Restoring cortical control of functional movement in a

Nature 533, 247-250 DOI: 10.1038/nature17435

Citation Report

#	Article	IF	CITATIONS
1	Living Brain to Hand. Neurosurgery, 2016, 79, N13-N14.	1.1	0
2	The Evolution of Neuroprosthetic Interfaces. Critical Reviews in Biomedical Engineering, 2016, 44, 123-152.	0.9	56
3	The Neural Bypass: New Hope for Spinal Cord Injury Patients. Spine Research, 2016, 02, .	0.0	0
4	A Bidirectional Brain-Machine Interface Featuring a Neuromorphic Hardware Decoder. Frontiers in Neuroscience, 2016, 10, 563.	2.8	58
5	Enhancing Nervous System Recovery through Neurobiologics, Neural Interface Training, and Neurorehabilitation. Frontiers in Neuroscience, 2016, 10, 584.	2.8	121
6	The Pursuit of Chronically Reliable Neural Interfaces: A Materials Perspective. Frontiers in Neuroscience, 2016, 10, 599.	2.8	15
7	Homo Technologicus: Threat or Opportunity?. Philosophies, 2016, 1, 199-208.	0.7	10
8	First paralysed person to be 'reanimated' offers neuroscience insights. Nature, 0, , .	27.8	3
9	Brain–machine interfaces for rehabilitation of poststroke hemiplegia. Progress in Brain Research, 2016, 228, 163-183.	1.4	41
10	A miniaturized brain-machine-spinal cord interface (BMSI) for closed-loop intraspinal microstimulation. , 2016, , .		2
11	Retrospectively supervised click decoder calibration for self-calibrating point-and-click brain–computer interfaces. Journal of Physiology (Paris), 2016, 110, 382-391.	2.1	17
12	Using an Artificial Neural Bypass to Restore Cortical Control of Rhythmic Movements in a Human with Quadriplegia. Scientific Reports, 2016, 6, 33807.	3.3	49
13	Noninvasive Electroencephalogram Based Control of a Robotic Arm for Reach and Grasp Tasks. Scientific Reports, 2016, 6, 38565.	3.3	333
14	Hybrid EEG/EOG-based brain/neural hand exoskeleton restores fully independent daily living activities after quadriplegia. Science Robotics, 2016, 1, .	17.6	163
15	Moving a Paralyzed Hand—A Biomedical Big Data Success Story. Chance, 2016, 29, 4-13.	0.2	3
16	Neural bypass. Nature Reviews Neuroscience, 2016, 17, 336-336.	10.2	0
17	Man with quadriplegia uses brainwaves to control his forearm muscles. Nature Reviews Neurology, 2016, 12, 314-314.	10.1	0
18	Brain-machine interface facilitated neurorehabilitation via spinal stimulation after spinal cord injury: Recent progress and future perspectives. Brain Research, 2016, 1646, 25-33.	2.2	50

ATION RED

\mathbf{C}		DEDO	DT
		Repo	ו או
0	/	ILLI U	TC L

#	Article	IF	CITATIONS
19	New Perspectives on Neuroengineering and Neurotechnologies: NSF-DFG Workshop Report. IEEE Transactions on Biomedical Engineering, 2016, 63, 1354-1367.	4.2	23
20	Predicting the Future — Big Data, Machine Learning, and Clinical Medicine. New England Journal of Medicine, 2016, 375, 1216-1219.	27.0	1,955
21	Cyborg Intelligence: Recent Progress and Future Directions. IEEE Intelligent Systems, 2016, 31, 44-50.	4.0	35
22	Neural interfaces take another step forward. Nature, 2016, 539, 177-178.	27.8	17
23	A brain–spine interface alleviating gait deficits after spinal cord injury in primates. Nature, 2016, 539, 284-288.	27.8	492
24	Fully Implanted Brain–Computer Interface in a Locked-In Patient with ALS. New England Journal of Medicine, 2016, 375, 2060-2066.	27.0	392
25	Graphene Encapsulated Copper Microwires as Highly MRI Compatible Neural Electrodes. Nano Letters, 2016, 16, 7731-7738.	9.1	82
26	Materials and technologies for soft implantable neuroprostheses. Nature Reviews Materials, 2016, 1, .	48.7	485
27	Big data challenges in decoding cortical activity in a human with quadriplegia to inform a brain computer interface. , 2016, 2016, 3084-3087.		13
28	Virtual reality for pediatric neuro-rehabilitation: Adaptive visual feedback of movement to engage the mirror neuron system. , 2016, 2016, 5849-5852.		18
29	Adaptive neuron-to-EMG decoder training for FES neuroprostheses. Journal of Neural Engineering, 2016, 13, 046009.	3.5	12
30	Decoding Local Field Potentials for Neural Interfaces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1705-1714.	4.9	52
31	Neural regulation of immunity: molecular mechanisms and clinical translation. Nature Neuroscience, 2017, 20, 156-166.	14.8	357
32	Electronic Dura Mater Meddling in the Central Nervous System. JAMA Neurology, 2017, 74, 470.	9.0	14
33	A high-performance transparent graphene/vertically aligned carbon nanotube (VACNT) hybrid electrode for neural interfacing. RSC Advances, 2017, 7, 3273-3281.	3.6	14
34	Versatile, modular 3D microelectrode arrays for neuronal ensemble recordings: from design to fabrication, assembly, and functional validation in non-human primates. Journal of Neural Engineering, 2017, 14, 036010.	3.5	47
35	Man/machine interface based on the discharge timings of spinal motor neurons after targeted muscle reinnervation. Nature Biomedical Engineering, 2017, 1, .	22.5	245
36	Review: Human Intracortical Recording and Neural Decoding for Brain–Computer Interfaces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1687-1696.	4.9	80

#	Article	IF	CITATIONS
37	Cracking the neural code, treating paralysis and the future of bioelectronic medicine. Journal of Internal Medicine, 2017, 282, 37-45.	6.0	29
38	Classification of different reaching movements from the same limb using EEG. Journal of Neural Engineering, 2017, 14, 046018.	3.5	48
39	Brain-Machine Interface Development for Finger Movement Control. Springer Briefs in Electrical and Computer Engineering, 2017, , 31-49.	0.5	1
40	Neuroprosthetics: Restoring multi-joint motor control. Nature Biomedical Engineering, 2017, 1, .	22.5	7
41	Gentler alternatives to chips in the brain. Nature, 2017, 544, 416-416.	27.8	2
42	Traumatic spinal cord injury. Nature Reviews Disease Primers, 2017, 3, 17018.	30.5	1,138
43	Physiological properties of brain-machine interface input signals. Journal of Neurophysiology, 2017, 118, 1329-1343.	1.8	38
44	Neuromorphic neural interfaces: from neurophysiological inspiration to biohybrid coupling with nervous systems. Journal of Neural Engineering, 2017, 14, 041002.	3.5	57
45	Emerging Challenges for Neuroradiologists. Clinical Neuroradiology, 2017, 27, 133-133.	1.9	0
46	Mechanisms and Therapeutic Relevance of Neuro-immune Communication. Immunity, 2017, 46, 927-942.	14.3	445
47	An engineered home environment for untethered data telemetry from nonhuman primates. Journal of Neuroscience Methods, 2017, 288, 72-81.	2.5	6
48	Mind control as a guide for the mind. Nature Human Behaviour, 2017, 1, .	12.0	18
49	A Cognition-Related Neural Oscillation Pattern, Generated in the Prelimbic Cortex, Can Control Operant Learning in Rats. Journal of Neuroscience, 2017, 37, 5923-5935.	3.6	12
50	Neurophysiology and neural engineering: a review. Journal of Neurophysiology, 2017, 118, 1292-1309.	1.8	30
51	Next-generation probes, particles, and proteins for neural interfacing. Science Advances, 2017, 3, e1601649.	10.3	377
52	Functional remodeling of subtype-specific markers surrounding implanted neuroprostheses. Journal of Neurophysiology, 2017, 118, 194-202.	1.8	33
53	Interfacing to the brain's motor decisions. Journal of Neurophysiology, 2017, 117, 1305-1319.	1.8	36
54	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.	13.7	632

#	Article	IF	CITATIONS
55	Reaching again: a glimpse of the future with neuroprosthetics. Lancet, The, 2017, 389, 1777-1778.	13.7	2
56	Brain-Machine Interfaces: From Basic Science to Neuroprostheses and Neurorehabilitation. Physiological Reviews, 2017, 97, 767-837.	28.8	409
57	Closed-loop brain training: the science of neurofeedback. Nature Reviews Neuroscience, 2017, 18, 86-100.	10.2	814
58	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.	4.0	85
59	Brain–Machine Interface Control Algorithms. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1725-1734.	4.9	58
60	Strategies for Autonomous Sensor–Brain Interfaces for Closed-Loop Sensory Reanimation of Paralyzed Limbs. Neurosurgery, 2017, 64, 11-20.	1.1	4
61	Giuliano Vanghetti and the innovation of "cineplastic operations― Neurology, 2017, 89, 1627-1632.	1.1	19
62	Central nervous system microstimulation: Towards selective micro-neuromodulation. Current Opinion in Biomedical Engineering, 2017, 4, 65-77.	3.4	12
63	Advances in BCI: A Neural Bypass Technology to Reconnect the Brain to the Body. Springer Briefs in Electrical and Computer Engineering, 2017, , 9-20.	0.5	3
64	Automatic Calibration of High Density Electric Muscle Stimulation. , 2017, 1, 1-17.		24
65	Neuroprosthetic-enabled control of graded arm muscle contraction in a paralyzed human. Scientific Reports, 2017, 7, 8386.	3.3	64
66	Bioelectronic medicine: technology targeting molecular mechanisms for therapy. Journal of Internal Medicine, 2017, 282, 3-4.	6.0	65
67	A Practical Guide to Posthumans. Journal of Posthuman Studies: Philosophy, Technology, Media, 2017, 1, 61-74.	0.3	4
68	A new 3D self-adaptive nerve electrode for high density peripheral nerve stimulation and recording. , 2017, , .		4
69	Micro-Hermetic Packaging Technology for Active Implantable Neural Interfaces. , 2017, , .		7
70	Leveraging neural dynamics to extend functional lifetime of brain-machine interfaces. Scientific Reports, 2017, 7, 7395.	3.3	33
71	What can neuronal populations tell us about cognition?. Current Opinion in Neurobiology, 2017, 46, 48-57.	4.2	9
72	Injecting Instructions into Premotor Cortex. Neuron, 2017, 96, 1282-1289.e4.	8.1	23

\sim			<u> </u>	
CI	ITATI	ON	REPO	JRT

#	Article	IF	CITATIONS
73	Nerve Stimulation: Immunomodulation and Control of Inflammation. Trends in Molecular Medicine, 2017, 23, 1103-1120.	6.7	102
74	Augmenting intracortical brain-machine interface with neurally driven error detectors. Journal of Neural Engineering, 2017, 14, 066007.	3.5	23
75	Restoring Touch through Intracortical Microstimulation of Human Somatosensory Cortex. , 2017, , .		4
76	Textual analysis and visualization of research trends in data mining for electronic health records. Health Policy and Technology, 2017, 6, 389-400.	2.5	24
77	Artificial intelligence in healthcare: past, present and future. Stroke and Vascular Neurology, 2017, 2, 230-243.	3.3	2,009
78	Skeletal Motor Neuroprostheses. Series on Bioengineering and Biomedical Engineering, 2017, , 491-536.	0.1	1
79	Editorial. Advancement in brain–machine interfaces for patients with tetraplegia: neurosurgical perspective. Neurosurgical Focus, 2017, 43, E5.	2.3	9
80	Intelligent biohybrid systems for functional brain repair. European Journal of Molecular and Clinical Medicine, 2017, 3, 162.	0.1	9
81	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.	4.9	2
82	Control of cell fate and excitability at the neural electrode interface: Genetic reprogramming and optical induction. , 2017, , .		3
83	15. Prosthetics. , 2017, , 266-293.		0
84	Cyborgs and Enhancement Technology. Philosophies, 2017, 2, 4.	0.7	21
85	Cortex-dependent recovery of unassisted hindlimb locomotion after complete spinal cord injury in adult rats. ELife, 2017, 6, .	6.0	32
86	State-Dependent Decoding Algorithms Improve the Performance of a Bidirectional BMI in Anesthetized Rats. Frontiers in Neuroscience, 2017, 11, 269.	2.8	1
87	Principled Approaches to Direct Brain Stimulation for Cognitive Enhancement. Frontiers in Neuroscience, 2017, 11, 650.	2.8	16
88	Neurobionics and the brain–computer interface: current applications and future horizons. Medical Journal of Australia, 2017, 206, 363-368.	1.7	52
89	Development of Si neural probe with piezoresistive force sensor for minimally invasive and precise monitoring of insertion forces. Japanese Journal of Applied Physics, 2017, 56, 04CM04.	1.5	0
90	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.	3.3	25

#	Article	IF	CITATIONS
91	Cyborgs. , 2017, , 705-715.		0
92	2016 yearbook of neurorestoratology. Journal of Neurorestoratology, 0, Volume 5, 111-115.	2.5	11
93	Clinical therapeutic guideline for neurorestoration in spinal cord injury (Chinese version 2016). Journal of Neurorestoratology, 2017, Volume 5, 73-83.	2.5	11
94	EVALUATION OF MUSCLE STRENGTH IN MEDULLAR INJURY: A LITERATURE REVIEW. Coluna/ Columna, 2017, 16, 323-329.	0.2	2
95	Sequential Probability Ratio Testing with Power Projective Base Method Improves Decision-Making for BCI. Computational and Mathematical Methods in Medicine, 2017, 2017, 1-10.	1.3	1
96	Effects of the electrode insertion depth on the neural signal amplitude in the spinal cord. Analytical Methods, 2018, 10, 1385-1390.	2.7	1
97	Volitional Modulation of Primary Visual Cortex Activity Requires the Basal Ganglia. Neuron, 2018, 97, 1356-1368.e4.	8.1	44
99	Molecular and Functional Neuroscience in Immunity. Annual Review of Immunology, 2018, 36, 783-812.	21.8	304
100	A noninvasive brain–computer interface approach for predicting motion intention of activities of daily living tasks for an upper-limb wearable robot. International Journal of Advanced Robotic Systems, 2018, 15, 172988141876731.	2.1	19
101	A Multimodal Adaptive Wireless Control Interface for People With Upper-Body Disabilities. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 564-575.	4.0	24
102	Biofunctionalized 3D Nanopillar Arrays Fostering Cell Guidance and Promoting Synapse Stability and Neuronal Activity in Networks. ACS Applied Materials & Interfaces, 2018, 10, 15207-15215.	8.0	32
103	EEC-controlled functional electrical stimulation for hand opening and closing in chronic complete cervical spinal cord injury. Biomedical Physics and Engineering Express, 2018, 4, 065005.	1.2	18
104	Object discrimination using electrotactile feedback. Journal of Neural Engineering, 2018, 15, 046007.	3.5	29
105	Brain–machine interfaces for controlling lower-limb powered robotic systems. Journal of Neural Engineering, 2018, 15, 021004.	3.5	157
106	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.	1.4	6
107	Rapid calibration of an intracortical brain–computer interface for people with tetraplegia. Journal of Neural Engineering, 2018, 15, 026007.	3.5	95
108	Brain–Machine Interfaces. , 2018, , 197-218.		0
109	Dynamic Neuroscience. , 2018, , .		9

#	Article	IF	CITATIONS
110	Current Researches and Future Development Trend of Intelligent Robot: A Review. International Journal of Automation and Computing, 2018, 15, 525-546.	4.5	94
111	Regulations for the development of deep technology applications in healthcare urgently needed to prevent abuse of vulnerable patients. BMJ Innovations, 2018, 4, 111-112.	1.7	3
112	Flexible multichannel vagus nerve electrode for stimulation and recording for heart failure treatment. Biosensors and Bioelectronics, 2018, 112, 114-119.	10.1	14
113	Feasibility of Automatic Error Detect-and-Undo System in Human Intracortical Brain–Computer Interfaces. IEEE Transactions on Biomedical Engineering, 2018, 65, 1771-1784.	4.2	12
114	Optimizing the Usability of Brain-Computer Interfaces. Neural Computation, 2018, 30, 1323-1358.	2.2	5
115	Brain-computer interfaces based on intracortical recordings of neural activity for restoration of movement and communication of people with paralysis. , 2018, , .		1
116	Bidirectional Neural Interface and Closed-Loop Control. , 2018, , 137-164.		0
117	Signal processing methods for reducing artifacts in microelectrode brain recordings caused by functional electrical stimulation. Journal of Neural Engineering, 2018, 15, 026014.	3.5	26
118	Potential for thermal damage to the blood–brain barrier during craniotomy: implications for intracortical recording microelectrodes. Journal of Neural Engineering, 2018, 15, 034001.	3.5	48
119	Visual evoked potentials determine chronic signal quality in a stent-electrode endovascular neural interface. Biomedical Physics and Engineering Express, 2018, 4, 055018.	1.2	8
120	Variation of Finger Activation Patterns Post-stroke Through Non-invasive Nerve Stimulation. Frontiers in Neurology, 2018, 9, 1101.	2.4	12
122	Cortical Decoding of Individual Finger Group Motions Using ReFIT Kalman Filter. Frontiers in Neuroscience, 2018, 12, 751.	2.8	36
123	Neuroengineering and neuroprosthetics. Brain and Neuroscience Advances, 2018, 2, 239821281881749.	3.4	9
124	Estimation of Relationship Between Stimulation Current and Force Exerted During Isometric Contraction. , 2018, , .		3
125	Brain signal acquisition methods in BCIs to estimate human motion intention â \in " a survey. , 2018, , .		2
126	Interaction techniques for a neural-guided hand exoskeleton. Procedia Computer Science, 2018, 141, 442-446.	2.0	3
127	Innovations in electrical stimulation harness neural plasticity to restore motor function. Bioelectronics in Medicine, 2018, 1, 251-263.	2.0	5
128	Biomimetic extracellular matrix coatings improve the chronic biocompatibility of microfabricated subdural microelectrode arrays. PLoS ONE, 2018, 13, e0206137.	2.5	16

#	Article	IF	Citations
" 129	Tracking Human Engrams Using Multivariate Analysis Techniques. Handbook of Behavioral Neuroscience, 2018, , 481-508.	0.7	4
130	Brain-machine interface cursor position only weakly affects monkey and human motor cortical activity in the absence of arm movements. Scientific Reports, 2018, 8, 16357.	3.3	8
131	Eyelid Drive System: An Assistive Technology Employing Inductive Sensing of Eyelid Movement. IEEE Transactions on Biomedical Circuits and Systems, 2018, 13, 1-1.	4.0	7
132	Three-Dimensional Brain–Computer Interface Control Through Simultaneous Overt Spatial Attentional and Motor Imagery Tasks. IEEE Transactions on Biomedical Engineering, 2018, 65, 2417-2427.	4.2	41
133	Brain–Computer Interfaces. , 2018, , 341-356.		2
134	Prospects for a Robust Cortical Recording Interface. , 2018, , 393-413.		1
135	Invasive Brain-Computer Interfaces and Neural Recordings From Humans. Handbook of Behavioral Neuroscience, 2018, 28, 527-539.	0.7	7
136	A Randomized Clinical Trial of a Functional Electrical Stimulation Mimic to Gait Promotes Motor Recovery and Brain Remodeling in Acute Stroke. Behavioural Neurology, 2018, 2018, 1-10.	2.1	27
137	Implantable Neural Probes for Brain-Machine Interfaces ? Current Developments and Future Prospects. Experimental Neurobiology, 2018, 27, 453-471.	1.6	45
138	Neural Decoding Forelimb Trajectory Using Evolutionary Neural Networks with Feedback-Error-Learning Schemes. , 2018, 2018, 2539-2542.		0
139	Motor Neuroprostheses. , 2018, 9, 127-148.		6
140	Neural Prosthetics: A Review of Empirical vs. Systems Engineering Strategies. Applied Bionics and Biomechanics, 2018, 2018, 1-17.	1.1	30
141	Progress towards restoring upper limb movement and sensation through intracortical brain-computer interfaces. Current Opinion in Biomedical Engineering, 2018, 8, 84-92.	3.4	35
142	Training in Use of Brain–Machine Interface-Controlled Robotic Hand Improves Accuracy Decoding Two Types of Hand Movements. Frontiers in Neuroscience, 2018, 12, 478.	2.8	12
143	Microfabricated intracortical extracellular matrix-microelectrodes for improving neural interfaces. Microsystems and Nanoengineering, 2018, 4, 30.	7.0	22
144	Brain Computer Interfaces in Rehabilitation Medicine. PM and R, 2018, 10, S233-S243.	1.6	59
145	Paradigm Shift in Sensorimotor Control Research and Brain Machine Interface Control: The Influence of Context on Sensorimotor Representations. Frontiers in Neuroscience, 2018, 12, 579.	2.8	19
146	Meeting brain–computer interface user performance expectations using a deep neural network decoding framework. Nature Medicine, 2018, 24, 1669-1676.	30.7	123

#	Article	IF	CITATIONS
147	Feasibility of identifying the ideal locations for motor intention decoding using unimodal and multimodal classification at 7T-fMRI. Scientific Reports, 2018, 8, 15556.	3.3	4
148	Neurolinguistics Research Advancing Development of a Direct-Speech Brain-Computer Interface. IScience, 2018, 8, 103-125.	4.1	58
149	Implicit Grasp Force Representation in Human Motor Cortical Recordings. Frontiers in Neuroscience, 2018, 12, 801.	2.8	20
150	A Characterization of Brain-Computer Interface Performance Trade-Offs Using Support Vector Machines and Deep Neural Networks to Decode Movement Intent. Frontiers in Neuroscience, 2018, 12, 763.	2.8	31
151	Configuration of electrical spinal cord stimulation through real-time processing of gait kinematics. Nature Protocols, 2018, 13, 2031-2061.	12.0	96
152	Neuromodulation in the restoration of function after spinal cord injury. Lancet Neurology, The, 2018, 17, 905-917.	10.2	119
153	Robust Closed-Loop Control of a Cursor in a Person with Tetraplegia using Gaussian Process Regression. Neural Computation, 2018, 30, 2986-3008.	2.2	20
154	Smart Neuroprosthetics Becoming Smarter, but Not for Everyone?. EClinicalMedicine, 2018, 2-3, 11-12.	7.1	8
155	Now is the Critical Time for Engineered Neuroplasticity. Neurotherapeutics, 2018, 15, 628-634.	4.4	28
156	Brain-controlled modulation of spinal circuits improves recovery from spinal cord injury. Nature Communications, 2018, 9, 3015.	12.8	108
157	Extracting wavelet based neural features from human intracortical recordings for neuroprosthetics applications. Bioelectronic Medicine, 2018, 4, 11.	2.3	27
158	Advances in Invasive Brain–Computer Interface Technology and Decoding Methods for Restoring Movement and Future Applications. , 2018, , 415-425.		3
159	Sensing and Decoding Neural Signals for Closed-Loop Neuromodulation and Advanced Diagnostics in Chronic Disease and Injury. , 2018, , 1541-1549.		3
160	Brain-machine interfaces for rehabilitation in stroke: A review. NeuroRehabilitation, 2018, 43, 77-97.	1.3	87
161	FES-UPP: A Flexible Functional Electrical Stimulation System to Support Upper Limb Functional Activity Practice. Frontiers in Neuroscience, 2018, 12, 449.	2.8	8
162	Liquid Metal Enabled Electrobiology: A New Frontier to Tackle Disease Challenges. Micromachines, 2018, 9, 360.	2.9	11
163	Technological Approaches for Neurorehabilitation: From Robotic Devices to Brain Stimulation and Beyond. Frontiers in Neurology, 2018, 9, 212.	2.4	49
164	Integration of Nanobots Into Neural Circuits As a Future Therapy for Treating Neurodegenerative Disorders. Frontiers in Neuroscience, 2018, 12, 153.	2.8	8

#	Article	IF	CITATIONS
165	Dexterous Control of Seven Functional Hand Movements Using Cortically-Controlled Transcutaneous Muscle Stimulation in a Person With Tetraplegia. Frontiers in Neuroscience, 2018, 12, 208.	2.8	53
166	Decoding Speech With Integrated Hybrid Signals Recorded From the Human Ventral Motor Cortex. Frontiers in Neuroscience, 2018, 12, 221.	2.8	20
167	Decoding unconstrained arm movements in primates using high-density electrocorticography signals for brain-machine interface use. Scientific Reports, 2018, 8, 10583.	3.3	15
168	Correlation of mRNA Expression and Signal Variability in Chronic Intracortical Electrodes. Frontiers in Bioengineering and Biotechnology, 2018, 6, 26.	4.1	22
169	Identification of cytokine-specific sensory neural signals by decoding murine vagus nerve activity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4843-E4852.	7.1	147
170	A simulation study on the effects of neuronal ensemble properties on decoding algorithms for intracortical brain–machine interfaces. BioMedical Engineering OnLine, 2018, 17, 28.	2.7	2
171	Stable long-term BCI-enabled communication in ALS and locked-in syndrome using LFP signals. Journal of Neurophysiology, 2018, 120, 343-360.	1.8	91
172	Progress in Neuroengineering for brain repair: New challenges and open issues. Brain and Neuroscience Advances, 2018, 2, 239821281877647.	3.4	27
173	Data-Driven Transducer Design and Identification for Internally-Paced Motor Brain Computer Interfaces: A Review. Frontiers in Neuroscience, 2018, 12, 540.	2.8	5
174	A biodegradable hybrid inorganic nanoscaffold for advanced stem cell therapy. Nature Communications, 2018, 9, 3147.	12.8	87
175	Long-term stability of neural signals from microwire arrays implanted in common marmoset motor cortex and striatum. Biomedical Physics and Engineering Express, 2018, 4, 055025.	1.2	16
176	Exploiting All Programmable SoCs in Neural Signal Analysis: A Closed-Loop Control for Large-Scale CMOS Multielectrode Arrays. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 839-850.	4.0	17
177	Brain-actuated functional electrical stimulation elicits lasting arm motor recovery after stroke. Nature Communications, 2018, 9, 2421.	12.8	342
178	Brain-Machine Interfaces: Powerful Tools for Clinical Treatment and Neuroscientific Investigations. Neuroscientist, 2019, 25, 139-154.	3.5	51
179	Neuroprosthetics. , 2019, , 241-253.		3
180	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.	4.2	26
181	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.	1.8	3
182	Ultrastretchable and Wireless Bioelectronics Based on Allâ€Hydrogel Microfluidics. Advanced Materials, 2019, 31, e1902783.	21.0	118

\sim			n
C1	TAT	ION	Report

#	Article	IF	CITATIONS
183	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.	4.9	19
184	Viral-Mediated Optogenetic Stimulation of Peripheral Motor Nerves in Non-human Primates. Frontiers in Neuroscience, 2019, 13, 759.	2.8	11
185	Stable InSe transistors with high-field effect mobility for reliable nerve signal sensing. Npj 2D Materials and Applications, 2019, 3, .	7.9	31
186	Neurorestorative interventions involving bioelectronic implants after spinal cord injury. Bioelectronic Medicine, 2019, 5, 10.	2.3	22
188	Real-Time InÂVivo Control of Neural Membrane Potential by Electro-Ionic Modulation. IScience, 2019, 17, 347-358.	4.1	3
189	Bypassing stroke-damaged neural pathways via a neural interface induces targeted cortical adaptation. Nature Communications, 2019, 10, 4699.	12.8	22
190	An exoskeleton controlled by an epidural wireless brain–machine interface in a tetraplegic patient: a proof-of-concept demonstration. Lancet Neurology, The, 2019, 18, 1112-1122.	10.2	212
191	Human motor decoding from neural signals: a review. BMC Biomedical Engineering, 2019, 1, 22.	2.6	44
192	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.	1.2	4
193	Bioelectronic medicine: an unexpected path to new therapies. Journal of Internal Medicine, 2019, 286, 237-239.	6.0	13
194	Assisted Grasping in Individuals with Tetraplegia: Improving Control through Residual Muscle Contraction and Movement. Sensors, 2019, 19, 4532.	3.8	17
195	A benchtop system to assess the feasibility of a fully independent and implantable brain-machine interface. Journal of Neural Engineering, 2019, 16, 066043.	3.5	13
196	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.	4.0	14
197	A Neuromorphic Prosthesis to Restore Communication in Neuronal Networks. IScience, 2019, 19, 402-414.	4.1	48
198	Upper limb sensorimotor restoration through brain–computer interface technology in tetraparesis. Current Opinion in Biomedical Engineering, 2019, 11, 85-101.	3.4	13
199	Human enhancement. Evolution, Medicine and Public Health, 2019, 2019, 183-189.	2.5	20
200	Brain–machine interfaces from motor to mood. Nature Neuroscience, 2019, 22, 1554-1564.	14.8	157
201	Bioelectronic medicine: updates, challenges and paths forward. Bioelectronic Medicine, 2019, 5, 1.	2.3	41

#	ARTICLE	IF	CITATIONS
202	Recording and Decoding of Vagal Neural Signals Related to Changes in Physiological Parameters and Biomarkers of Disease. Cold Spring Harbor Perspectives in Medicine, 2019, 9, a034157.	6.2	24
203	Hydrogel bioelectronics. Chemical Society Reviews, 2019, 48, 1642-1667.	38.1	1,267
204	Noninvasive neuroimaging enhances continuous neural tracking for robotic device control. Science Robotics, 2019, 4, .	17.6	227
205	Principled BCI Decoder Design and Parameter Selection Using a Feedback Control Model. Scientific Reports, 2019, 9, 8881.	3.3	28
206	An artificial neural network for the prediction of assisted reproduction outcome. Journal of Assisted Reproduction and Genetics, 2019, 36, 1441-1448.	2.5	38
207	Single-paradigm and hybrid brain computing interfaces and their use by disabled patients. Journal of Neural Engineering, 2019, 16, 061001.	3.5	13
208	Cryptopharmaceuticals: Increasing the Safety of Medication by a Blockchain of Pharmaceutical Products. Journal of Pharmaceutical Sciences, 2019, 108, 2838-2841.	3.3	51
209	Spinal cord repair: advances in biology and technology. Nature Medicine, 2019, 25, 898-908.	30.7	323
210	Stimulated activity in the neural tissue. Journal of Applied Physics, 2019, 125, 211101.	2.5	5
211	A Wireless Multi-Channel Peripheral Nerve Signal Acquisition System-on-Chip. IEEE Journal of Solid-State Circuits, 2019, 54, 2266-2280.	5.4	30
212	In Vitro Neuronal Networks. Advances in Neurobiology, 2019, , .	1.8	12
213	Artificial Intelligence for Participatory Health: Applications, Impact, and Future Implications. Yearbook of Medical Informatics, 2019, 28, 165-173.	1.0	21
214	Clinically Significant Gains in Skillful Grasp Coordination by an Individual With Tetraplegia Using an Implanted Brain-Computer Interface With Forearm Transcutaneous Muscle Stimulation. Archives of Physical Medicine and Rehabilitation, 2019, 100, 1201-1217.	0.9	39
215	Closed-Loop Systems and In Vitro Neuronal Cultures: Overview and Applications. Advances in Neurobiology, 2019, 22, 351-387.	1.8	10
216	Chronic recording and electrochemical performance of amorphous silicon carbide-coated Utah electrode arrays implanted in rat motor cortex. Journal of Neural Engineering, 2019, 16, 046006.	3.5	24
217	The impact of modulating the blood–brain barrier on the electrophysiological and histological outcomes of intracortical electrodes. Journal of Neural Engineering, 2019, 16, 046005.	3.5	6
218	Cortical Correlates of Locomotor Muscle Synergy Activation in Humans: An Electroencephalographic Decoding Study. IScience, 2019, 15, 623-639.	4.1	37
219	Decoding of muscle activity from the sensorimotor cortex in freely behaving monkeys. NeuroImage, 2019, 197, 512-526.	4.2	23

#	Article	IF	CITATIONS
220	Highly Conductive, Stretchable, and Cellâ€Adhesive Hydrogel by Nanoclay Doping. Small, 2019, 15, e1901406.	10.0	62
221	Brain-Computer Interfaces in Quadriplegic Patients. Neurosurgery Clinics of North America, 2019, 30, 275-281.	1.7	11
222	Using brain-computer interfaces: a scoping review of studies employing social research methods. BMC Medical Ethics, 2019, 20, 18.	2.4	40
223	Cognition in Sensorimotor Control: Interfacing With the Posterior Parietal Cortex. Frontiers in Neuroscience, 2019, 13, 140.	2.8	10
224	Towards neural co-processors for the brain: combining decoding and encoding in brain–computer interfaces. Current Opinion in Neurobiology, 2019, 55, 142-151.	4.2	36
225	Gastroenterology Meets Machine Learning: Status Quo and Quo Vadis. Advances in Bioinformatics, 2019, 2019, 1-24.	5.7	15
226	Adaptive Artifact Removal From Intracortical Channels for Accurate Decoding of a Force Signal in Freely Moving Rats. Frontiers in Neuroscience, 2019, 13, 350.	2.8	13
227	Volitional control of single-electrode high gamma local field potentials by people with paralysis. Journal of Neurophysiology, 2019, 121, 1428-1450.	1.8	12
228	Evaluating If Children Can Use Simple Brain Computer Interfaces. Frontiers in Human Neuroscience, 2019, 13, 24.	2.0	38
229	Restoring Movement in Paralysis with a Bioelectronic Neural Bypass Approach: Current State and Future Directions. Cold Spring Harbor Perspectives in Medicine, 2019, 9, a034306.	6.2	7
230	Flexible fiber-based optoelectronics for neural interfaces. Chemical Society Reviews, 2019, 48, 1826-1852.	38.1	100
231	Decoding neural activity to predict rat locomotion using intracortical and epidural arrays. Journal of Neural Engineering, 2019, 16, 036005.	3.5	9
232	Design and testing of a 96-channel neural interface module for the Networked Neuroprosthesis system. Bioelectronic Medicine, 2019, 5, 3.	2.3	19
233	Decoding Movements Using Local Field Potentials from Premotor Cortex of Stroke Rats. , 2019, , .		1
234	Towards a Modular Brain-Machine Interface for Intelligent Vehicle Systems Control – A CARLA Demonstration. , 2019, , .		0
235	Decoding Movement From Electrocorticographic Activity: A Review. Frontiers in Neuroinformatics, 2019, 13, 74.	2.5	61
236	The translational landscape in spinal cord injury: focus on neuroplasticity and regeneration. Nature Reviews Neurology, 2019, 15, 732-745.	10.1	180
237	Closed-loop neuromuscular electrical stimulation using feedforward-feedback control and textile electrodes to regulate grasp force in quadriplegia. Bioelectronic Medicine, 2019, 5, 19.	2.3	14

# 238	ARTICLE 7 Closed-Loop Stimulation Methods: Current Practice and Future Promise. , 2019, , .	IF	Citations
239	Demonstration of a portable intracortical brain-computer interface. Brain-Computer Interfaces, 2019, 6, 106-117.	1.8	14
240	Control Using High-carrier Frequency PWM in Functional Electrical Stimulation. , 2019, , .		0
241	Discrimination of Movement-Related Cortical Potentials Exploiting Unsupervised Learned Representations From ECoGs. Frontiers in Neuroscience, 2019, 13, 1248.	2.8	1
242	Implantable Neural Interfaces and Wearable Tactile Systems for Bidirectional Neuroprosthetics Systems. Advanced Healthcare Materials, 2019, 8, e1801345.	7.6	32
243	Optimising non-invasive brain-computer interface systems for free communication between naÃ ⁻ ve human participants. Scientific Reports, 2019, 9, 18705.	3.3	23
244	Workshops of the seventh international brain-computer interface meeting: not getting lost in translation. Brain-Computer Interfaces, 2019, 6, 71-101.	1.8	8
245	Effects of Athermal Shortwave Diathermy Treatment on Somatosensory Evoked Potentials and Motor Evoked Potentials in Rats With Spinal Cord Injury. Spine, 2019, 44, E749-E758.	2.0	7
246	Closed-Loop Neuromodulation in Physiological and Translational Research. Cold Spring Harbor Perspectives in Medicine, 2019, 9, a034314.	6.2	34
247	Decoding Native Cortical Representations for Flexion and Extension at Upper Limb Joints Using Electrocorticography. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 293-303.	4.9	18
248	The Potential for a Speech Brain–Computer Interface Using Chronic Electrocorticography. Neurotherapeutics, 2019, 16, 144-165.	4.4	71
249	A muscle-activity-dependent gain between motor cortex and EMG. Journal of Neurophysiology, 2019, 121, 61-73.	1.8	37
250	A Novel FES Strategy for Poststroke Rehabilitation Based on the Natural Organization of Neuromuscular Control. IEEE Reviews in Biomedical Engineering, 2019, 12, 154-167.	18.0	27
251	Closed-loop cortical control of virtual reach and posture using Cartesian and joint velocity commands. Journal of Neural Engineering, 2019, 16, 026011.	3.5	14
252	Interfacing with the nervous system: a review of current bioelectric technologies. Neurosurgical Review, 2019, 42, 227-241.	2.4	19
253	Bioelectronic Medicine: From Preclinical Studies on the Inflammatory Reflex to New Approaches in Disease Diagnosis and Treatment. Cold Spring Harbor Perspectives in Medicine, 2020, 10, a034140.	6.2	54
254	Spinal cord neural interfacing in common marmosets (<i>Callithrix jacchus</i>). Journal of Neural Engineering, 2020, 17, 016031.	3.5	9
255	A versatile robotic platform for the design of natural, three-dimensional reaching and grasping tasks in monkeys. Journal of Neural Engineering, 2020, 17, 016004.	3.5	10

#	Article	IF	CITATIONS
256	Fast Overcomplete Dictionary Construction with Probabilistic Guarantees. Bulletin of the Brazilian Mathematical Society, 2020, 51, 719-743.	0.8	0
257	The impact of machine learning on patient care: A systematic review. Artificial Intelligence in Medicine, 2020, 103, 101785.	6.5	108
258	Deep Learning Neural Encoders for Motor Cortex. IEEE Transactions on Biomedical Engineering, 2020, 67, 2145-2158.	4.2	7
259	Clinical Neurorestorative Therapeutic Guidelines for Spinal Cord Injury (IANR/CANR version 2019). Journal of Orthopaedic Translation, 2020, 20, 14-24.	3.9	73
260	Short reaction times in response to multi-electrode intracortical microstimulation may provide a basis for rapid movement-related feedback. Journal of Neural Engineering, 2020, 17, 016013.	3.5	16
261	Nanoelectronics for Minimally Invasive Cellular Recordings. Advanced Functional Materials, 2020, 30, 1906210.	14.9	13
262	CURATE.AI: Optimizing Personalized Medicine with Artificial Intelligence. SLAS Technology, 2020, 25, 95-105.	1.9	82
263	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. Neuromodulation, 2020, 23, 411-426.	0.8	40
264	Plasticity and Adaptation in Neuromorphic Biohybrid Systems. IScience, 2020, 23, 101589.	4.1	26
265	Bioinspired Mechanically Interlocking Structures. Small Structures, 2020, 1, 2000045.	12.0	53
265 266	Bioinspired Mechanically Interlocking Structures. Small Structures, 2020, 1, 2000045. New Concepts on the Implementation of Motor and Cognitive Functions in the Brain: Facts and Hypotheses. Human Physiology, 2020, 46, 343-350.	12.0 0.4	53
	New Concepts on the Implementation of Motor and Cognitive Functions in the Brain: Facts and		
266	New Concepts on the Implementation of Motor and Cognitive Functions in the Brain: Facts and Hypotheses. Human Physiology, 2020, 46, 343-350. Spatiotemporal Maps of Proprioceptive Inputs to the Cervical Spinal Cord During Three-Dimensional Reaching and Grasping. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28,	0.4	1
266 267	New Concepts on the Implementation of Motor and Cognitive Functions in the Brain: Facts and Hypotheses. Human Physiology, 2020, 46, 343-350. Spatiotemporal Maps of Proprioceptive Inputs to the Cervical Spinal Cord During Three-Dimensional Reaching and Grasping. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1668-1677. Intra-cortical brain-machine interfaces for controlling upper-limb powered muscle and robotic	0.4 4.9	1 8
266 267 268	 New Concepts on the Implementation of Motor and Cognitive Functions in the Brain: Facts and Hypotheses. Human Physiology, 2020, 46, 343-350. Spatiotemporal Maps of Proprioceptive Inputs to the Cervical Spinal Cord During Three-Dimensional Reaching and Grasping. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1668-1677. Intra-cortical brain-machine interfaces for controlling upper-limb powered muscle and robotic systems in spinal cord injury. Clinical Neurology and Neurosurgery, 2020, 196, 106069. What It Takes to Be a Pioneer: Ability Expectations From Brain-Computer Interface Users. NanoEthics, 	0.4 4.9 1.4	1 8 11
266 267 268 269	New Concepts on the Implementation of Motor and Cognitive Functions in the Brain: Facts and Hypotheses. Human Physiology, 2020, 46, 343-350. Spatiotemporal Maps of Proprioceptive Inputs to the Cervical Spinal Cord During Three-Dimensional Reaching and Grasping. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1668-1677. Intra-cortical brain-machine interfaces for controlling upper-limb powered muscle and robotic systems in spinal cord injury. Clinical Neurology and Neurosurgery, 2020, 196, 106069. What It Takes to Be a Pioneer: Ability Expectations From Brain-Computer Interface Users. NanoEthics, 2020, 14, 227-239. Classifying Intracortical Brain-Machine Interface Signal Disruptions Based on System Performance	0.4 4.9 1.4 0.8	1 8 11 10
266 267 268 269 270	New Concepts on the Implementation of Motor and Cognitive Functions in the Brain: Facts and Hypotheses. Human Physiology, 2020, 46, 343-350. Spatiotemporal Maps of Proprioceptive Inputs to the Cervical Spinal Cord During Three-Dimensional Reaching and Grasping. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 1668-1677. Intra-cortical brain-machine interfaces for controlling upper-limb powered muscle and robotic systems in spinal cord injury. Clinical Neurology and Neurosurgery, 2020, 196, 106069. What It Takes to Be a Pioneer: Ability Expectations From Brain-Computer Interface Users. NanoEthics, 2020, 14, 227-239. Classifying Intracortical Brain-Machine Interface Signal Disruptions Based on System Performance and Applicable Compensatory Strategies: A Review. Frontiers in Neurorobotics, 2020, 14, 558987. Organic Electrochemical Transistors (OECTs) Toward Flexible and Wearable Bioelectronics.	0.4 4.9 1.4 0.8 2.8	1 8 11 10 14

#	Article	IF	CITATIONS
274	Who Are the People in Your Neighborhood? Personas Populating Unregulated mHealth Research. Journal of Law, Medicine and Ethics, 2020, 48, 37-48.	0.9	2
275	Dorsal Column Nuclei Neural Signal Features Permit Robust Machine-Learning of Natural Tactile- and Proprioception-Dominated Stimuli. Frontiers in Systems Neuroscience, 2020, 14, 46.	2.5	2
276	Neuroprosthesis for individuals with spinal cord injury. Neurological Research, 2023, 45, 893-905.	1.3	10
277	Reducing Neuron Apoptosis in the Pontine Micturition Center by Nerve Root Transfer for Restoration of Micturition Function after Spinal Cord Injury. BioMed Research International, 2020, 2020, 1-9.	1.9	0
278	Brain-Machine Interfaces: A Tale of Two Learners. IEEE Systems, Man, and Cybernetics Magazine, 2020, 6, 12-19.	1.4	45
279	Determining grasp selection from arm trajectories via deep learning to enable functional hand movement in tetraplegia. Bioelectronic Medicine, 2020, 6, 17.	2.3	3
280	State-Based Decoding of Force Signals From Multi-Channel Local Field Potentials. IEEE Access, 2020, 8, 159089-159099.	4.2	12
281	Operant conditioning of motor cortex neurons reveals neuron-subtype-specific responses in a brain-machine interface task. Scientific Reports, 2020, 10, 19992.	3.3	6
282	3D Multi-Material Printing of an Anthropomorphic, Personalized Replacement Hand for Use in Neuroprosthetics Using 3D Scanning and Computer-Aided Design: First Proof-of-Technical-Concept Study. Prosthesis, 2020, 2, 362-370.	2.9	8
283	Feasibility and Safety of Bilateral Hybrid EEC/EOG Brain/Neural–Machine Interaction. Frontiers in Human Neuroscience, 2020, 14, 580105.	2.0	14
284	Why brain-controlled neuroprosthetics matter: mechanisms underlying electrical stimulation of muscles and nerves in rehabilitation. BioMedical Engineering OnLine, 2020, 19, 81.	2.7	31
285	CLoSES: A platform for closed-loop intracranial stimulation in humans. NeuroImage, 2020, 223, 117314.	4.2	21
286	Implantable Neuroamplifers for Electrocorticography Using Flexible and Biocompatible Technology. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900830.	1.8	0
287	Ultra-small carbon fiber electrode recording site optimization and improved <i>in vivo</i> chronic recording yield. Journal of Neural Engineering, 2020, 17, 026037.	3.5	51
288	Replay of Learned Neural Firing Sequences during Rest in Human Motor Cortex. Cell Reports, 2020, 31, 107581.	6.4	37
289	The future of upper extremity rehabilitation robotics: research and practice. Muscle and Nerve, 2020, 61, 708-718.	2.2	22
290	"l Felt the Ballâ€â€"The Future of Spine Injury Recovery. World Neurosurgery, 2020, 140, 602-613.	1.3	1
291	Materials for flexible bioelectronic systems as chronic neural interfaces. Nature Materials, 2020, 19, 590-603.	27.5	277

#	Article	IF	CITATIONS
292	Citizen Neuroscience: Brain–Computer Interface Researcher Perspectives on Do-lt-Yourself Brain Research. Science and Engineering Ethics, 2020, 26, 2769-2790.	2.9	3
293	The Motor Cortex Has Independent Representations for Ipsilateral and Contralateral Arm Movements But Correlated Representations for Grasping. Cerebral Cortex, 2020, 30, 5400-5409.	2.9	19
294	Review on motor imagery based BCI systems for upper limb post-stroke neurorehabilitation: From designing to application. Computers in Biology and Medicine, 2020, 123, 103843.	7.0	115
295	Strategies and prospects of effective neural circuits reconstruction after spinal cord injury. Cell Death and Disease, 2020, 11, 439.	6.3	56
297	Classification of Individual Finger Movements Using Intracortical Recordings in Human Motor Cortex. Neurosurgery, 2020, 87, 630-638.	1.1	14
298	Bidirectional brain-computer interfaces. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2020, 168, 163-181.	1.8	31
299	Spinal cord lesions. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2020, 168, 51-65.	1.8	23
300	Brain-computer interfaces for basic neuroscience. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2020, 168, 233-247.	1.8	2
301	General principles of machine learning for brain-computer interfacing. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2020, 168, 311-328.	1.8	10
302	A review of methods for achieving upper limb movement following spinal cord injury through hybrid muscle stimulation and robotic assistance. Experimental Neurology, 2020, 328, 113274.	4.1	39
303	Application of Artificial Intelligence in Modern Healthcare System. , 0, , .		17
304	The Discriminative Kalman Filter for Bayesian Filtering with Nonlinear and Nongaussian Observation Models. Neural Computation, 2020, 32, 969-1017.	2.2	13
305	Hand Knob Area of Premotor Cortex Represents the Whole Body in a Compositional Way. Cell, 2020, 181, 396-409.e26.	28.9	101
306	Applications of brain-computer interfaces to the control of robotic and prosthetic arms. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2020, 168, 87-99.	1.8	37
307	Merging brain-computer interface and functional electrical stimulation technologies for movement restoration. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2020, 168, 303-309.	1.8	11
308	Neural reflex control of vascular inflammation. Bioelectronic Medicine, 2020, 6, 3.	2.3	4
309	Speech-related dorsal motor cortex activity does not interfere with iBCI cursor control. Journal of Neural Engineering, 2020, 17, 016049.	3.5	21
310	How do we know how the brain works?—Analyzing whole brain activities with classic mathematical and machine learning methods. Japanese Journal of Applied Physics, 2020, 59, 030501.	1.5	1

#	Article	IF	CITATIONS
311	Predicting functional force production capabilities of upper extremity functional electrical stimulation neuroprostheses: a proof of concept study. Journal of Neural Engineering, 2020, 17, 016051.	3.5	3
312	Electrocorticogram (ECoG) Is Highly Informative in Primate Visual Cortex. Journal of Neuroscience, 2020, 40, 2430-2444.	3.6	27
313	Flexible inorganic bioelectronics. Npj Flexible Electronics, 2020, 4, .	10.7	134
314	Brain mechanisms in motor control during reaching movements: Transition of functional connectivity according to movement states. Scientific Reports, 2020, 10, 567.	3.3	24
315	Toward guiding principles for the design of biologically-integrated electrodes for the central nervous system. Journal of Neural Engineering, 2020, 17, 021001.	3.5	22
316	A Sub-\$mu\$ W Reconfigurable Front-End for Invasive Neural Recording That Exploits the Spectral Characteristics of the Wideband Neural Signal. IEEE Transactions on Circuits and Systems I: Regular Papers, 2020, 67, 1426-1437.	5.4	16
317	Soft mixed ionic–electronic conductive electrodes for noninvasive stimulation. Journal of Applied Polymer Science, 2020, 137, 48998.	2.6	5
318	Clinician awareness of brain computer interfaces: a Canadian national survey. Journal of NeuroEngineering and Rehabilitation, 2020, 17, 2.	4.6	16
319	A bioinspired analogous nerve towards artificial intelligence. Nature Communications, 2020, 11, 268.	12.8	80
320	Bacomics: a comprehensive cross area originating in the studies of various brain–apparatus conversations. Cognitive Neurodynamics, 2020, 14, 425-442.	4.0	11
321	Brain–machine interfaces. , 2020, , 1037-1045.		0
322	Visual Feedback Control of a Rat Ankle Angle Using a Wirelessly Powered Two-Channel Neurostimulator. Sensors, 2020, 20, 2210.	3.8	5
323	Restoring the Sense of Touch Using a Sensorimotor Demultiplexing Neural Interface. Cell, 2020, 181, 763-773.e12.	28.9	94
324	Progress in Brainâ€Compatible Interfaces with Soft Nanomaterials. Advanced Materials, 2020, 32, e1907522.	21.0	29
325	Stabilization of a brain–computer interface via the alignment of low-dimensional spaces of neural activity. Nature Biomedical Engineering, 2020, 4, 672-685.	22.5	118
326	An Analysis of the Impact of Brain-Computer Interfaces on Autonomy. Neuroethics, 2021, 14, 17-29.	2.8	25
327	A Fully Integrated Sensor-Brain–Machine Interface System for Restoring Somatosensation. IEEE Sensors Journal, 2021, 21, 4764-4775.	4.7	18
328	Bio-inspired Neurocomputing. Studies in Computational Intelligence, 2021, , .	0.9	44

#	Article	IF	CITATIONS
329	Design and fabrication novel flexible electrode used for external defibrillator based on liquid metal. Microsystem Technologies, 2021, 27, 3349-3355.	2.0	1
330	Neuronal degeneration and cognitive impairment can be prevented via the normalization of mitochondrial dynamics. Pharmacological Research, 2021, 163, 105246.	7.1	3
331	EEG Motor Imagery Classification With Sparse Spectrotemporal Decomposition and Deep Learning. IEEE Transactions on Automation Science and Engineering, 2021, 18, 541-551.	5.2	42
332	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.	4.2	3
333	Typical somatomotor physiology of the hand is preserved in a patient with an amputated arm: An ECoG case study. NeuroImage: Clinical, 2021, 31, 102728.	2.7	3
334	Stroke Rehabilitation and Parkinson's Disease Tremor Reduction Using BCIs Combined With FES. , 2021, , 473-491.		0
335	Neurosurgery and artificial intelligence. AIMS Neuroscience, 2021, 8, 477-495.	2.3	45
336	Wearable and non-invasive assistive technologies. , 2021, , 593-627.		2
337	Brain-Computer-Spinal Interface Restores Upper Limb Function After Spinal Cord Injury. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1233-1242.	4.9	17
338	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.	0.5	1
340	Invasive BCI Approaches for Restoration of Upper Extremity Movements. , 2021, , 217-232.		1
341	Sensing implants. , 2021, , 329-352.		0
342	Auditory cues reveal intended movement information in middle frontal gyrus neuronal ensemble activity of a person with tetraplegia. Scientific Reports, 2021, 11, 98.	3.3	12
343	Ethical Principles Under the Challenge of Enhancing Medecine. International Journal of Biomedical Engineering and Clinical Science, 2021, 7, 7.	0.4	0
344	Upper Extremity Neuroprosthetics for Spinal Cord Injury. , 2021, , 125-142.		0
345	A Roadmap Towards Standards for Neurally Controlled End Effectors. IEEE Open Journal of Engineering in Medicine and Biology, 2021, 2, 84-90.	2.3	8
347	Neural electrodes for long-term tissue interfaces. , 2021, , 509-536.		2
348	Restoring upper extremity function with brain-machine interfaces. International Review of Neurobiology, 2021, 159, 153-186.	2.0	0

#	Article	IF	CITATIONS
349	The Neural Representation of Force across Grasp Types in Motor Cortex of Humans with Tetraplegia. ENeuro, 2021, 8, ENEURO.0231-20.2020.	1.9	9
350	Stroke Rehabilitation and Parkinson's Disease Tremor Reduction Using BCIs Combined With FES. , 2021, , 679-697.		0
351	Performing a Disembodied Mind: Neurotechnology Between Empowerment and Normalization. Lecture Notes in Computer Science, 2021, , 239-251.	1.3	1
352	Functional MRI based simulations of ECoG grid configurations for optimal measurement of spatially distributed hand-gesture information. Journal of Neural Engineering, 2021, 18, 026013.	3.5	5
353	Brain Computer Interface for the Hand Function Restoration. , 2021, , .		1
354	An Intracortical Implantable Brain-Computer Interface for Telemetric Real-Time Recording and Manipulation of Neuronal Circuits for Closed-Loop Intervention. Frontiers in Human Neuroscience, 2021, 15, 618626.	2.0	15
356	Classification of Tactile Perception and Attention on Natural Textures from EEG Signals. , 2021, , .		8
359	Robust and accurate decoding of hand kinematics from entire spiking activity using deep learning. Journal of Neural Engineering, 2021, 18, 026011.	3.5	27
360	High-Precision Control for Functional Electrical Stimulation Utilizing a High-Resolution Encoder. IEEJ Journal of Industry Applications, 2021, 10, 124-133.	1.1	4
362	A novel approach of CNN for human motor imagery recognition using the virtual electrode pairs. Journal of Intelligent and Fuzzy Systems, 2021, 40, 5275-5288.	1.4	1
363	Prostac: A New Composite Score With Potential Predictive Value in Prostate Cancer. Frontiers in Oncology, 2021, 11, 644665.	2.8	0
364	Artificial intelligence in dermatology. Clinics in Dermatology, 2021, 39, 657-666.	1.6	6
365	Brain–Computer Interfaces in Neurorecovery and Neurorehabilitation. Seminars in Neurology, 2021, 41, 206-216.	1.4	11
366	Spatiotemporal patterns of gene expression around implanted silicon electrode arrays. Journal of Neural Engineering, 2021, 18, 045005.	3.5	33
367	Hierarchical Dynamical Model for Multiple Cortical Neural Decoding. Neural Computation, 2021, 33, 1372-1401.	2.2	4
369	Adding Tactile Feedback and Changing ISI to Improve BCI Systems' Robustness: An Error-Related Potential Study. Brain Topography, 2021, 34, 467-477.	1.8	8
371	The Riemannian spatial pattern method: mapping and clustering movement imagery using Riemannian geometry. Journal of Neural Engineering, 2021, 18, 056014.	3.5	8
372	Physiologyâ€Based Stretchable Electronics Design Method for Accurate Surface Electromyography Evaluation. Advanced Science, 2021, 8, 2004987.	11.2	3

#	Article	IF	CITATIONS
373	Meeting Proceedings for SCI 2020: Launching a Decade of Disruption in Spinal Cord Injury Research. Journal of Neurotrauma, 2021, 38, 1251-1266.	3.4	14
375	A Primer on the Use of Artificial Intelligence in Spine Surgery. Clinical Spine Surgery, 2021, 34, 316-321.	1.3	12
376	PEDOT:PSSâ€Based Bioelectronic Devices for Recording and Modulation of Electrophysiological and Biochemical Cell Signals. Advanced Healthcare Materials, 2021, 10, e2100061.	7.6	92
377	Neurostimulation for Stroke Rehabilitation. Frontiers in Neuroscience, 2021, 15, 649459.	2.8	22
379	Artificial intelligence in dermatology and healthcare: An overview. Indian Journal of Dermatology, Venereology and Leprology, 2021, 87, 1-11.	0.6	16
380	Decoding of continuous movement attempt in 2-dimensions from non-invasive low frequency brain signals. , 2021, , .		7
381	Flexible Electrodes for In Vivo and In Vitro Electrophysiological Signal Recording. Advanced Healthcare Materials, 2021, 10, e2100646.	7.6	62
382	High-performance brain-to-text communication via handwriting. Nature, 2021, 593, 249-254.	27.8	409
383	A brain-computer interface that evokes tactile sensations improves robotic arm control. Science, 2021, 372, 831-836.	12.6	245
384	Physical principles of brain–computer interfaces and their applications for rehabilitation, robotics and control of human brain states. Physics Reports, 2021, 918, 1-133.	25.6	88
385	A Nonlinear Maximum Correntropy Information Filter for High-Dimensional Neural Decoding. Entropy, 2021, 23, 743.	2.2	5
386	A Wireless Artificial Mechanoreceptor in 180-nm CMOS. IEEE Transactions on Microwave Theory and Techniques, 2021, 69, 2907-2920.	4.6	4
387	Role of Artificial Intelligence in Video Capsule Endoscopy. Diagnostics, 2021, 11, 1192.	2.6	22
388	An artificial nervous system to treat chronic stroke. Artificial Organs, 2021, 45, 804-812.	1.9	2
389	An Energy-Efficient Compressed Sensing-Based Encryption Scheme for Wireless Neural Recording. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2021, 11, 405-414.	3.6	8
390	Spinal cord regeneration: A brief overview of the present scenario and a sneak peek into the future. Biotechnology Journal, 2021, 16, e2100167.	3.5	7
391	Brain-Computer Interface, Neuromodulation, and Neurorehabilitation Strategies for Spinal Cord Injury. Neurosurgery Clinics of North America, 2021, 32, 407-417.	1.7	3
392	Advancing sensory neuroprosthetics using artificial brain networks. Patterns, 2021, 2, 100304.	5.9	2

#	Article	IF	CITATIONS
393	Home Use of a Percutaneous Wireless Intracortical Brain-Computer Interface by Individuals With Tetraplegia. IEEE Transactions on Biomedical Engineering, 2021, 68, 2313-2325.	4.2	83
394	Bilateral Control of Human Upper Limbs Using Functional Electrical Stimulation Based on Dynamic Model Approximation. IEEJ Journal of Industry Applications, 2021, 10, 443-456.	1.1	8
395	Decoding Neural Activity in Sulcal and White Matter Areas of the Brain to Accurately Predict Individual Finger Movement and Tactile Stimuli of the Human Hand. Frontiers in Neuroscience, 2021, 15, 699631.	2.8	5
396	Corticospinal Motor Circuit Plasticity After Spinal Cord Injury: Harnessing Neuroplasticity to Improve Functional Outcomes. Molecular Neurobiology, 2021, 58, 5494-5516.	4.0	17
397	Long-term intracortical microelectrode array performance in a human: a 5 year retrospective analysis. Journal of Neural Engineering, 2021, 18, 0460d7.	3.5	27
398	Intracortical Microelectrode Array Unit Yield under Chronic Conditions: A Comparative Evaluation. Micromachines, 2021, 12, 972.	2.9	16
400	A modular strategy for next-generation upper-limb sensory-motor neuroprostheses. Med, 2021, 2, 912-937.	4.4	16
401	Deep learning multimodal fNIRS and EEG signals for bimanual grip force decoding. Journal of Neural Engineering, 2021, 18, 0460e6.	3.5	12
402	The science and engineering behind sensitized brain-controlled bionic hands. Physiological Reviews, 2022, 102, 551-604.	28.8	32
403	Real-time linear prediction of simultaneous and independent movements of two finger groups using an intracortical brain-machine interface. Neuron, 2021, 109, 3164-3177.e8.	8.1	24
404	Case Study: Mapping Evoked Fields in Primary Motor and Sensory Areas via Magnetoencephalography in Tetraplegia. Frontiers in Neurology, 2021, 12, 739693.	2.4	2
405	Historical perspectives, challenges, and future directions of implantable brain-computer interfaces for sensorimotor applications. Bioelectronic Medicine, 2021, 7, 14.	2.3	11
406	Smart Tactile Gloves for Haptic Interaction, Communication, and Rehabilitation. Advanced Intelligent Systems, 2022, 4, 2100091.	6.1	78
407	Long-term stability of the chronic epidural wireless recorder WIMAGINE in tetraplegic patients. Journal of Neural Engineering, 2021, 18, 056026.	3.5	16
409	The impact of distractions on intracortical brain–computer interface control of a robotic arm. Brain-Computer Interfaces, 2022, 9, 23-35.	1.8	2
410	Evoking highly focal percepts in the fingertips through targeted stimulation of sulcal regions of the brain for sensory restoration. Brain Stimulation, 2021, 14, 1184-1196.	1.6	16
411	Force Decoding of Caudal Forelimb Area and Rostral Forelimb Area in Chronic Stroke Rats. IEEE Transactions on Biomedical Engineering, 2021, 68, 3078-3086.	4.2	3
412	Summary of over Fifty Years with Brain-Computer Interfaces—A Review. Brain Sciences, 2021, 11, 43.	2.3	93

#	Article	IF	CITATIONS
413	Trauma Products: Spinal Cord Injury Implants. , 2021, , 1229-1250.		0
414	What Is It Like to Be a Cyborg?. , 2021, , 400-410.		0
415	Brain Co-processors: Using Al to Restore and Augment Brain Function. , 2021, , 1-36.		2
416	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.	18.0	9
417	Design a Novel BCI for Neurorehabilitation Using Concurrent LFP and EEG Features: A Case Study. IEEE Transactions on Biomedical Engineering, 2022, 69, 1554-1563.	4.2	12
418	Incremental Training of Neural Network for Motor Tasks Recognition Based on Brain-Computer Interface. Lecture Notes in Computer Science, 2019, , 610-619.	1.3	3
419	Brain–Computer Interfaces. , 2020, , 131-183.		53
420	Intracortical Brain–Machine Interfaces. , 2020, , 185-221.		5
421	Brain-Computer Interfaces for Motor Rehabilitation. , 2017, , 1-31.		1
422	Neural-gesteuerte Robotik für Assistenz und Rehabilitation im Alltag. , 2020, , 117-131.		3
423	A Classification Model Based on an Adaptive Neuro-fuzzy Inference System for Disease Prediction. Studies in Computational Intelligence, 2021, , 131-149.	0.9	3
424	Micro- and nanotechnology for neural electrode-tissue interfaces. Biosensors and Bioelectronics, 2020, 170, 112645.	10.1	42
425	Neural Representation of Observed, Imagined, and Attempted Grasping Force in Motor Cortex of Individuals with Chronic Tetraplegia. Scientific Reports, 2020, 10, 1429.	3.3	16
426	Continuous low-frequency EEG decoding of arm movement for closed-loop, natural control of a robotic arm. Journal of Neural Engineering, 2020, 17, 046031.	3.5	43
427	Gels, jets, mosquitoes, and magnets: a review of implantation strategies for soft neural probes. Journal of Neural Engineering, 2020, 17, 041002.	3.5	17
428	Distance- and speed-informed kinematics decoding improves M/EEG based upper-limb movement decoder accuracy. Journal of Neural Engineering, 2020, 17, 056027.	3.5	16
429	Decoding spoken English from intracortical electrode arrays in dorsal precentral gyrus. Journal of Neural Engineering, 2020, 17, 066007.	3.5	52
430	Motor imagery recognition with automatic EEG channel selection and deep learning. Journal of Neural Engineering, 2020, , .	3.5	23

#	Article	IF	CITATIONS
431	Brain-controlled cycling system for rehabilitation following paraplegia with delay-time prediction. Journal of Neural Engineering, 2021, 18, 016022.	3.5	7
446	Emerging ideas and tools to study the emergent properties of the cortical neural circuits for voluntary motor control in non-human primates. F1000Research, 2019, 8, 749.	1.6	18
447	The Representation of Finger Movement and Force in Human Motor and Premotor Cortices. ENeuro, 2020, 7, ENEURO.0063-20.2020.	1.9	15
448	Development of Fuzzy Logic-Base Diagnosis Expert System for Typhoid Fever. Jurnal Kejuruteraan, 2020, 32, 9-16.	0.3	2
449	Current advancements in the management of spinal cord injury: A comprehensive review of literature. , 2020, 11, 2.		37
450	What Is It Like to Be a Cyborg?. Advances in Computational Intelligence and Robotics Book Series, 2018, , 68-78.	0.4	1
451	Advancements in the mind-machine interface: towards re-establishment of direct cortical control of limb movement in spinal cord injury. Neural Regeneration Research, 2016, 11, 1060.	3.0	3
452	Motor neuroprosthesis for injured spinal cord: who is an ideal candidate?. Neural Regeneration Research, 2017, 12, 1809.	3.0	8
453	Differences in neuroplasticity after spinal cord injury in varying animal models and humans. Neural Regeneration Research, 2019, 14, 7.	3.0	56
454	Opportunities and challenges for developing closed-loop bioelectronic medicines. Neural Regeneration Research, 2019, 14, 46.	3.0	26
455	Rewiring the Lesioned Brain: Electrical Stimulation for Post-Stroke Motor Restoration. Journal of Stroke, 2020, 22, 47-63.	3.2	48
456	Wireless recording from unrestrained monkeys reveals motor goal encoding beyond immediate reach in frontoparietal cortex. ELife, 2020, 9, .	6.0	35
457	Visual percepts evoked with an intracortical 96-channel microelectrode array inserted in human occipital cortex. Journal of Clinical Investigation, 2021, 131, .	8.2	87
458	Complex Electrical Stimulation Systems in Motor Function Rehabilitation after Spinal Cord Injury. Complexity, 2021, 2021, 1-16.	1.6	3
459	Restoring Sensorimotor Function Through Neuromodulation After Spinal Cord Injury: Progress and Remaining Challenges. Frontiers in Neuroscience, 2021, 15, 749465.	2.8	11
460	Implantable brain–computer interface for neuroprosthetic-enabled volitional hand grasp restoration in spinal cord injury. Brain Communications, 2021, 3, fcab248.	3.3	18
461	Finger somatotopy is preserved after tetraplegia but deteriorates over time. ELife, 2021, 10, .	6.0	14
462	Improving reaching with functional electrical stimulation by incorporating stiffness modulation. Journal of Neural Engineering, 2021, 18, 055009.	3.5	1

# 463	ARTICLE Novel rehabilitation paradigm for restoration of hand functions after tetraplegia. Neural Regeneration Research, 2016, 11, 1058.	IF 3.0	Citations
464	Advance in Rehabilitative Intuitive Robotics. Journal of Applied Biotechnology & Bioengineering, 2016, 1,	0.1	0
465	Medical and health stories to watch in 2016. BMJ, The, 2016, 355, i4592.	6.0	0
466	'The Brain-Computer Interface' for the Exoskeleton BIOMECH: Basic Functionality. Keldysh Institute Preprints, 2017, , 1-20.	0.2	0
469	Brain-Computer Interfaces for Motor Rehabilitation. , 2018, , 1471-1501.		0
470	Stroke Rehabilitation and Parkinson's Disease Tremor Reduction Using BCIs Combined With FES. International Journal of Privacy and Health Information Management, 2018, 6, 20-36.	0.2	0
471	Brain Machine Interface Mediated Neurorehabilitation for Gait Recovery. The Japanese Journal of Rehabilitation Medicine, 2018, 55, 761-766.	0.0	0
474	Cortically Controlled FES for Restoration and Rehabilitation of Function Following SCI in Rats. Biosystems and Biorobotics, 2019, , 931-934.	0.3	0
477	Brain-Machine Interfaces. , 2019, , 1-4.		0
478	Empirical Performance Analysis of Decision Tree and Support Vector Machine based Classifiers on Biological Databases. International Journal of Advanced Computer Science and Applications, 2019, 10, .	0.7	1
479	IoT and Transhumanism. , 2019, , 689-700.		2
481	Remote Optical Estimation of Respiratory Rate Based on a Deep Learning Human Pose Detector. IFMBE Proceedings, 2020, , 234-241.	0.3	0
486	Introduction of brain computer interface to neurologists. Annals of Clinical Neurophysiology, 2021, 23, 92-98.	0.2	1
487	Ethical and social aspects of neural prosthetics. Progress in Biomedical Engineering, 2022, 4, 012004.	4.9	2
488	Augmented Humanity: Data, Privacy and Security. Advanced Sciences and Technologies for Security Applications, 2020, , 73-93.	0.5	4
490	Trauma Products: Spinal Cord Injury Implants. , 2020, , 1-22.		Ο
491	A Hybrid Brain-Computer Interface using Extreme Learning Machines for Motor Intention Detection. Lecture Notes in Computer Science, 2021, , 115-123.	1.3	0
492	Neurorestoration: Advances in human brain–computer interface using microelectrode arrays. Journal of Neurorestoratology, 2020, 8, 32-39.	2.5	4

#	Article	IF	CITATIONS
493	Reference Trajectory Generation for Closed-Loop Control of Electrical Stimulation for Rehabilitation of Upper Limb. IFAC-PapersOnLine, 2020, 53, 16438-16444.	0.9	3
494	Experimental Usage of Al Brain-Computer Interfaces: Computerized Errors, Side-Effects, and Alteration of Personality. Military and Humanitarian Health Ethics, 2020, , 195-209.	0.8	3
495	Intracortical Electrodes. , 2020, , 67-94.		0
497	Inflammation neuroscience: neuroâ€immune crosstalk and interfaces. Clinical and Translational Immunology, 2021, 10, e1352.	3.8	14
499	Photolithographic Fabrication of Mechanically Adaptive Devices. ACS Polymers Au, 2022, 2, 50-58.	4.1	1
500	Skilled independent control of individual motor units via a non-invasive neuromuscular–machine interface. Journal of Neural Engineering, 2021, 18, 066019.	3.5	28
502	Computer-aided Big Healthcare Data (BHD) Analytics. , 2020, , 115-138.		1
505	Novel intraoperative online functional mapping of somatosensory finger representations for targeted stimulating electrode placement: technical note. Journal of Neurosurgery, 2021, , 1-8.	1.6	14
507	Sensing and decoding the neural drive to paralyzed muscles during attempted movements of a person with tetraplegia using a sleeve array. Journal of Neurophysiology, 2021, 126, 2104-2118.	1.8	23
508	Neuromodulation in the treatment of symptoms of spinal cord injury. Journal of Education, Health and Sport, 2020, 10, 382-396.	0.1	0
510	Effects of Gaze Fixation on the Performance of a Motor Imagery-Based Brain-Computer Interface. Frontiers in Human Neuroscience, 2021, 15, 773603.	2.0	4
511	Targeting Sensory and Motor Integration for Recovery of Movement After CNS Injury. Frontiers in Neuroscience, 2021, 15, 791824.	2.8	9
512	Artificial intelligence and machine learning for the healthcare sector. , 2022, , 1-28.		0
513	Exploring Cognition with Brain–Machine Interfaces. Annual Review of Psychology, 2022, 73, 131-158.	17.7	12
514	The role of electrical stimulation for rehabilitation and regeneration after spinal cord injury. Journal of Orthopaedics and Traumatology, 2022, 23, 2.	2.3	28
515	Intrinsic somatosensory feedback supports motor control and learning to operate artificial body parts. Journal of Neural Engineering, 2022, 19, 016006.	3.5	6
517	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.	4.0	8
518	Nerve tissue engineering on degradable scaffold. , 2022, , 363-398.		1

		CITATION REPORT		
#	Article		IF	CITATIONS
520	Sense of agency for intracortical brain–machine interfaces. Nature Human Behaviour,	2022, 6, 565-578.	12.0	15
521	A Wireless Somatosensory Feedback System Using Human Body Communication. IEEE J Solid-State Circuits, 2022, 57, 869-881.	ournal of	5.4	2
522	Restoring Hand Functions in People with Tetraplegia through Multi-Contact, Fascicular, Auto-Pilot Stimulation: A Proof-of-Concept Demonstration. Journal of Neurotrauma, 202		3.4	6
523	Motor BMIs Have Entered the Clinical Realm. , 2022, , 1-37.			1
524	Deep Feature Mining via the Attention-Based Bidirectional Long Short Term Memory Gra Convolutional Neural Network for Human Motor Imagery Recognition. Frontiers in Bioer and Biotechnology, 2021, 9, 706229.		4.1	6
526	Data Transformation in the Processing of Neuronal Signals: A Powerful Tool to Illuminate Informative Contents. IEEE Reviews in Biomedical Engineering, 2023, 16, 611-626.	e	18.0	2
528	Improved Spike-Based Brain-Machine Interface Using Bayesian Adaptive Kernel Smoothe Learning. IEEE Access, 2022, 10, 29341-29356.	er and Deep	4.2	5
531	Identification of Signature Genes and Characterizations of Tumor Immune Microenviron Tumor Purity in Lung Adenocarcinoma Based on Machine Learning. Frontiers in Medicine 843749.		2.6	7
532	Volitional Control of Brain Motor Activity and Its Therapeutic Potential. Neuromodulatio 1187-1196.	ın, 2022, 25,	0.8	6
533	Application of AI and ML Techniques for Revolutionized Health Care System. , 2022, , .			1
534	Recent advances in wireless epicortical and intracortical neuronal recording systems. Sc Information Sciences, 2022, 65, 1.	ience China	4.3	12
535	Spinal cord bioelectronic interfaces: opportunities in neural recording and clinical challe Journal of Neural Engineering, 2022, 19, 021003.	nges.	3.5	2
536	Potential of Internet of Medical Things (IoMT) applications in building a smart healthcard systematic review. Journal of Oral Biology and Craniofacial Research, 2022, 12, 302-318		1.9	93
537	Feel Your Reach: An EEG-Based Framework to Continuously Detect Goal-Directed Mover Error Processing to Gate Kinesthetic Feedback Informed Artificial Arm Control. Frontiers Neuroscience, 2022, 16, 841312.		2.0	10
538	Applying Dimensionality Reduction Techniques in Source-Space Electroencephalography and Magnetic Resonance Imaging-Derived Head Models to Continuously Decode Hand 1 Frontiers in Human Neuroscience, 2022, 16, 830221.	y via Template Trajectories.	2.0	5
539	Recent advancements in Micro-engineered devices for surface and deep brain animal stu Sensing and Bio-Sensing Research, 2022, 36, 100483.	udies: A review.	4.2	2
541	A Brain Biometric-based Identification Approach Using Local Field Potentials. , 2021, 202	21, 1116-1119.		1
542	Explant Analysis of Utah Electrode Arrays Implanted in Human Cortex for Brain-Compute Frontiers in Bioengineering and Biotechnology, 2021, 9, 759711.	er-Interfaces.	4.1	26

#	Article	IF	CITATIONS
543	An iEEG Recording and Adjustable Shunt-Current Conduction Platform for Epilepsy Treatment. Biosensors, 2022, 12, 247.	4.7	4
557	Increasing Robustness of Brain–Computer Interfaces Through Automatic Detection and Removal of Corrupted Input Signals. Frontiers in Neuroscience, 2022, 16, 858377.	2.8	2
558	RBF Sliding Mode Control Method for an Upper Limb Rehabilitation Exoskeleton Based on Intent Recognition. Applied Sciences (Switzerland), 2022, 12, 4993.	2.5	8
559	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.	4.0	6
562	Towards semi-supervised myoelectric finger motion recognition based on spatial motor units activation. Science China Technological Sciences, 2022, 65, 1232-1242.	4.0	8
563	Design-development of an at-home modular brain–computer interface (BCI) platform in a case study of cervical spinal cord injury. Journal of NeuroEngineering and Rehabilitation, 2022, 19, .	4.6	5
565	Dynamic Ensemble Bayesian Filter for Robust Control of a Human Brain-Machine Interface. IEEE Transactions on Biomedical Engineering, 2022, 69, 3825-3835.	4.2	8
568	Characteristics and stability of sensorimotor activity driven by isolated-muscle group activation in a human with tetraplegia. Scientific Reports, 2022, 12, .	3.3	0
569	Restoration of complex movement in the paralyzed upper limb. Journal of Neural Engineering, 2022, 19, 046002.	3.5	7
571	2D MXene interfaces preserve the basal electrophysiology of targeted neural circuits. Nanoscale, 2022, 14, 10992-11002.	5.6	7
572	Epidural electrical stimulation of the cervical dorsal roots restores voluntary upper limb control in paralyzed monkeys. Nature Neuroscience, 2022, 25, 924-934.	14.8	30
573	Soft robotics and functional electrical stimulation advances for restoring hand function in people with SCI: a narrative review, clinical guidelines and future directions. Journal of NeuroEngineering and Rehabilitation, 2022, 19, .	4.6	8
574	Time stability and connectivity analysis with an intracortical 96-channel microelectrode array inserted in human visual cortex. Journal of Neural Engineering, 2022, 19, 045001.	3.5	3
575	A hybrid autoencoder framework of dimensionality reduction for brain-computer interface decoding. Computers in Biology and Medicine, 2022, 148, 105871.	7.0	3
576	Spike prediction on primary motor cortex from medial prefrontal cortex during task learning. Journal of Neural Engineering, 2022, 19, 046025.	3.5	2
577	Recent Progress in Flexible Pressure Sensor Arrays. Nanomaterials, 2022, 12, 2495.	4.1	26
578	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
580	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.	1.6	0

# 581	ARTICLE Slow Firing Single Units Are Essential for Optimal Decoding of Silent Speech. Frontiers in Human Neuroscience, 0, 16, .	IF 2.0	CITATIONS
582	Is Graphene Shortening the Path toward Spinal Cord Regeneration?. ACS Nano, 2022, 16, 13430-13467.	14.6	16
584	Potential Use of Artificial Intelligence in Healthcare System. The Chinese Journal of Artificial Intelligence, 2022, 01, .	0.0	0
585	Activity-dependent plasticity and spinal cord stimulation for motor recovery following spinal cord injury. Experimental Neurology, 2022, 357, 114178.	4.1	13
586	From psychosomatic medicine, brain–computer interface to brain–apparatus communication. , 2022, 1, 66-88.		8
587	Flexible electrodes for non-invasive brain–computer interfaces: A perspective. APL Materials, 2022, 10, .	5.1	4
588	Central and Peripheral Neural Interfaces for Control of Upper Limb Actuators for Motor Rehabilitation After Stroke: Technical and Clinical Considerations. , 2022, , 1-54.		1
589	A Spiking Neural Network Based on Neural Manifold for Augmenting Intracortical Brain-Computer Interface Data. Lecture Notes in Computer Science, 2022, , 519-530.	1.3	2
590	In Vivo Transcranial Measurement of Brain Activated Sources with Acoustoelectric Brain Imaging. IEEE Transactions on Instrumentation and Measurement, 2022, , 1-1.	4.7	0
591	Stability of motor representations after paralysis. ELife, 0, 11, .	6.0	8
592	A Wirelessly Powered 4-Channel Neurostimulator for Reconstructing Walking Trajectory. Sensors, 2022, 22, 7198.	3.8	1
593	Beyond the brain-computer interface: Decoding brain activity as a tool to understand neuronal mechanisms subtending cognition and behavior. Frontiers in Neuroscience, 0, 16, .	2.8	3
595	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, .	2.0	0
596	User Based Development and Test of the EXOTIC Exoskeleton: Empowering Individuals with Tetraplegia Using a Compact, Versatile, 5-DoF Upper Limb Exoskeleton Controlled through Intelligent Semi-Automated Shared Tongue Control. Sensors, 2022, 22, 6919.	3.8	10
597	Bioelectronic medicine: Preclinical insights and clinical advances. Neuron, 2022, 110, 3627-3644.	8.1	28
598	Activating effective functional hand movements in individuals with complete tetraplegia through neural stimulation. Scientific Reports, 2022, 12, .	3.3	5
599	Optimising Automatic Calibration of Electric Muscle Stimulation. Proceedings of the AAAI Conference on Artificial Intelligence, 2021, 35, 3759-3767.	4.9	2
600	A Method of Using Statistical Features Extraction and GA-SVM for EEG Classification. Lecture Notes in Electrical Engineering, 2022, , 707-716.	0.4	1

#	Article	IF	CITATIONS
601	Finger movement and coactivation predicted from intracranial brain activity using extended Block-Term Tensor Regression. Journal of Neural Engineering, 0, , .	3.5	0
602	Non-invasive brain-spine interface: Continuous control of trans-spinal magnetic stimulation using EEG. Frontiers in Bioengineering and Biotechnology, 0, 10, .	4.1	4
603	An interactive mouthguard based on mechanoluminescence-powered optical fibre sensors for bite-controlled device operation. Nature Electronics, 2022, 5, 682-693.	26.0	57
604	Demystifying Supervised Learning in Healthcare 4.0: A New Reality of Transforming Diagnostic Medicine. Diagnostics, 2022, 12, 2549.	2.6	64
605	Functional Electrical Stimulation Therapy: Mechanisms for Recovery of Function Following Spinal Cord Injury and Stroke. , 2022, , 401-427.		3
606	Selective Drive and Control of Index Finger Joint Using Multipoint Functional Electrical Stimulation. IEEE Access, 2022, 10, 112444-112459.	4.2	1
608	Machine learning models can predict the presence of variants in hemoglobin: artificial neural network-based recognition of human hemoglobin variants by HPLC. Biyokimya Dergisi, 2023, 48, 5-11.	0.5	1
609	Learning to control a BMI-driven wheelchair for people with severe tetraplegia. IScience, 2022, 25, 105418.	4.1	10
610	A Brain-Controlled Mahjong Game withÂArtificial Intelligence Augmentation. Lecture Notes in Computer Science, 2022, , 548-553.	1.3	2
611	Neuromorphic-Based Neuroprostheses for Brain Rewiring: State-of-the-Art and Perspectives in Neuroengineering. Brain Sciences, 2022, 12, 1578.	2.3	8
612	Continuous Bimanual Trajectory Decoding of Coordinated Movement From EEG Signals. IEEE Journal of Biomedical and Health Informatics, 2022, 26, 6012-6023.	6.3	8
613	Noninvasive neuroimaging and spatial filter transform enable ultra low delay motor imagery EEG decoding. Journal of Neural Engineering, 2022, 19, 066034.	3.5	1
615	Interim Safety Profile From the Feasibility Study of the BrainGate Neural Interface System. Neurology, 2023, 100, .	1.1	11
616	Neuroprosthetics: from sensorimotor to cognitive disorders. Communications Biology, 2023, 6, .	4.4	19
617	Benchtop and bedside validation of a low-cost programmable cortical stimulator in a testbed for bi-directional brain-computer-interface research. Frontiers in Neuroscience, 0, 16, .	2.8	4
618	Brain-Computer interface control of stepping from invasive electrocorticography upper-limb motor imagery in a patient with quadriplegia. Frontiers in Human Neuroscience, 0, 16, .	2.0	1
619	An interpretable machine learning approach to estimate the influence of inflammation biomarkers on cardiovascular risk assessment. Computer Methods and Programs in Biomedicine, 2023, 230, 107347.	4.7	4
620	Design and performance study of a BMI-based hand-assisted robot. , 2022, , .		0

#	Article	IF	CITATIONS
621	Human–Machine Interaction through Advanced Haptic Sensors: A Piezoelectric Sensory Glove with Edge Machine Learning for Gesture and Object Recognition. Future Internet, 2023, 15, 14.	3.8	11
624	Neurosurgical Considerations for the Brain Computer Interface. , 2023, , 3567-3604.		0
625	Motor BMIs Have Entered the Clinical Realm. , 2023, , 1381-1417.		0
626	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
627	Brain-Machine Interfaces for Neurorobotics. , 2023, , 1817-1857.		0
628	Towards a Wireless Implantable Brain-Machine Interface for Locomotion Control. , 2023, , 1003-1022.		0
629	Reengineering neurotechnology: placing patients first. , 2023, 1, 5-7.		1
630	Hybrid Robotics and Neuroprosthetics forÂAssociative Neurorehabilitation. , 2023, , 1755-1776.		0
631	A Neuroprosthetic for Individuals with Tetraplegia: The Path from a Clinical Research Tool to a Home-Use Assistive Device. , 2023, , 3353-3385.		0
632	Water-soluble conjugated polymers for bioelectronic systems. Materials Horizons, 2023, 10, 1210-1233.	12.2	16
633	Comparative study of EEG motor imagery classification based on DSCNN and ELM. Biomedical Signal Processing and Control, 2023, 84, 104750.	5.7	6
634	Neural Dielet: A 0.4 mm\$^{3}\$ Battery-Less Crystal-Less Neural-Recording System on Die Achieving 1.6 cm Backscatter Range With 2 mm ×2 mm On-Chip Antenna. IEEE Transactions on Biomedical Circuits and Systems, 2023, 17, 54-66.	4.0	3
635	Brain Co-processors: Using Al to Restore and Augment Brain Function. , 2023, , 1225-1260.		1
637	An integrated perspective for the diagnosis and therapy of neurodevelopmental disorders – From an engineering point of view. Advanced Drug Delivery Reviews, 2023, 194, 114723.	13.7	2
638	Soft Fiber Electronics Based on Semiconducting Polymer. Chemical Reviews, 2023, 123, 4693-4763.	47.7	40
639	Recent progress and challenges in the treatment of spinal cord injury. Protein and Cell, 2023, 14, 635-652.	11.0	5
640	From disabled tourists to impaired cyborg tourists: What would it take to transform?. Universal Access in the Information Society, 0, , .	3.0	1
641	Neural Bypasses: Literature Review and Future Directions in Developing Artificial Neural Connections. OBM Neurobiology, 2023, 07, 1-24.	0.6	2

#	Article	IF	CITATIONS
642	Stimulation of spinal cord according to recorded theta hippocampal rhythm during rat move on treadmill. Biomedizinische Technik, 2023, .	0.8	0
643	Corticospinal interface to restore voluntary control of joint torque in a paralyzed forearm following spinal cord injury in non-human primates. Frontiers in Neuroscience, 0, 17, .	2.8	0
644	Intracortical Hindlimb Brain–Computer Interface Systems: A Systematic Review. IEEE Access, 2023, 11, 28119-28139.	4.2	1
646	Neurotechnologies to restore hand functions. , 2023, 1, 390-407.		5
647	Restoring continuous finger function with temporarily paralyzed nonhuman primates using brain–machine interfaces. Journal of Neural Engineering, 2023, 20, 036006.	3.5	0
649	"The Trauma of Losing Your Own Identity Again― The Ethics of Explantation of Brain–Computer Interfaces. Advances in Neuroethics, 2023, , 27-41.	0.3	0
650	Brain Co-processors: Ethical and Social Implications. Advances in Neuroethics, 2023, , 169-185.	0.3	0
652	Intracortical brain-computer interfaces in primates: a review and outlook. Biomedical Engineering Letters, 2023, 13, 375-390.	4.1	2
654	The impact of task context on predicting finger movements in a brain-machine interface. ELife, 0, 12, .	6.0	0
655	Implanted Electrodes for Functional Electrical Stimulation to Restore Upper and Lower Extremity Function: History and Future Directions. Neurosurgery, 2023, 93, 965-970.	1.1	0
656	Functional electrical stimulation of the upper extremities of persons with quadriplegia. Acta Facultatis Medicae Naissensis, 2023, 40, 132-140.	0.4	0
657	Bilingual Bidirectional Stretchable Self-Healing Neuristors with Proprioception. ACS Nano, 2023, 17, 12652-12662.	14.6	1
659	Spatiotemporal expression of RNA-seq identified proteins at the electrode interface. Acta Biomaterialia, 2023, 164, 209-222.	8.3	1
660	Decoding and geometry of ten finger movements in human posterior parietal cortex and motor cortex. Journal of Neural Engineering, 2023, 20, 036020.	3.5	2
661	Optimal Motor Point Search Using Mm-Order Electrode Arrays. IEEE Access, 2023, 11, 58970-58981.	4.2	0
662	Chronic stability of a neuroprosthesis comprising multiple adjacent Utah arrays in monkeys. Journal of Neural Engineering, 2023, 20, 036039.	3.5	2
663	Neural Decoding for Intracortical Brain–Computer Interfaces. Cyborg and Bionic Systems, 2023, 4, .	7.9	4
664	Optimal Feature Analysis for Identification Based on Intracranial Brain Signals with Machine Learning Algorithms. Bioengineering, 2023, 10, 801.	3.5	Ο

#	Article	IF	CITATIONS
665	Hand-worn devices for assessment and rehabilitation of motor function and their potential use in BCI protocols: a review. Frontiers in Human Neuroscience, 0, 17, .	2.0	0
666	Targeted transcutaneous spinal cord stimulation promotes persistent recovery of upper limb strength and tactile sensation in spinal cord injury: a pilot study. Frontiers in Neuroscience, 0, 17, .	2.8	3
667	Prospects of soft biopotential interfaces for wearable human-machine interactive devices and applications. , 0, 3, .		2
668	Conformal in-ear bioelectronics for visual and auditory brain-computer interfaces. Nature Communications, 2023, 14, .	12.8	8
669	Brain-Computer Interfaces in Visualized Medicine. Advances in Experimental Medicine and Biology, 2023, , 127-153.	1.6	0
670	Case study: persistent recovery of hand movement and tactile sensation in peripheral nerve injury using targeted transcutaneous spinal cord stimulation. Frontiers in Neuroscience, 0, 17, .	2.8	0
672	Shared Three-Dimensional Robotic Arm Control Based on Asynchronous BCI and Computer Vision. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2023, 31, 3163-3175.	4.9	2
673	Review of fog and edge computing–based smart health care system using deep learning approaches. , 2023, , 95-105.		0
674	The digital motor output: a conceptual framework for a meaningful clinical performance metric for a motor neuroprosthesis. Journal of NeuroInterventional Surgery, 0, , jnis-2023-020316.	3.3	1
675	Human Intracranial Recordings for Language Research. Neuromethods, 2023, , 285-309.	0.3	0
676	Decoding movement kinematics from EEG using an interpretable convolutional neural network. Computers in Biology and Medicine, 2023, 165, 107323.	7.0	5
678	Prospects of artificial intelligence in regeneration and repair of organs. , 2023, , 117-132.		0
679	Virtual reality, augmented reality technologies, and rehabilitation. , 2023, , 111-134.		0
680	Pediatric Spinal Cord Injury: A Review. Children, 2023, 10, 1456.	1.5	1
681	Decoding hand kinetics and kinematics using somatosensory cortex activity in active and passive movement. IScience, 2023, 26, 107808.	4.1	0
682	Research hotspots and trends of brain-computer interface technology in stroke: a bibliometric study and visualization analysis. Frontiers in Neuroscience, 0, 17, .	2.8	7
683	Artificial intelligence in developing countries: The impact of generative artificial intelligence (AI) technologies for development. Information Development, 0, , .	2.3	5
684	Brainmask: an ultrasoft and moist micro-electrocorticography electrode for accurate positioning and long-lasting recordings. Microsystems and Nanoengineering, 2023, 9, .	7.0	0

#	Article	IF	CITATIONS
685	Challenges of neural interfaces for stroke motor rehabilitation. Frontiers in Human Neuroscience, 0, 17, .	2.0	2
687	How Does Artificial Intelligence Contribute to iEEG Research?. Studies in Neuroscience, Psychology and Behavioral Economics, 2023, , 761-802.	0.3	2
688	Encrypt with Your Mind: Reliable and Revocable Brain Biometrics via Multidimensional Gaussian Fitted Bit Allocation. Bioengineering, 2023, 10, 912.	3.5	0
691	Neuromodulation of the peripheral nervous system: Bioelectronic technology and prospective developments. , 2024, 2, .		3
692	Favoring the cognitive-motor process in the closed-loop of BCI mediated post stroke motor function recovery: challenges and approaches. Frontiers in Neurorobotics, 0, 17, .	2.8	2
693	An implantable, wireless, battery-free system for tactile pressure sensing. Microsystems and Nanoengineering, 2023, 9, .	7.0	3
694	From monkeys to humans: observation-based EMG brain–computer interface decoders for humans with paralysis. Journal of Neural Engineering, 2023, 20, 056040.	3.5	0
695	Intracortical brain-computer interfaces for improved motor function: a systematic review. Reviews in the Neurosciences, 2024, 35, 213-223.	2.9	0
696	Recent Progress in Wearable Brain–Computer Interface (BCI) Devices Based on Electroencephalogram (EEG) for Medical Applications: A Review. Health Data Science, 2023, 3, .	2.3	1
697	A Combined Virtual Electrode-Based ESA and CNN Method for MI-EEG Signal Feature Extraction and Classification. Sensors, 2023, 23, 8893.	3.8	1
698	Lifetime engineering of bioelectronic implants with mechanically reliable thin film encapsulations. Progress in Biomedical Engineering, 2024, 6, 012001.	4.9	2
699	Boosting brain–computer interfaces with functional electrical stimulation: potential applications in people with locked-in syndrome. Journal of NeuroEngineering and Rehabilitation, 2023, 20, .	4.6	0
700	Advanced Electrode Technologies for Noninvasive Brain–Computer Interfaces. ACS Nano, 0, , .	14.6	0
701	ChatGPT and large language models in orthopedics: from education and surgery to research. Journal of Experimental Orthopaedics, 2023, 10, .	1.8	1
704	Invasive Brain Computer Interface for Motor Restoration in Spinal Cord Injury: A Systematic Review. Neuromodulation, 2023, , .	0.8	1
705	The role of distinct ECoG frequency features in decoding finger movement. Journal of Neural Engineering, 2023, 20, 066014.	3.5	0
706	Decoding the Spike-Band Subthreshold Motor Cortical Activity. Journal of Motor Behavior, 2024, 56, 161-183.	0.9	0
707	Unsupervised Neural Manifold Alignment for Stable Decoding of Movement from Cortical Signals. International Journal of Neural Systems, 0, , .	5.2	0

#	Article	IF	CITATIONS
708	Reconnecting the Hand and Arm to the Brain: Efficacy of Neural Interfaces for Sensorimotor Restoration After Tetraplegia. Neurosurgery, 0, , .	1.1	1
709	Dynamic decomposition graph convolutional neural network for SSVEP-based brain–computer interface. Neural Networks, 2024, 172, 106075.	5.9	0
710	Understanding the Potentiality of Artificial Intelligence in Psychological Disorders Detection and Diagnostics. OBM Neurobiology, 2023, 07, 1-22.	0.6	0
711	Applications of Brain Computer Interface in Present Healthcare Setting. Artificial Intelligence, 0, , .	2.3	0
712	Brain-Body Interfaces to Assist and Restore Motor Functions in People with Paralysis. Springer Briefs in Electrical and Computer Engineering, 2024, , 59-73.	0.5	0
713	Rhesus monkeys learn to control a directional-key inspired brain machine interface via bio-feedback. PLoS ONE, 2024, 19, e0286742.	2.5	0
714	Brain control of bimanual movement enabled by recurrent neural networks. Scientific Reports, 2024, 14, .	3.3	1
715	Magnetically Compatible Brain Electrode Arrays Based on Single-Walled Carbon Nanotubes for Long-Term Implantation. Nanomaterials, 2024, 14, 240.	4.1	0
716	IoT-driven augmented reality and virtual reality systems in neurological sciences. Internet of Things (Netherlands), 2024, 25, 101098.	7.7	0
718	Mind-Controlled Optical Manipulation. ACS Photonics, 2024, 11, 1213-1220.	6.6	0
719	Non-linear model predictive control based trajectory tracking of hand and wrist motion using functional electrical stimulation. Control Engineering Practice, 2024, 146, 105895.	5.5	0
720	Personalized strategies of neurostimulation: from static biomarkers to dynamic closed-loop assessment of neural function. Frontiers in Neuroscience, 0, 18, .	2.8	0
721	A Genre of Cognitive Evolutions Through Artificial Superintelligence and Robotics Technology. Studies in Rhythm Engineering, 2024, , 153-187.	0.2	0
722	Neural interfaces: Bridging the brain to the world beyond healthcare. Exploration, 0, , .	11.0	0
723	Planar amorphous silicon carbide microelectrode arrays for chronic recording in rat motor cortex. Biomaterials, 2024, 308, 122543.	11.4	0