.9	29
1888	Restoration of complex movement in the paralyzed upper limb. <i>Journal of Neural Engineering</i> , 2022, 19, 046002.	1.8	7
1890	Fast construction of interpretable whole-brain decoders. <i>Cell Reports Methods</i> , 2022, 2, 100227.	1.4	1
1891	Manipulation of Surface Hydration States by Tuning the Oligo(Ethylene Glycol) Moieties on PEDOT to Achieve Platelet-Resistant Bioelectrode Applications. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	4
1892	High-density single-unit human cortical recordings using the Neuropixels probe. <i>Neuron</i> , 2022, 110, 2409-2421.e3.	3.8	36
1893	Decoding locomotion speed and slope from local field potentials of rat motor cortex. <i>Computer Methods and Programs in Biomedicine</i> , 2022, 223, 106961.	2.6	3
1894	Somatosensory Prosthesis. , 2022, , 3185-3188.		0
1895	Functional Neuroscience: Cortical Control of Limb Prostheses. , 2022, , 1474-1487.		0
1896	Neural Decoding. , 2022, , 2213-2225.		0
1897	SiC protective coating for photovoltaic retinal prostheses. , 2022, , 99-123.		1
1898	Brain-Machine Interface: Overview. , 2022, , 12-19.		0
1899	Cortical Motor Prosthesis. , 2022, , 1061-1074.		0

#	ARTICLE	IF	CITATIONS
1900	Brain-Machine Interface and Neuroimaging. , 2022, , 573-575.		0
1901	A Wide-Dynamic-Range Neural-Recording IC With Automatic-Gain-Controlled AFE and CT Dynamic-Zoom $\hat{\mu}\hat{\Sigma}$ ADC for Saturation-Free Closed-Loop Neural Interfaces. IEEE Journal of Solid-State Circuits, 2022, 57, 3071-3082.	3.5	6
1902	Continuous Decoding of Hand Movement From EEG Signals Using Phase-Based Connectivity Features. Frontiers in Human Neuroscience, 0, 16, .	1.0	6
1903	Basal ganglia-cortical connectivity underlies self-regulation of brain oscillations in humans. Communications Biology, 2022, 5, .	2.0	5
1904	Time stability and connectivity analysis with an intracortical 96-channel microelectrode array inserted in human visual cortex. Journal of Neural Engineering, 2022, 19, 045001.	1.8	3
1905	A hybrid autoencoder framework of dimensionality reduction for brain-computer interface decoding. Computers in Biology and Medicine, 2022, 148, 105871.	3.9	3
1906	A hardware efficient intra-cortical neural decoding approach based on spike train temporal information. Integrated Computer-Aided Engineering, 2022, , 1-15.	2.5	0
1908	Spike prediction on primary motor cortex from medial prefrontal cortex during task learning. Journal of Neural Engineering, 2022, 19, 046025.	1.8	2
1909	BCImat: a Matlab-based framework for Intracortical Brain-Computer Interfaces and their simulation with an artificial spiking neural network. Journal of Open Source Software, 2022, 7, 3956.	2.0	1
1910	Poststroke motor, cognitive and speech rehabilitation with brain-computer interface: a perspective review. Stroke and Vascular Neurology, 2022, 7, 541-549.	1.5	13
1911	2020 International brain-computer interface competition: A review. Frontiers in Human Neuroscience, 0, 16, .	1.0	14
1913	Reduction in Command Generation Time for fNIRS-Based BCI. , 2022, , .		0
1914	Brain-machine system design and interface development based on an upper limb robotic device : "A validated application to assist in the induction recording of stroke patients. , 2022, , .		0
1915	Neuroinflammatory Gene Expression Analysis Reveals Pathways of Interest as Potential Targets to Improve the Recording Performance of Intracortical Microelectrodes. Cells, 2022, 11, 2348.	1.8	14
1918	Corticospinal circuit neuroplasticity may involve silent synapses: Implications for functional recovery facilitated by neuromodulation after spinal cord injury. IBRO Neuroscience Reports, 2023, 14, 185-194.	0.7	0
1919	Slow Firing Single Units Are Essential for Optimal Decoding of Silent Speech. Frontiers in Human Neuroscience, 0, 16, .	1.0	2
1920	Is Graphene Shortening the Path toward Spinal Cord Regeneration?. ACS Nano, 2022, 16, 13430-13467.	7.3	16
1921	From Transparent Cranial Windows to Multifunctional Smart Cranial Platforms. Electronics (Switzerland), 2022, 11, 2559.	1.8	0

#	ARTICLE	IF	CITATIONS
1922	Femtosecond laser hierarchical surface restructuring for next generation neural interfacing electrodes and microelectrode arrays. Scientific Reports, 2022, 12, .	1.6	4
1924	Flexible electrodes for non-invasive brain-computer interfaces: A perspective. APL Materials, 2022, 10, .	2.2	4
1925	In vivo spatiotemporal dynamics of astrocyte reactivity following neural electrode implantation. Biomaterials, 2022, 289, 121784.	5.7	18
1926	Subject-Independent Classification of P300 Event-Related Potentials Using a Small Number of Training Subjects. IEEE Transactions on Human-Machine Systems, 2022, 52, 843-854.	2.5	7
1927	Intracranial EEG Recordings of High-Frequency Activity From a Wireless Implantable BMI Device in Awake Nonhuman Primates. IEEE Transactions on Biomedical Engineering, 2023, 70, 1107-1113.	2.5	0
1928	Central and Peripheral Neural Interfaces for Control of Upper Limb Actuators for Motor Rehabilitation After Stroke: Technical and Clinical Considerations. , 2022, , 1-54.		1
1929	Motor Imagery Intention Recognition Based on Common Spatial Pattern for Manipulator Grasping. Lecture Notes in Computer Science, 2022, , 125-135.	1.0	0
1930	Challenges for Large-Scale Brain-Machine Interfaces. , 2022, , 1-22.		0
1931	Brain-Machine Interfaces for Upper and Lower Limb Prostheses. , 2022, , 1-45.		0
1932	A Spiking Neural Network Based on Neural Manifold for Augmenting Intracortical Brain-Computer Interface Data. Lecture Notes in Computer Science, 2022, , 519-530.	1.0	2
1933	An Energy-Efficient Spiking Neural Network for Finger Velocity Decoding for Implantable Brain-Machine Interface. , 2022, , .		8
1934	Atomic Force Microscope Characterization of the Bending Stiffness and Surface Topography of Silicon and Polymeric Electrodes. , 2022, , .		0
1935	Evaluation of Pneumatic Insertion Stability of Utah Slanted Electrode Arrays in Rat Sciatic Nerve. , 2022, , .		3
1936	Effects of Low Mental Energy from Long Periods of Work on Brain-Computer Interfaces. Brain Sciences, 2022, 12, 1152.	1.1	1
1938	Stability of motor representations after paralysis. ELife, 0, 11, .	2.8	8
1939	Exploring user perspectives on a robotic arm with brain-machine interface: A qualitative focus group study. Medicine (United States), 2022, 101, e30508.	0.4	2
1940	Beyond the brain-computer interface: Decoding brain activity as a tool to understand neuronal mechanisms subtending cognition and behavior. Frontiers in Neuroscience, 0, 16, .	1.4	3
1942	Recruitment and Differential Firing Patterns of Single Units During Conditioning to a Tone in a Mute Locked-In Human. Frontiers in Human Neuroscience, 0, 16, .	1.0	0

#	ARTICLE	IF	CITATIONS
1943	Methodological Recommendations for Studies on the Daily Life Implementation of Implantable Communication-Brain-Computer Interfaces for Individuals With Locked-in Syndrome. <i>Neurorehabilitation and Neural Repair</i> , 2022, 36, 666-677.	1.4	4
1945	Brain-Computer Interface using neural network and temporal-spectral features. <i>Frontiers in Neuroinformatics</i> , 0, 16, .	1.3	0
1946	Deep brain-machine interfaces: sensing and modulating the human deep brain. <i>National Science Review</i> , 2022, 9, .	4.6	8
1947	Finger movement and coactivation predicted from intracranial brain activity using extended Block-Term Tensor Regression. <i>Journal of Neural Engineering</i> , 0, , .	1.8	0
1948	Roadmap on nanogenerators and piezotronics. <i>APL Materials</i> , 2022, 10, .	2.2	22
1950	Real-Time Deep Neurolinguistic Learning Enhances Noninvasive Neural Language Decoding for Brain-Machine Interaction. <i>IEEE Transactions on Cybernetics</i> , 2023, 53, 7469-7482.	6.2	6
1951	The Hand After Stroke and SCI: Restoration of Function with Technology. , 2022, , 113-134.		1
1952	BCI-Based Neuroprostheses and Physiotherapies for Stroke Motor Rehabilitation. , 2022, , 509-524.		0
1954	Real-time brain-machine interface in non-human primates achieves high-velocity prosthetic finger movements using a shallow feedforward neural network decoder. <i>Nature Communications</i> , 2022, 13, .	5.8	20
1957	Learning to control a BMI-driven wheelchair for people with severe tetraplegia. <i>IScience</i> , 2022, 25, 105418.	1.9	10
1958	Decoder calibration framework for intracortical brain-computer interface system via domain adaptation. <i>Biomedical Signal Processing and Control</i> , 2023, 81, 104453.	3.5	1
1959	Brain Chip Implant: Public's knowledge, Attitude, and Determinants. A Multi-Country Study, 2021. <i>Open Access Macedonian Journal of Medical Sciences</i> , 2022, 10, 2489-2497.	0.1	0
1960	Delving into Temporal-Spectral Connections in Spike-LFP Decoding by Transformer Networks. <i>Communications in Computer and Information Science</i> , 2023, , 15-29.	0.4	1
1961	Towards clinical application of implantable brain-computer interfaces for people with late-stage ALS: medical and ethical considerations. <i>Journal of Neurology</i> , 2023, 270, 1323-1336.	1.8	11
1962	Bibliometric analysis on Brain-computer interfaces in a 30-year period. <i>Applied Intelligence</i> , 2023, 53, 16205-16225.	3.3	2
1963	Active upper limb prostheses: a review on current state and upcoming breakthroughs. <i>Progress in Biomedical Engineering</i> , 2023, 5, 012001.	2.8	17
1964	Utah array characterization and histological analysis of a multi-year implant in non-human primate motor and sensory cortices. <i>Journal of Neural Engineering</i> , 2023, 20, 014001.	1.8	10
1965	Application of Robotic Recovery Techniques to Stroke Survivors—Bibliometric Analysis. <i>Journal of Personalized Medicine</i> , 2022, 12, 2066.	1.1	5

#	ARTICLE	IF	CITATIONS
1966	Continuous Bimanual Trajectory Decoding of Coordinated Movement From EEG Signals. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 6012-6023.	3.9	8
1969	A novel closed-loop BCI system based on comparison of multiple methods. , 2022, , .		0
1970	Tracking momentary fluctuations in human attention with a cognitive brain-machine interface. Communications Biology, 2022, 5, .	2.0	4
1971	Electroencephalogram signal analysis with 1T1R arrays toward high-efficiency brain computer interface. AIP Advances, 2022, 12, .	0.6	1
1972	Interim Safety Profile From the Feasibility Study of the BrainGate Neural Interface System. Neurology, 2023, 100, .	1.5	11
1973	Neuroprosthetics: from sensorimotor to cognitive disorders. Communications Biology, 2023, 6, .	2.0	19
1974	Self-Powered Electronic Skin for Remote Human-Machine Synchronization. ACS Applied Electronic Materials, 2023, 5, 498-508.	2.0	48
1975	Assessment of Safety of a Fully Implanted Endovascular Brain-Computer Interface for Severe Paralysis in 4 Patients. JAMA Neurology, 2023, 80, 270.	4.5	28
1976	Neural interfacing biomaterials coated with the firmly tethered neuro-specific lipid bilayer. Applied Surface Science, 2023, 624, 156424.	3.1	0
1977	Modulating Brain Activity with Invasive Brain-Computer Interface: A Narrative Review. Brain Sciences, 2023, 13, 134.	1.1	6
1979	Sensing local field potentials with a directional and scalable depth electrode array. Journal of Neural Engineering, 2023, 20, 016041.	1.8	3
1980	Heterogeneous domain adaptation for intracortical signal classification using domain consensus. Biomedical Signal Processing and Control, 2023, 82, 104540.	3.5	1
1981	Performance Evaluation of Head-Mounted Display based Brain-Computer Interface for Virtual Robotic Arm Operation. , 2022, , .		0
1982	Real-time Control of UGV Robot in Gazebo Simulator using P300-based Brain-Computer Interface. , 2022, , .		1
1983	Sensorimotor Rhythm-Based Brain-Computer Interfaces for Motor Tasks Used in Hand Upper Extremity Rehabilitation after Stroke: A Systematic Review. Brain Sciences, 2023, 13, 56.	1.1	4
1984	A Scorewriter Application using Electrooculography-based Human-Computer Interface. , 2022, , .		0
1986	Personalized Brain-Computer Interface and Its Applications. Journal of Personalized Medicine, 2023, 13, 46.	1.1	10
1987	Co-Adaptive Myoelectric Interface for Continuous Control*. IFAC-PapersOnLine, 2022, 55, 95-100.	0.5	1

#	ARTICLE	IF	CITATIONS
1988	Current cutting-edge research in computer science. , 0, , 1-4.		2
1989	Brain-Machine Interfaces: From Restoring Sensorimotor Control to Augmenting Cognition. , 2023, , 1343-1380.		0
1990	Implantable Device Fabrication and Packaging. , 2023, , 289-337.		1
1991	The Berlin Bimanual Test for Tetraplegia (BeBiTT): development, psychometric properties, and sensitivity to change in assistive hand exoskeleton application. Journal of NeuroEngineering and Rehabilitation, 2023, 20, .	2.4	2
1992	Neurosurgical Considerations for the Brain Computer Interface. , 2023, , 3567-3604.		0
1993	Motor BMIs Have Entered the Clinical Realm. , 2023, , 1381-1417.		0
1994	Neural Interfaces Involving the CNS and PNS Combined with Upper Limb Actuators for Motor Rehabilitation After Stroke: Technical and Clinical Considerations. , 2023, , 1701-1754.		0
1995	Brain-Machine Interfaces for Neurorobotics. , 2023, , 1817-1857.		0
1996	Artificial Sensory Feedback to the Brain: Somatosensory Feedback for Neural Devices and BCI. , 2023, , 1261-1283.		0
1997	Towards a Wireless Implantable Brain-Machine Interface for Locomotion Control. , 2023, , 1003-1022.		0
1998	Design Considerations for Implantable Neural Circuits and Systems. , 2023, , 695-719.		0
1999	A Neuroprosthetic for Individuals with Tetraplegia: The Path from a Clinical Research Tool to a Home-Use Assistive Device. , 2023, , 3353-3385.		0
2000	Quantitative Modeling on Nonstationary Neural Spikes: From Reinforcement Learning to Point Process. , 2023, , 2555-2614.		0
2002	Adversarial robustness benchmark for EEG-based brain-computer interfaces. Future Generation Computer Systems, 2023, 143, 231-247.	4.9	4
2003	Motorische Neurorehabilitation. , 2023, , 439-462.		0
2004	Layer-dependent stability of intracortical recordings and neuronal cell loss. Frontiers in Neuroscience, 0, 17, .	1.4	2
2005	Activation of inflammasomes and their effects on neuroinflammation at the microelectrode-tissue interface in intracortical implants. Biomaterials, 2023, 297, 122102.	5.7	1
2006	Autonomous grasping of 3-D objects by a vision-actuated robot arm using Brain-Computer Interface. Biomedical Signal Processing and Control, 2023, 84, 104765.	3.5	1

#	ARTICLE	IF	CITATIONS
2007	A new full closed-loop brain-machine interface approach based on neural activity: A study based on modeling and experimental studies. <i>Heliyon</i> , 2023, 9, e13766.	1.4	0
2008	Human single neuron recordings. , 2024, , .		0
2009	Flexible brain-computer interfaces. <i>Nature Electronics</i> , 2023, 6, 109-118.	13.1	48
2010	Challenges for Large-Scale Brain-Machine Interfaces. , 2023, , 419-440.		0
2011	Brain Co-processors: Using AI to Restore and Augment Brain Function. , 2023, , 1225-1260.		1
2012	Brain-Machine Interfaces for Upper and Lower Limb Protheses. , 2023, , 1091-1135.		0
2013	Soft Fiber Electronics Based on Semiconducting Polymer. <i>Chemical Reviews</i> , 2023, 123, 4693-4763.	23.0	40
2014	Revisiting embodiment for brain-computer interfaces. <i>Human-Computer Interaction</i> , 0, , 1-27.	3.1	0
2016	Post-explant profiling of subcellular-scale carbon fiber intracortical electrodes and surrounding neurons enables modeling of recorded electrophysiology. <i>Journal of Neural Engineering</i> , 2023, 20, 026019.	1.8	4
2017	Neuronal representation of bimanual arm motor imagery in the motor cortex of a tetraplegia human, a pilot study. <i>Frontiers in Neuroscience</i> , 0, 17, .	1.4	4
2018	Brain-Computer Interface (BCI) Based on the EEG Signal Decomposition Butterfly Optimization and Machine Learning. , 2023, , 83-106.		0
2019	Demystifying Cognitive Informatics and its Applications in Brain-Computer Interface. <i>Wireless Personal Communications</i> , 2023, 129, 1343-1368.	1.8	3
2020	Flexible and smart electronics for single-cell resolved brain-machine interfaces. <i>Applied Physics Reviews</i> , 2023, 10, .	5.5	1
2021	Decoding of Individual Finger Movement on One Hand Using Ultra high-density EEG. , 2022, , .		0
2022	A Low-Complexity Brain-Computer Interface for High-Complexity Robot Swarm Control. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2023, 31, 1816-1825.	2.7	1
2023	Research Development on Assistive Technology: A Network and Concept-Linking Analysis. <i>Springer Proceedings in Complexity</i> , 2023, , 107-118.	0.2	0
2024	A hybrid P300-SSVEP brain-computer interface speller with a frequency enhanced row and column paradigm. <i>Frontiers in Neuroscience</i> , 0, 17, .	1.4	6
2025	Noninvasive Sensors for Brain-Machine Interfaces Based on Micropatterned Epitaxial Graphene. <i>ACS Applied Nano Materials</i> , 2023, 6, 5440-5447.	2.4	6



#	ARTICLE	IF	CITATIONS
2026	Impact of dataset size and long-term ECoG-based BCI usage on deep learning decoders performance. <i>Frontiers in Human Neuroscience</i> , 0, 17, .	1.0	2
2027	Synchronous motor imagery and visual feedback of finger movement elicit the moving rubber hand illusion, at least in illusion-susceptible individuals. <i>Experimental Brain Research</i> , 2023, 241, 1021-1039.	0.7	1
2028	BCI-activated electrical stimulation in children with perinatal stroke and hemiparesis: A pilot study. <i>Frontiers in Human Neuroscience</i> , 0, 17, .	1.0	0
2029	Intracortical Hindlimb Brain-Computer Interface Systems: A Systematic Review. <i>IEEE Access</i> , 2023, 11, 28119-28139.	2.6	1
2030	A Hybrid Method for Implicit Intention Inference Based on Punished-Weighted Naïve Bayes. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2023, 31, 1826-1836.	2.7	0
2031	Decoding Action Planning of three-dimensional Movements Using Electrocorticographic signals. , 2023, , .		0
2032	BrainGate: An Intracortical Brain-Computer Interface for the Restoration of Communication and Functional Independence for People with Paralysis. , 2023, , .		0
2033	Brain-Computer Interface. , 2023, , 223-248.		1
2036	Mobile cognition: imaging the human brain in the "real world"™. <i>Nature Reviews Neuroscience</i> , 2023, 24, 347-362.	4.9	29
2037	Neurotechnologies to restore hand functions. , 2023, 1, 390-407.		5
2038	Translational opportunities and challenges of invasive electrodes for neural interfaces. <i>Nature Biomedical Engineering</i> , 2023, 7, 424-442.	11.6	17
2039	Restoring continuous finger function with temporarily paralyzed nonhuman primates using brain-machine interfaces. <i>Journal of Neural Engineering</i> , 2023, 20, 036006.	1.8	0
2041	Brain Co-processors: Ethical and Social Implications. <i>Advances in Neuroethics</i> , 2023, , 169-185.	0.1	0
2042	Future Developments in Brain/Neural-Computer Interface Technology. <i>Advances in Neuroethics</i> , 2023, , 65-85.	0.1	2
2054	Soft Robotics Enables Neuroprosthetic Hand Design. <i>ACS Nano</i> , 2023, 17, 9661-9672.	7.3	9
2056	Intracortical brain-computer interfaces in primates: a review and outlook. <i>Biomedical Engineering Letters</i> , 2023, 13, 375-390.	2.1	2
2057	Electrochemical and electrophysiological considerations for clinical high channel count neural interfaces. <i>MRS Bulletin</i> , 0, , .	1.7	1
2064	ImageRobo: Controlling Robot by Some EEGs from Right Frontal Area on Recalling Image of Its Movements. <i>Studies in Fuzziness and Soft Computing</i> , 2023, , 89-100.	0.6	0

#	ARTICLE	IF	CITATIONS
2066	Body-tool integration: past, present, and future. , 2023, , 131-150.		0
2076	Robust Online Multiband Drift Estimation in Electrophysiology Data. , 2023, , .		5
2083	HAT: Head-Worn Assistive Teleoperation of Mobile Manipulators. , 2023, , .		0
2084	Neural Decoding for Intracortical Brain-Computer Interfaces. Cyborg and Bionic Systems, 2023, 4, .	3.7	4
2085	Brain-Computer Interfaces in Visualized Medicine. Advances in Experimental Medicine and Biology, 2023, , 127-153.	0.8	0
2087	A Compact 16-Channel Neural Signal Recorder with Wireless Power and Data Transmission. , 2023, , .		0
2088	Biomimetic Grasp Control of Robotic Hands Using Deep Learning. , 2023, , .		0
2095	Human Intracranial Recordings for Language Research. Neuromethods, 2023, , 285-309.	0.2	0
2099	A review on the performance of brain-computer interface systems used for patients with locked-in and completely locked-in syndrome. Cognitive Neurodynamics, 0, , .	2.3	0
2101	Micro electrical mechanical system (MEMS) sensor technologies. , 2023, , 25-44.		0
2102	Virtual reality, augmented reality technologies, and rehabilitation. , 2023, , 111-134.		0
2109	Wearable Extra Robotic Limbs: A Systematic Review of Current Progress and Future Prospects. Journal of Intelligent and Robotic Systems: Theory and Applications, 2023, 109, .	2.0	0
2114	How Does Artificial Intelligence Contribute to iEEG Research?. Studies in Neuroscience, Psychology and Behavioral Economics, 2023, , 761-802.	0.1	2
2116	Association between lesion location and sensorimotor rhythms in stroke – a systematic review with narrative synthesis. Neurological Sciences, 0, , .	0.9	0
2117	Motor sequela of adult and pediatric stroke: Imminent losses and ultimate gains. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2023, , 305-346.	1.0	0
2119	Brain-Machine Based Rehabilitation Motor Interface and Design Evaluation for Stroke Patients. Lecture Notes in Computer Science, 2023, , 625-635.	1.0	0
2145	DORMADL - Dataset of Human-Operated Robot Arm Motion in Activities of Daily Living. , 2023, , .		0
2147	Error-related Potentials in a Virtual Pick-and-Place Experiment: Toward Real-world Shared-control. , 2023, , .		0

#	ARTICLE	IF	CITATIONS
2148	EEG Context Fusion for AI-Based Object Detection and Drone Navigation in Situationally Aware Brain-Computer Interfaces. , 2023, , .		0
2150	Technological trends in medical robotic sensing with soft electronic skin. Sensors & Diagnostics, 2024, 3, 218-237.	1.9	0
2153	May the Force Be with You: Biomimetic Grasp Force Decoding for Brain Controlled Bionic Hands. Springer Briefs in Electrical and Computer Engineering, 2024, , 109-121.	0.3	0
2154	Digital Bridge to Restore Voluntary Control of Leg Movements After Paralysis. Springer Briefs in Electrical and Computer Engineering, 2024, , 49-57.	0.3	0
2155	The Neuroscience of Functional Neurosurgery. , 2024, , 369-381.		0
2159	Neuromorphic hardware for somatosensory neuroprostheses. Nature Communications, 2024, 15, .	5.8	1
2163	FPGA implementation of a Spiking Neural Network for Real-Time Action Potential and Burst Detection. , 2023, , .		0
2165	The Concept of Hippocampal Activity Restoration Using Artificial Intelligence Technologies. Communications in Computer and Information Science, 2024, , 240-252.	0.4	0
2166	Brain-Controlled Assistive Robotics and Prosthetics. , 0, , 129-147.		0
2168	Robotics and exoskeletons: Are we close to daily clinical implementation?. , 2024, , 257-268.		0
2169	Bioengineering prospects in livestock production. , 2024, , 129-158.		0
2175	Mirror Visual Feedback as a Tool for Training Users to Achieve Control Over the BCI. IFMBE Proceedings, 2024, , 77-84.	0.2	0
2179	Rehabilitation and Assistive Robotics. , 2023, , 73-99.		0
2181	Continuous Decoding of Movement Trajectory During Unimanual Movement Using Bilateral Motor Cortex Signals. , 2023, , .		0