## Nitish Thakor

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7172453/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Differential Impact of Autonomous Vehicle Malfunctions on Human Trust. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 548-557.	4.7	22
2	STEER: 3D Printed Guide for Nerve Regrowth Control and Neural Interface in Non-Human Primate Model. IEEE Transactions on Biomedical Engineering, 2022, 69, 1085-1092.	2.5	1
3	Systemic administration of dendrimer Nâ€acetyl cysteine improves outcomes and survival following cardiac arrest. Bioengineering and Translational Medicine, 2022, 7, e10259.	3.9	3
4	Distinct spatio-temporal and spectral brain patterns for different thermal stimuli perception. Scientific Reports, 2022, 12, 919.	1.6	4
5	Early Thalamocortical Reperfusion Leads to Neurologic Recovery in a Rodent Cardiac Arrest Model. Neurocritical Care, 2022, 37, 60-72.	1.2	7
6	Insulin enhances neurite extension and myelination of diabetic neuropathy neurons. Korean Journal of Pain, 2022, 35, 160-172.	0.8	1
7	Objective assessment of trait attentional control predicts driver response to emergency failures of vehicular automation. Accident Analysis and Prevention, 2022, 168, 106588.	3.0	4
8	Quantitative Assessment of Electroencephalogram Reactivity in Comatose Patients on Extracorporeal Membrane Oxygenation. International Journal of Neural Systems, 2022, 32, 2250025.	3.2	1
9	In vivo phenotyping of the microvasculature in necrotizing enterocolitis with multicontrast optical imaging. Microcirculation, 2022, 29, e12768.	1.0	6
10	Texture Discrimination with a Soft Biomimetic Finger Using a Flexible Neuromorphic Tactile Sensor Array That Provides Sensory Feedback. Soft Robotics, 2021, 8, 577-587.	4.6	36
11	Cognitive State Analysis, Understanding, and Decoding from the Perspective of Brain Connectivity. , 2021, , 1-35.		0
12	Nanostructured Platforms Interfacing with Nervous System. , 2021, , 1-24.		0
13	Cognitive State Assessment and Monitoring: A Brain Connectivity Perspective. , 2021, , 1-27.		0
14	Intranasal Orexin After Cardiac Arrest Leads to Increased Electroencephalographic Gamma Activity and Enhanced Neurologic Recovery in Rats. , 2021, 3, e0349.		1
15	Cut wires: The Electrophysiology of Regenerated Tissue. Bioelectronic Medicine, 2021, 7, 1.	1.0	9
16	Sensory Stimulation Enhances Functional Connectivity towards the Somatosensory Cortex in Upper Limb Amputation. , 2021, , .		2
17	A Portable Multicontrast Microscope for Multiscale Imaging of the Microcirculation. FASEB Journal, 2021, 35, .	0.2	0
18	A scalable algorithm based on spike train distance to select stimulation patterns for sensory feedback. , 2021, , .		1

#	Article	IF	CITATIONS
19	Signal Processing for Neurorehabilitation and Assistive Technologies [From the Guest Editors]. IEEE Signal Processing Magazine, 2021, 38, 5-7.	4.6	5
20	Targeted Photoacoustic Imaging of Brain Tumor Mediated by Neutrophils Engineered with Lipid-Based Molecular Probe. , 2021, 3, 1284-1290.		11
21	Spatio-Temporal Encoding Improves Neuromorphic Tactile Texture Classification. IEEE Sensors Journal, 2021, 21, 19038-19046.	2.4	9
22	Microfluidic Culture Platforms in Neuroscience Research. , 2021, , 1-39.		1
23	A Biomimetic Circuit for Electronic Skin With Application in Hand Prosthesis. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 2333-2344.	2.7	6
24	A Miniature Laser Speckle Contrast Imager for Monitoring the Neuromodulatory Effect of Transcranial Ultrasound Stimulation. , 2021, 2021, .		1
25	Nontransient silk sandwich for soft, conformal bionic links. Materials Today, 2020, 32, 68-83.	8.3	24
26	Driving Neurogenesis in Neural Stem Cells with High Sensitivity Optogenetics. NeuroMolecular Medicine, 2020, 22, 139-149.	1.8	7
27	Stable Responsive EMG Sequence Prediction and Adaptive Reinforcement With Temporal Convolutional Networks. IEEE Transactions on Biomedical Engineering, 2020, 67, 1707-1717.	2.5	39
28	Safety and tolerability of cryocompression as a method of enhanced limb hypothermia to reduce taxane-induced peripheral neuropathy. Supportive Care in Cancer, 2020, 28, 3691-3699.	1.0	17
29	Sensing and Control for Prosthetic Hands in Clinical and Research Applications. , 2020, , 445-468.		12
30	Effects of Rest-Break on Mental Fatigue Recovery Determined by a Novel Temporal Brain Network Analysis of Dynamic Functional Connectivity. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 62-71.	2.7	17
31	Organic nanoparticle-doped microdroplets as dual-modality contrast agents for ultrasound microvascular flow and photoacoustic imaging. Scientific Reports, 2020, 10, 17009.	1.6	1
32	Acuteâ€stage MRI cerebral oxygen consumption biomarkers predict 24â€hour neurological outcome in a rat cardiac arrest model. NMR in Biomedicine, 2020, 33, e4377.	1.6	8
33	Biomimetic Nanocomposites Cloaked with Bioorthogonally Labeled Glioblastoma Cell Membrane for Targeted Multimodal Imaging of Brain Tumors. Advanced Functional Materials, 2020, 30, 2004346.	7.8	52
34	Towards scalable soft e-skin: Flexible event-based tactile-sensors using wireless sensor elements embedded in soft elastomer. , 2020, , .		1
35	Sensory Feedback in Upper Limb Amputees Impacts Cortical Activity as Revealed by Multiscale Connectivity Analysis. , 2020, 2020, 3844-3847.		0
36	Soft sensors for a sensing-actuation system with high bladder voiding efficiency. Science Advances, 2020, 6, eaba0412.	4.7	32

#	Article	IF	CITATIONS
37	Neuromorphic approach to tactile edge orientation estimation using spatiotemporal similarity. Neurocomputing, 2020, 407, 246-258.	3.5	7
38	Unveiling Stimulation Secrets of Electrical Excitation of Neural Tissue Using a Circuit Probability Theory. Frontiers in Computational Neuroscience, 2020, 14, 50.	1.2	7
39	Minimally invasive therapeutic ultrasound: Ultrasound-guided ultrasound ablation in neuro-oncology. Ultrasonics, 2020, 108, 106210.	2.1	16
40	Nanotunnels within Poly(3,4-ethylenedioxythiophene)-Carbon Nanotube Composite for Highly Sensitive Neural Interfacing. ACS Nano, 2020, 14, 8059-8073.	7.3	37
41	Decoding of Pain Perception using EEG Signals for a Real-Time Reflex System in Prostheses: A Case Study. Scientific Reports, 2020, 10, 5606.	1.6	25
42	Toward Nontransient Silk Bioelectronics: Engineering Silk Fibroin for Bionic Links. Small Methods, 2020, 4, 2000274.	4.6	24
43	EEG Functional Connectivity Predicts Individual Behavioural Impairment During Mental Fatigue. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 2080-2089.	2.7	14
44	Brain Functional Connectivity in Unconstrained Walking With and Without an Exoskeleton. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 730-739.	2.7	15
45	HemoSYS: A Toolkit for Image-based Systems Biology of Tumor Hemodynamics. Scientific Reports, 2020, 10, 2372.	1.6	5
46	Biodegradable rare earth fluorochloride nanocrystals for phototheranostics. RSC Advances, 2020, 10, 15387-15393.	1.7	11
47	Towards machine to brain interfaces: sensory stimulation enhances sensorimotor dynamic functional connectivity in upper limb amputees. Journal of Neural Engineering, 2020, 17, 035002.	1.8	21
48	Enhanced penetration of pro-apoptotic and anti-angiogenic micellar nanoprobe in 3D multicellular spheroids for chemophototherapy. Journal of Controlled Release, 2020, 323, 502-518.	4.8	22
49	EEG Signal Processing: Theory and Applications. , 2020, , 97-129.		2
50	Decoding Olfactory Cognition: EEG Functional Modularity Analysis Reveals Differences in Perception of Positively-Valenced Stimuli. Lecture Notes in Computer Science, 2020, , 79-89.	1.0	1
51	Transcranial Dynamic Fluorescence Imaging for the Study of the Epileptic Seizures. Brain Informatics and Health, 2020, , 49-66.	0.1	1
52	Time delay effect in a microchip pulse laser for the nonlinear photoacoustic signal enhancement. Optics Express, 2020, 28, 23154.	1.7	1
53	Sensory stimulation enhances phantom limb perception and movement decoding. Journal of Neural Engineering, 2020, 17, 056006.	1.8	14
54	Therapeutic hypothermia promotes cerebral blood flow recovery and brain homeostasis after resuscitation from cardiac arrest in a rat model. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 1961-1973.	2.4	29

#	Article	IF	CITATIONS
55	Reorganization of Temporal Brain Network Underpins Accumulative Nature of Mental Fatigue. , 2019, , .		Ο
56	Texture Discrimination using a Soft Biomimetic Finger for Prosthetic Applications. , 2019, 2019, 380-385.		9
57	Expanding the Toolbox of Upconversion Nanoparticles for In Vivo Optogenetics and Neuromodulation. Advanced Materials, 2019, 31, e1803474.	11.1	118
58	Mental Workload Drives Different Reorganizations of Functional Cortical Connectivity Between 2D and 3D Simulated Flight Experiments. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1704-1713.	2.7	61
59	Neuromorphic vision and tactile fusion for upper limb prosthesis control. , 2019, 2019, 981-984.		6
60	Active Contact Enhancements With Stretchable Soft Layers and Piezoresistive Tactile Array for Robotic Grippers. , 2019, , .		7
61	Toward a cooperation index based on EEG-workload causality: preliminary findings on aerospace-like tasks. , 2019, 2019, 4554-4557.		2
62	E-Skins: Biomimetic Sensing and Encoding for Upper Limb Prostheses. Proceedings of the IEEE, 2019, 107, 2052-2064.	16.4	28
63	What Are Spectral and Spatial Distributions of EEC-EMG Correlations in Overground Walking? An Exploratory Study. IEEE Access, 2019, 7, 143935-143946.	2.6	13
64	Closed-Loop Bladder Neuromodulation Therapy in Spinal Cord Injury Rat Model. , 2019, , .		0
65	Direct Stimulation of Bladder Pelvic Nerve using Battery-Free Neural Clip Interface. , 2019, , .		7
66	Altered Regional Brain Communities during High Order Cognitive Processes: Relation to Vigilance Decrement. , 2019, , .		3
67	Role of Cross-Frequency Coupling in the Frontal and Parieto-Occipital Subnetwork during Creative Ideation. , 2019, , .		5
68	Pinch Grasp and Suction for Delicate Object Manipulations Using Modular Anthropomorphic Robotic Gripper with Soft Layer Enhancements. Robotics, 2019, 8, 67.	2.1	10
69	Topological Re-Organisation of the Brain Connectivity During Olfactory Adaptation - an EEG Functional Connectome Study. , 2019, , .		5
70	Stable Electromyographic Sequence Prediction During Movement Transitions using Temporal Convolutional Networks. , 2019, , .		14
71	A Bio-Inspired Slip Detection and Reflex-Like Suppression Method for Robotic Manipulators. IEEE Sensors Journal, 2019, 19, 12443-12453.	2.4	16
72	The Microbead: A 0.009 mm <sup>3</sup> Implantable Wireless Neural Stimulator. IEEE Transactions on Biomedical Circuits and Systems, 2019, 13, 971-985.	2.7	87

#	Article	IF	CITATIONS
73	Identifying glioblastoma margins using dual-targeted organic nanoparticles for efficient <i>in vivo</i> fluorescence image-guided photothermal therapy. Materials Horizons, 2019, 6, 311-317.	6.4	53
74	Between-Frequency Topographical and Dynamic High-Order Functional Connectivity for Driving Drowsiness Assessment. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 358-367.	2.7	30
75	Engineering the Infrared Luminescence and Photothermal Properties of Double-Shelled Rare-Earth-Doped Nanoparticles for Biomedical Applications. ACS Biomaterials Science and Engineering, 2019, 5, 4089-4101.	2.6	17
76	An adaptive socket with auto-adjusting air bladders for interfacing transhumeral prosthesis: A pilot study. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2019, 233, 812-822.	1.0	5
77	Investigation of Lowâ€Current Direct Stimulation for Rehabilitation Treatment Related to Muscle Function Loss Using Selfâ€Powered TENG System. Advanced Science, 2019, 6, 1900149.	5.6	97
78	Visualization of Intraâ€neuronal Motor Protein Transport through Upconversion Microscopy. Angewandte Chemie - International Edition, 2019, 58, 9262-9268.	7.2	52
79	Visualization of Intraâ€neuronal Motor Protein Transport through Upconversion Microscopy. Angewandte Chemie, 2019, 131, 9363-9369.	1.6	34
80	The Design of a Thermoelectric Generator and Its Medical Applications. Designs, 2019, 3, 22.	1.3	66
81	Fibro-Neuronal Guidance on Common, 3D-Printed Textured Substrates. IEEE Transactions on Nanobioscience, 2019, 18, 226-229.	2.2	10
82	Self-Powered Direct Muscle Stimulation Using a Triboelectric Nanogenerator (TENG) Integrated with a Flexible Multiple-Channel Intramuscular Electrode. ACS Nano, 2019, 13, 3589-3599.	7.3	130
83	Upconversion amplification through dielectric superlensing modulation. Nature Communications, 2019, 10, 1391.	5.8	114
84	Mechano-neuromodulation of autonomic pelvic nerve for underactive bladder: A triboelectric neurostimulator integrated with flexible neural clip interface. Nano Energy, 2019, 60, 449-456.	8.2	81
85	Neural Mechanisms of Mental Fatigue Revisited: New Insights from the Brain Connectome. Engineering, 2019, 5, 276-286.	3.2	65
86	Texture Discrimination using a Flexible Tactile Sensor Array on a Soft Biomimetic Finger. , 2019, , .		9
87	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.	2.7	18
88	A miniature multi-contrast microscope for functional imaging in freely behaving animals. Nature Communications, 2019, 10, 99.	5.8	62
89	Improving the functionality, robustness, and adaptability of myoelectric control for dexterous motion restoration. Experimental Brain Research, 2019, 237, 291-311.	0.7	42
90	Minimally invasive intraventricular ultrasound: design and instrumentation towards a miniaturized ultrasound-guided focused ultrasound probe. , 2019, , .		2

#	Article	IF	CITATIONS
91	Design considerations for a miniature multicontrast neuroimager. , 2019, , .		Ο
92	A novel real-time driving fatigue detection system based on wireless dry EEG. Cognitive Neurodynamics, 2018, 12, 365-376.	2.3	81
93	Brain tumors disrupt the resting-state connectome. NeuroImage: Clinical, 2018, 18, 279-289.	1.4	31
94	A Method for 3-D Printing Patient-Specific Prosthetic Arms With High Accuracy Shape and Size. IEEE Access, 2018, 6, 25029-25039.	2.6	23
95	Biofunctionalized platforms towards long-term neural interface. Current Opinion in Biomedical Engineering, 2018, 6, 81-91.	1.8	8
96	Toward Self-Control Systems for Neurogenic Underactive Bladder: A Triboelectric Nanogenerator Sensor Integrated with a Bistable Micro-Actuator. ACS Nano, 2018, 12, 3487-3501.	7.3	96
97	Molecular Engineering of Photoacoustic Performance by Chalcogenide Variation in Conjugated Polymer Nanoparticles for Brain Vascular Imaging. Small, 2018, 14, e1703732.	5.2	37
98	Functional Connectivity Analysis of Mental Fatigue Reveals Different Network Topological Alterations Between Driving and Vigilance Tasks. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 740-749.	2.7	108
99	Modeling task-specific neuronal ensembles improves decoding of grasp. Journal of Neural Engineering, 2018, 15, 036006.	1.8	Ο
100	Frontoâ€Parietal Subnetworks Flexibility Compensates For Cognitive Decline Due To Mental Fatigue. Human Brain Mapping, 2018, 39, 3528-3545.	1.9	21
101	Battery-free neuromodulator for peripheral nerve direct stimulation. Nano Energy, 2018, 50, 148-158.	8.2	88
102	An Extreme Learning Machine-Based Neuromorphic Tactile Sensing System for Texture Recognition. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 313-325.	2.7	63
103	The Microbead: A Highly Miniaturized Wirelessly Powered Implantable Neural Stimulating System. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 521-531.	2.7	52
104	Topological Changes in the Brain Network Induced by the Training on a Piloting Task: An EEG-Based Functional Connectome Approach. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 263-271.	2.7	11
105	Limb Position Tolerant Pattern Recognition for Myoelectric Prosthesis Control with Adaptive Sparse Representations From Extreme Learning. IEEE Transactions on Biomedical Engineering, 2018, 65, 770-778.	2.5	81
106	Simultaneous functional photoacoustic microscopy and electrocorticography reveal the impact of rtPA on dynamic neurovascular functions after cerebral ischemia. Journal of Cerebral Blood Flow and Metabolism, 2018, 38, 980-995.	2.4	15
107	A Highly Selective 3D Spiked Ultraflexible Neural (SUN) Interface for Decoding Peripheral Nerve Sensory Information. Advanced Healthcare Materials, 2018, 7, 1700987.	3.9	36
108	Design and Anchorage Dependence of Shape Memory Alloy Actuators on Enhanced Voiding of a Bladder. Advanced Materials Technologies, 2018, 3, 1700184.	3.0	19

#	Article	IF	CITATIONS
109	Predictive trajectory estimation during rehabilitative tasks in augmented reality using inertial sensors. , 2018, , .		4
110	Classifying Brain Activities in Perception of Shape-Analogous English Letters Based on EEG Signal. , 2018, , .		2
111	Designing Feedback Controllers for Human-Prosthetic Systems Using H <inf>â^ž</inf> Model Matching. , 2018, 2018, 2316-2319.		2
112	A Neuromorphic Approach to Tactile Texture Recognition. , 2018, , .		2
113	A Mixed-Reality Training Environment for Upper Limb Prosthesis Control. , 2018, , .		11
114	Electrospun nanofibers facilitate better alignment, differentiation, and long-term culture in an <i>in vitro</i> model of the neuromuscular junction (NMJ). Biomaterials Science, 2018, 6, 3262-3272.	2.6	40
115	Live Demonstration: Augmented Reality Prosthesis Training with Real- Time Hand Trajectory Prediction and Neuromorphic Tactile Encoding. , 2018, , .		1
116	Batteryless neural interface using triboelectric nanogenerators (TENGs) to enable a self-sustainable platform for neuromodulation. Journal of Physics: Conference Series, 2018, 1052, 012007.	0.3	4
117	Performance Improvement of Driving Fatigue Identification Based on Power Spectra and Connectivity Using Feature Level and Decision Level Fusions. , 2018, 2018, 102-105.		11
118	Dynamically Mapping Socket Loading Conditions During Real Time Operation of an Upper Limb Prosthesis. , 2018, 2018, 3930-3933.		4
119	Functional brain network analysis reveals time-on-task related performance decline. , 2018, 2018, 271-274.		2
120	A Handheld Real-Time Photoacoustic Imaging System for Animal Neurological Disease Models: From Simulation to Realization. Sensors, 2018, 18, 4081.	2.1	13
121	Slip suppression in prosthetic hands using a reflective optical sensor and MPI controller. , 2018, , .		4
122	Unsupervised Learning and Adaptive Classification of Neuromorphic Tactile Encoding of Textures. , 2018, , .		15
123	Registration of EMG Electrodes to Reduce Classification Errors due to Electrode Shift. , 2018, , .		4
124	Dynamic Texture Decoding Using a Neuromorphic Multilayer Tactile Sensor. , 2018, , .		15
125	Batteryless Pelvic Nerve Direct Modulation for Bladder Voding Using an Active Neural Clip. , 2018, , .		3
126	Photoacoustic and Magnetic Resonance Imaging Bimodal Contrast Agent Displaying Amplified Photoacoustic Signal. Small, 2018, 14, e1800652.	5.2	27

#	Article	IF	CITATIONS
127	Single-Finger Neural Basis Information-Based Neural Decoder for Multi-Finger Movements. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 2240-2248.	2.7	1
128	Closed-loop stimulation of the pelvic nerve for optimal micturition. Journal of Neural Engineering, 2018, 15, 066009.	1.8	13
129	Decoding peripheral nerve sensory information with a spiked flexible neural interface. , 2018, , .		Ο
130	Unilateral Exoskeleton Imposes Significantly Different Hemispherical Effect in Parietooccipital Region, but Not in Other Regions. Scientific Reports, 2018, 8, 13470.	1.6	10
131	Novel Neurostimulation of Autonomic Pelvic Nerves Overcomes Bladder-Sphincter Dyssynergia. Frontiers in Neuroscience, 2018, 12, 186.	1.4	26
132	Polymer-based composites by electrospinning: Preparation & functionalization with nanocarbons. Progress in Polymer Science, 2018, 86, 40-84.	11.8	197
133	Spatio–Spectral Representation Learning for Electroencephalographic Gait-Pattern Classification. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1858-1867.	2.7	43
134	Prosthesis with neuromorphic multilayered e-dermis perceives touch and pain. Science Robotics, 2018, 3, .	9.9	280
135	CONE: Convex-Optimized-Synaptic Efficacies for Temporally Precise Spike Mapping. IEEE Transactions on Neural Networks and Learning Systems, 2017, 28, 849-861.	7.2	10
136	A CMOS Current Steering Neurostimulation Array With Integrated DAC Calibration and Charge Balancing. IEEE Transactions on Biomedical Circuits and Systems, 2017, 11, 324-335.	2.7	34
137	Wireless Power Delivery to Flexible Subcutaneous Implants Using Capacitive Coupling. IEEE Transactions on Microwave Theory and Techniques, 2017, 65, 280-292.	2.9	123
138	Development of battery-free neural interface and modulated control of tibialis anterior muscle via common peroneal nerve based on triboelectric nanogenerators (TENGs). Nano Energy, 2017, 33, 1-11.	8.2	124
139	Hybrid Tele-Manipulation System Using a Sensorized 3-D-Printed Soft Robotic Gripper and a Soft Fabric-Based Haptic Glove. IEEE Robotics and Automation Letters, 2017, 2, 880-887.	3.3	80
140	The effects of a mid-task break on the brain connectome in healthy participants: A resting-state functional MRI study. NeuroImage, 2017, 152, 19-30.	2.1	38
141	Micro-device combining electrophysiology and optical imaging for functional brain monitoring in freely moving animals. Proceedings of SPIE, 2017, , .	0.8	0
142	Real-time imaging for cerebral ischemia in rats using the multi-wavelength handheld photoacoustic system. Proceedings of SPIE, 2017, , .	0.8	0
143	Multi-Position Training Improves Robustness of Pattern Recognition and Reduces Limb-Position Effect in Prosthetic Control. Journal of Prosthetics and Orthotics, 2017, 29, 54-62.	0.2	24
144	Implications of neurovascular uncoupling in functional magnetic resonance imaging (fMRI) of brain tumors. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 3475-3487.	2.4	77

#	Article	IF	CITATIONS
145	Brain-Machine Interface Development for Finger Movement Control. Springer Briefs in Electrical and Computer Engineering, 2017, , 31-49.	0.3	1
146	Decoding Kinematics Using Task-Independent Movement-Phase-Specific Encoding Models. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 2122-2132.	2.7	8
147	Neural interfaces engineered via micro- and nanostructured coatings. Nano Today, 2017, 14, 59-83.	6.2	60
148	Nanowire Electrodes Integrated on Tip of Microwire for Peripheral Nerve Stimulation. Journal of Microelectromechanical Systems, 2017, 26, 921-925.	1.7	4
149	Wireless Power Transfer Strategies for Implantable Bioelectronics. IEEE Reviews in Biomedical Engineering, 2017, 10, 136-161.	13.1	364
150	Organic molecules with propeller structures for efficient photoacoustic imaging and photothermal ablation of cancer cells. Materials Chemistry Frontiers, 2017, 1, 1556-1562.	3.2	85
151	EEG Classification with a Sequential Decision-Making Method in Motor Imagery BCI. International Journal of Neural Systems, 2017, 27, 1750046.	3.2	23
152	Toward Bioelectronic Medicine—Neuromodulation of Small Peripheral Nerves Using Flexible Neural Clip. Advanced Science, 2017, 4, 1700149.	5.6	76
153	Novel Classification System for Classifying Cognitive Workload Levels Under Vague Visual Stimulation. IEEE Sensors Journal, 2017, 17, 7019-7028.	2.4	20
154	Graph theoretical analysis of EEG functional network during multi-workload flight simulation experiment in virtual reality environment. , 2017, 2017, 3957-3960.		14
155	Role of multisensory stimuli in vigilance enhancement- a single trial event related potential study. , 2017, 2017, 2446-2449.		10
156	Enhanced near-infrared photoacoustic imaging of silica-coated rare-earth doped nanoparticles. Materials Science and Engineering C, 2017, 70, 340-346.	3.8	23
157	Selective stimulation and neural recording on peripheral nerves using flexible split ring electrodes. Sensors and Actuators B: Chemical, 2017, 242, 1165-1170.	4.0	62
158	Dynamic Functional Segregation and Integration in Human Brain Network During Complex Tasks. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 547-556.	2.7	38
159	How the workload impacts on cognitive cooperation: A pilot study. , 2017, 2017, 3961-3964.		3
160	Measuring vigilance decrement using computer vision assisted eye tracking in dynamic naturalistic environments. , 2017, 2017, 2478-2481.		7
161	A chronic implantable EMG recording system with wireless power and data transfer. , 2017, ,		1
162	Live demonstration: Prosthesis grip force modulation using neuromorphic tactile sensing. , 2017, , .		7

#	Article	IF	CITATIONS
163	Targeted transcutaneous electrical nerve stimulation for phantom limb sensory feedback. , 2017, 2017, .		23
164	Adaptive closed-loop bladder neuromodulation. , 2017, , .		0
165	Live demonstration: Programmable biphasic multi-channel constant current muscle stimulator with wireless power and data transfer. , 2017, , .		1
166	A bidirectional soft pneumatic fabric-based actuator for grasping applications. , 2017, , .		25
167	Development of flexible fabric based tactile sensor for closed loop control of soft robotic actuator. , 2017, , .		10
168	A mental fatigue index based on regression using mulitband EEG features with application in simulated driving. , 2017, 2017, 3220-3223.		6
169	Identification of gait-related brain activity using electroencephalographic signals. , 2017, , .		5
170	Chronic wide-field imaging of brain hemodynamics in behaving animals. Biomedical Optics Express, 2017, 8, 436.	1.5	21
171	Novel Early EEG Measures Predicting Brain Recovery after Cardiac Arrest. Entropy, 2017, 19, 466.	1.1	2
172	EEG Cortical Connectivity Analysis of Working Memory Reveals Topological Reorganization in Theta and Alpha Bands. Frontiers in Human Neuroscience, 2017, 11, 237.	1.0	67
173	Discrimination of Dynamic Tactile Contact by Temporally Precise Event Sensing in Spiking Neuromorphic Networks. Frontiers in Neuroscience, 2017, 11, 5.	1.4	24
174	A Saccade Based Framework for Real-Time Motion Segmentation Using Event Based Vision Sensors. Frontiers in Neuroscience, 2017, 11, 83.	1.4	9
175	A New Perspective for the Training Assessment: Machine Learning-Based Neurometric for Augmented User's Evaluation. Frontiers in Neuroscience, 2017, 11, 325.	1.4	36
176	In-vivo tests of an inductively powered miniaturized neural stimulator. , 2017, , .		3
177	Live demonstration $\hat{a} \in$ " An adaptable prosthetic socket: Regulating independent air bladders through closed-loop control. , 2017, , .		1
178	Brain Interaction during Cooperation: Evaluating Local Properties of Multiple-Brain Network. Brain Sciences, 2017, 7, 90.	1.1	43
179	Integrated treatment modality of cathodal-transcranial direct current stimulation with peripheral sensory stimulation affords neuroprotection in a rat stroke model. Neurophotonics, 2017, 4, 1.	1.7	27
180	Rare-Earth Doped CaF2 Nanocrystals for Dual-Modal Short-Wavelength Infrared Fluorescence and Photoacoustic Imaging. Nanoscience and Nanotechnology Letters, 2017, 9, 481-488.	0.4	3

#	Article	IF	CITATIONS
181	Subcellular electrical stimulation of neurons enhances the myelination of axons by oligodendrocytes. PLoS ONE, 2017, 12, e0179642.	1.1	30
182	Intranasal post-cardiac arrest treatment with orexin-A facilitates arousal from coma and ameliorates neuroinflammation. PLoS ONE, 2017, 12, e0182707.	1.1	24
183	Vagus nerve stimulation (VNS) for heart rate control using novel neural interfaces. , 2017, , .		0
184	Designing Closed-Loop Brain-Machine Interfaces Using Model Predictive Control. Technologies, 2016, 4, 18.	3.0	0
185	EEG and Eye Tracking Demonstrate Vigilance Enhancement with Challenge Integration. Frontiers in Human Neuroscience, 2016, 10, 273.	1.0	52
186	Mid-Task Break Improves Global Integration of Functional Connectivity in Lower Alpha Band. Frontiers in Human Neuroscience, 2016, 10, 304.	1.0	46
187	Causal Interactions between FrontalÎ, – Parieto-Occipitalα2 Predict Performance on a Mental Arithmetic Task. Frontiers in Human Neuroscience, 2016, 10, 454.	1.0	38
188	Progress of Flexible Electronics in Neural Interfacing – A Selfâ€Adaptive Nonâ€Invasive Neural Ribbon Electrode for Small Nerves Recording. Advanced Materials, 2016, 28, 4472-4479.	11.1	96
189	Selfâ€organization of "fibroâ€axonal―composite tissue around unmodified metallic microâ€electrodes can form a functioning interface with a peripheral nerve: A new direction for creating longâ€term neural interfaces. Muscle and Nerve, 2016, 53, 789-796.	1.0	8
190	Identification of fluocinolone acetonide to prevent paclitaxelâ€induced peripheral neuropathy. Journal of the Peripheral Nervous System, 2016, 21, 128-133.	1.4	5
191	Live demonstration: Real-time orientation estimation and grasping of household objects for upper limb prostheses with a dynamic vision sensor. , 2016, , .		0
192	Orientation estimation and grasp type detection of household objects for upper limb prostheses with dynamic vision sensor. , 2016, , .		3
193	Hypothermia for preventing chemotherapy-induced neuropathy – a pilot study on safety and tolerability in healthy controls. Acta Oncológica, 2016, 55, 430-436.	0.8	17
194	Fault tolerant tactile sensor arrays for prosthesis. , 2016, , .		4
195	Size and Shell Effects on the Photoacoustic and Luminescence Properties of Dual Modal Rare-Earth-Doped Nanoparticles for Infrared Photoacoustic Imaging. ACS Biomaterials Science and Engineering, 2016, 2, 809-817.	2.6	41
196	Brain-machine interface facilitated neurorehabilitation via spinal stimulation after spinal cord injury: Recent progress and future perspectives. Brain Research, 2016, 1646, 25-33.	1.1	50
197	Neuromimetic Event-Based Detection for Closed-Loop Tactile Feedback Control of Upper Limb Prostheses. IEEE Transactions on Haptics, 2016, 9, 196-206.	1.8	59
198	Organic Nanoparticles with Aggregationâ€Induced Emission for Bone Marrow Stromal Cell Tracking in a Rat PTI Model. Small, 2016, 12, 6576-6585.	5.2	29

#	Article	IF	CITATIONS
199	A robotic knee exoskeleton for walking assistance and connectivity topology exploration in EEG signal. , 2016, , .		18
200	Electroceuticals: Mapping of Small Nerve Trunks and Branches Using Adaptive Flexible Electrodes (Adv. Sci. 9/2016). Advanced Science, 2016, 3, .	5.6	1
201	Development of flexible multi-channel muscle interfaces with advanced sensing function. Sensors and Actuators A: Physical, 2016, 249, 269-275.	2.0	6
202	Biocompatible Red Fluorescent Organic Nanoparticles with Tunable Size and Aggregationâ€Induced Emission for Evaluation of Blood–Brain Barrier Damage. Advanced Materials, 2016, 28, 8760-8765.	11.1	80
203	Mapping of Small Nerve Trunks and Branches Using Adaptive Flexible Electrodes. Advanced Science, 2016, 3, 1500386.	5.6	32
204	Subcellular Optogenetic Stimulation for Activity-Dependent Myelination of Axons in a Novel Microfluidic Compartmentalized Platform. ACS Chemical Neuroscience, 2016, 7, 1317-1324.	1.7	41
205	Comparison method for community detection on brain networks from neuroimaging data. Applied Network Science, 2016, 1, 8.	0.8	18
206	Neurophotonics by laser speckle and photoacoustic imaging. , 2016, , .		0
207	Real-time robot tracking and following with neuromorphic vision sensor. , 2016, , .		4
208	Encapsulated Conjugated Oligomer Nanoparticles for Realâ€Time Photoacoustic Sentinel Lymph Node Imaging and Targeted Photothermal Therapy. Small, 2016, 12, 4873-4880.	5.2	48
209	A Bidirectional Neural Interface IC With Chopper Stabilized BioADC Array and Charge Balanced Stimulator. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 990-1002.	2.7	36
210	An integrated neuroprotective intervention for brain ischemia validated by ECoG-fPAM. , 2016, 2016, 4009-4012.		2
211	Biologically inspired multi-layered synthetic skin for tactile feedback in prosthetic limbs. , 2016, 2016, 4622-4625.		15
212	Mining cross-frequency coupling microstates (CFCμstates) from EEG recordings during resting state and mental arithmetic tasks. , 2016, 2016, 5517-5520.		0
213	Peripheral sensory stimulation is neuroprotective in a rat photothrombotic ischemic stroke model. , 2016, 2016, 6086-6089.		3
214	Delicate manipulations with compliant mechanism and electrostatic adhesion. , 2016, , .		5
215	Quantitative Assessment of the Training Improvement in a Motor-Cognitive Task by Using EEG, ECG and EOG Signals. Brain Topography, 2016, 29, 149-161.	0.8	59
216	Implantable neurotechnologies: a review of integrated circuit neural amplifiers. Medical and Biological Engineering and Computing, 2016, 54, 45-62.	1.6	69

#	Article	IF	CITATIONS
217	High Precision Neural Decoding of Complex Movement Trajectories Using Recursive Bayesian Estimation With Dynamic Movement Primitives. IEEE Robotics and Automation Letters, 2016, 1, 676-683.	3.3	23
218	Implantable neurotechnologies: bidirectional neural interfaces—applications and VLSI circuit implementations. Medical and Biological Engineering and Computing, 2016, 54, 1-17.	1.6	52
219	Implantable neurotechnologies: a review of micro- and nanoelectrodes for neural recording. Medical and Biological Engineering and Computing, 2016, 54, 23-44.	1.6	123
220	Implantable neurotechnologies: electrical stimulation and applications. Medical and Biological Engineering and Computing, 2016, 54, 63-76.	1.6	38
221	Effect of cranial window type on monitoring neurovasculature using laser speckle contrast imaging. , 2016, , .		1
222	Individual finger control of a modular prosthetic limb using high-density electrocorticography in a human subject. Journal of Neural Engineering, 2016, 13, 026017.	1.8	169
223	Real-time modulated nanoparticle separation with an ultra-large dynamic range. Lab on A Chip, 2016, 16, 75-85.	3.1	75
224	Flexible Epineural Strip Electrode for Recording in Fine Nerves. IEEE Transactions on Biomedical Engineering, 2016, 63, 581-587.	2.5	27
225	Continuous-flow C. elegans fluorescence expression analysis with real-time image processing through microfluidics. Biosensors and Bioelectronics, 2016, 77, 428-434.	5.3	18
226	Limb Hypothermia for Preventing Paclitaxel-Induced Peripheral Neuropathy in Breast Cancer Patients: A Pilot Study. Frontiers in Oncology, 2016, 6, 274.	1.3	32
227	Time-varying dynamic Bayesian network model and its application to brain connectivity using electrocorticograph. Wuli Xuebao/Acta Physica Sinica, 2016, 65, 038702.	0.2	3
228	Systems Neuroengineering: Understanding and Interacting with the Brain. Engineering, 2015, 1, 292-308.	3.2	30
229	Brain enhancement through cognitive training: a new insight from brain connectome. Frontiers in Systems Neuroscience, 2015, 9, 44.	1.2	67
230	Progressive Gender Differences of Structural Brain Networks in Healthy Adults: A Longitudinal, Diffusion Tensor Imaging Study. PLoS ONE, 2015, 10, e0118857.	1.1	84
231	Sensing of Stimulus Artifact Suppressed Signals From Electrode Interfaces. IEEE Sensors Journal, 2015, 15, 3734-3742.	2.4	16
232	Front Matter: Volume 9305. , 2015, , .		0
233	Prolonged Local Hypothermia Has No Long-Term Adverse Effect on the Spinal Cord. Therapeutic Hypothermia and Temperature Management, 2015, 5, 152-162.	0.3	9
234	Fluorogens with Aggregation Induced Emission: Ideal Photoacoustic Contrast Reagents Due to Intramolecular Rotation. Journal of Nanoscience and Nanotechnology, 2015, 15, 1864-1868.	0.9	30

#	Article	IF	CITATIONS
235	Investigating the correlation between the neural activity and task performance in a psychomotor vigilance test. , 2015, 2015, 4725-8.		0
236	A 5 $\hat{I}_{4}$ W/channel 9b-ENOB BioADC array for electrocortical recording. , 2015, , .		0
237	Multi-function optogenetic stimulator and neural amplifier for wirelessly controlled neural interface. , 2015, , .		5
238	Eye tracking and EEG synchronization to analyze microsaccades during a workload task. , 2015, 2015, 7994-7.		6
239	Real-time arm tracking for HMI applications. , 2015, 2015, .		5
240	Semi-autonomous Hybrid Brain-Machine Interface. Springer Briefs in Electrical and Computer Engineering, 2015, , 89-104.	0.3	1
241	A kilohertz kilotaxel tactile sensor array for investigating spatiotemporal features in neuromorphic touch. , 2015, , .		19
242	Rescue of cortical neurovascular functions during the hyperacute phase of ischemia by peripheral sensory stimulation. Neurobiology of Disease, 2015, 75, 53-63.	2.1	33
243	Polymeric C-shaped cuff electrode for recording of peripheral nerve signal. Sensors and Actuators B: Chemical, 2015, 210, 640-648.	4.0	43
244	Hand and Wrist Movement Control of Myoelectric Prosthesis Based on Synergy. IEEE Transactions on Human-Machine Systems, 2015, 45, 74-83.	2.5	66
245	Task-Independent Cognitive State Transition Detection From Cortical Neurons During 3-D Reach-to-Grasp Movements. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2015, 23, 676-682.	2.7	15
246	Enabling Wireless Powering and Telemetry for Peripheral Nerve Implants. IEEE Journal of Biomedical and Health Informatics, 2015, 19, 958-970.	3.9	74
247	The anterior contralateral response improves performance in a single trial auditory oddball BMI. Biomedical Signal Processing and Control, 2015, 22, 74-84.	3.5	10
248	PMv Neuronal Firing May Be Driven by a Movement Command Trajectory within Multidimensional Gaussian Fields. Journal of Neuroscience, 2015, 35, 9508-9525.	1.7	11
249	Neuron Selection Based on Deflection Coefficient Maximization for the Neural Decoding of Dexterous Finger Movements. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2015, 23, 374-384.	2.7	3
250	A systematic approach to selecting task relevant neurons. Journal of Neuroscience Methods, 2015, 245, 156-168.	1.3	4
251	Miniaturized optical neuroimaging in unrestrained animals. NeuroImage, 2015, 113, 397-406.	2.1	27
252	Local scattering property scales flow speed estimation in laser speckle contrast imaging. Laser Physics Letters, 2015, 12, 075601.	0.6	4

#	Article	IF	CITATIONS
253	An intrafascicular electrode with integrated amplifiers for peripheral nerve recording. , 2015, , .		4
254	Selective stimulation of peripheral motor nerve using a flexible split-ring electrode. , 2015, , .		1
255	Assessment of neurovascular dynamics during transient ischemic attack by the novel integration of micro-electrocorticography electrode array with functional photoacoustic microscopy. Neurobiology of Disease, 2015, 82, 455-465.	2.1	26
256	Conjugated polymer and drug co-encapsulated nanoparticles for Chemo- and Photo-thermal Combination Therapy with two-photon regulated fast drug release. Nanoscale, 2015, 7, 3067-3076.	2.8	92
257	Biocompatible Conjugated Polymer Nanoparticles for Efficient Photothermal Tumor Therapy. Small, 2015, 11, 1603-1610.	5.2	168
258	Cognitive Workload Assessment Based on the Tensorial Treatment of EEG Estimates of Cross-Frequency Phase Interactions. Annals of Biomedical Engineering, 2015, 43, 977-989.	1.3	79
259	Sensory Stimulation-Induced Neuroprotection in Hyperacute Phase of Ischemic Stroke - A Multimodal Imaging Study. IFMBE Proceedings, 2015, , 256-259.	0.2	0
260	Therapeutic Time Window for rt-PA Thrombolysis in a Rat Photothrombotic Ischemic Stroke Model. IFMBE Proceedings, 2015, , 231-234.	0.2	1
261	Coarse Electrocorticographic Decoding of Ipsilateral Reach in Patients with Brain Lesions. PLoS ONE, 2014, 9, e115236.	1.1	25
262	Towards better understanding and reducing the effect of limb position on myoelectric upper-limb prostheses. , 2014, 2014, 2577-80.		6
263	Correlation between muscular and nerve signals responsible for hand grasping in non-human primates. , 2014, 2014, 2314-7.		2
264	Ultra-low power neural stimulator for electrode interfaces. , 2014, , .		5
265	ERP signal estimation from single trial EEG. , 2014, 2014, 2989-92.		6
266	Entropy analysis reveals a simple linear relation between laser speckle and blood flow. Optics Letters, 2014, 39, 3907.	1.7	17
267	Towards a multimodal bioelectrical framework for the online mental workload evaluation. , 2014, 2014, 3001-4.		26
268	A continuous-flow C. elegans sorting system with integrated optical fiber detection and laminar flow switching. Lab on A Chip, 2014, 14, 4000-4006.	3.1	20
269	Improving neurovascular outcomes with bilateral forepaw stimulation in a rat photothrombotic ischemic stroke model. Neurophotonics, 2014, 1, 011007.	1.7	23

#	Article	IF	CITATIONS
271	Enhancement of Bilateral Cortical Somatosensory Evoked Potentials to Intact Forelimb Stimulation Following Thoracic Contusion Spinal Cord Injury in Rats. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 953-964.	2.7	29
272	Single cell kinase signaling assay using pinched flow coupled droplet microfluidics. Biomicrofluidics, 2014, 8, 034104.	1.2	34
273	Cognitive workload estimation due to vague visual stimuli using saccadic eye movements. , 2014, 2014, 2993-6.		14
274	Neuroprosthetic limb control with electrocorticography: Approaches and challenges. , 2014, 2014, 5212-5.		2
275	Effect of isoflurane on somatosensory evoked potentials in a rat model. , 2014, 2014, 4286-9.		7
276	Topological changes of the effective connectivity during the working memory training. , 2014, 2014, 6242-5.		5
277	Transcutaneous power delivery and safety. , 2014, , .		1
278	Recent Progress in Voltage-Sensitive Dye Imaging for Neuroscience. Journal of Nanoscience and Nanotechnology, 2014, 14, 4733-4744.	0.9	33
279	Neural prosthesis for motor function restoration in upper limb extremity. , 2014, , .		9
280	A two-compartment organotypic model of mammalian peripheral nerve repair. Journal of Neuroscience Methods, 2014, 232, 84-92.	1.3	16
281	Study of the Spatial Correlation Between Neuronal Activity and BOLD fMRI Responses Evoked by Sensory and Channelrhodopsin-2 Stimulation in the Rat Somatosensory Cortex. Journal of Molecular Neuroscience, 2014, 53, 553-61.	1.1	23
282	Conjugated polymer nanoparticles for photoacoustic vascular imaging. Polymer Chemistry, 2014, 5, 2854-2862.	1.9	93
283	Tactile feedback in upper limb prosthetic devices using flexible textile force sensors. , 2014, 2014, 114-119.		29
284	Discriminative Analysis of Brain Functional Connectivity Patterns for Mental Fatigue Classification. Annals of Biomedical Engineering, 2014, 42, 2084-2094.	1.3	53
285	Simultaneous Neural Control of Simple Reaching and Grasping With the Modular Prosthetic Limb Using Intracranial EEG. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 695-705.	2.7	65
286	Gait event detection through neuromorphic spike sequence learning. , 2014, , .		16
287	Local field potentials mitigate decline in motor decoding performance caused by loss of spiking units. , 2014, 2014, 1298-301.		2
288	Ultra-thin flexible polyimide neural probe embedded in a dissolvable maltose-coated microneedle. Journal of Micromechanics and Microengineering, 2014, 24, 065015.	1.5	129

#	Article	IF	CITATIONS
289	Catching brain waves in a net. IEEE Spectrum, 2014, 51, 40-45.	0.5	3
290	A neurally inspired robotic control algorithm for gait rehabilitation in hemiplegic stroke patients. , 2014, , .		2
291	Organometallic carbonyl clusters: a new class of contrast agents for photoacoustic cerebral vascular imaging. Chemical Communications, 2014, 50, 2601-2603.	2.2	19
292	Principal components of hand kinematics and neurophysiological signals in motor cortex during reach to grasp movements. Journal of Neurophysiology, 2014, 112, 1857-1870.	0.9	36
293	User Training for Pattern Recognition-Based Myoelectric Prostheses: Improving Phantom Limb Movement Consistency and Distinguishability. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 522-532.	2.7	100
294	Demonstration of a Semi-Autonomous Hybrid Brain–Machine Interface Using Human Intracranial EEG, Eye Tracking, and Computer Vision to Control a Robotic Upper Limb Prosthetic. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 784-796.	2.7	162
295	Investigation of nerve injury through microfluidic devices. Journal of the Royal Society Interface, 2014, 11, 20130676.	1.5	44
296	Nanoparticles for Molecular Imaging. Journal of Biomedical Nanotechnology, 2014, 10, 2641-2676.	0.5	31
297	Rare-Earth Doped Particles as Dual-Modality Contrast Agent for Minimally-Invasive Luminescence and Dual-Wavelength Photoacoustic Imaging. Scientific Reports, 2014, 4, 6562.	1.6	34
298	The Analytic Bilinear Discrimination of Single-Trial EEG Signals in Rapid Image Triage. PLoS ONE, 2014, 9, e100097.	1.1	6
299	Motor Imagery based Brain-Computer Interface for Cerebellar Ataxia. Journal of Korean Institute of Intelligent Systems, 2014, 24, 609-614.	0.0	0
300	Neurovascular coupling: in vivo optical techniques for functional brain imaging. BioMedical Engineering OnLine, 2013, 12, 38.	1.3	95
301	Editorial by Nitish Thakor. Medical and Biological Engineering and Computing, 2013, 51, 3-5.	1.6	1
302	EEG Signal Processing: Theory and Applications. , 2013, , 259-303.		21
303	Neuromuscular junction in a microfluidic device. , 2013, 2013, 2833-5.		40
304	Translating the Brain-Machine Interface. Science Translational Medicine, 2013, 5, 210ps17.	5.8	103
305	Bipedal locomotion modeled as the central pattern generator (CPG) and regulated by self organizing map for model of cortex. , 2013, , .		2
306	Control design of a novel compliant actuator for rehabilitation robots. Mechatronics, 2013, 23, 1072-1083.	2.0	97

#	Article	IF	CITATIONS
307	Assessing Thalamocortical Functional Connectivity With Granger Causality. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2013, 21, 725-733.	2.7	6
308	Imaging of temperature dependent hemodynamics in the rat sciatic nerve by functional photoacoustic microscopy. BioMedical Engineering OnLine, 2013, 12, 120.	1.3	10
309	State-based decoding of hand and finger kinematics using neuronal ensemble and LFP activity during dexterous reach-to-grasp movements. Journal of Neurophysiology, 2013, 109, 3067-3081.	0.9	132
310	A CMOS neurostimulator with on-chip DAC calibration and charge balancing. , 2013, , .		5
311	Flexible Charge Balanced Stimulator With 5.6 fC Accuracy for 140 nC Injections. IEEE Transactions on Biomedical Circuits and Systems, 2013, 7, 266-275.	2.7	36
312	Wirelessly powered and controlled, implantable, multi-channel, multi-wavelength optogenetic stimulator. , 2013, , .		0
313	In the Spotlight: Neuroengineering. IEEE Reviews in Biomedical Engineering, 2013, 6, 24-26.	13.1	0
314	Mechanism of tetracycline resistance by ribosomal protection protein Tet(O). Nature Communications, 2013, 4, 1477.	5.8	87
315	Laser Speckle Contrast Imaging: Theory, Instrumentation and Applications. IEEE Reviews in Biomedical Engineering, 2013, 6, 99-110.	13.1	165
316	Study of neurovascular coupling functions for transient focal cerebral ischemia in rats using electrocorticography functional photoacoustic microscopy (ECoG-fPAM). , 2013, 2013, 1799-802.		3
317	Utilizing tactile feedback for biomimetic grasping control in upper limb prostheses. , 2013, 2013, .		8
318	Bio-mimetic strategies for tactile sensing. , 2013, , .		22
319	Classification of gait phases from lower limb EMG: Application to exoskeleton orthosis. , 2013, , .		73
320	Mechanical design of a portable knee-ankle-foot robot. , 2013, , .		31
321	Structural connectivity analysis reveals topological aberrations in patients with schizophrenia. , 2013, 2013, 1386-9.		3
322	Front Matter: Volume 8586. Proceedings of SPIE, 2013, , .	0.8	3
323	A Training Strategy for Learning Pattern Recognition Control for Myoelectric Prostheses. Journal of Prosthetics and Orthotics, 2013, 25, 30-41.	0.2	50
324	Laser speckle contrast reveals cerebral blood flow dynamics evoked by optogenetically controlled neuronal activity. , 2013, , .		2

#	Article	IF	CITATIONS
325	Pathophysiology of Acute Coma and Disorders of Consciousness: Considerations for Diagnosis and Management. Seminars in Neurology, 2013, 33, 091-109.	0.5	5
326	A spiking neural network architecture for visual motion estimation. , 2013, , .		36
327	Real-time motion estimation using spatiotemporal filtering in FPGA. , 2013, , .		5
328	Development of flexible neural probes using SU-8/parylene. , 2013, , .		2
329	Neuronal activity promotes myelination via a cAMP pathway. Glia, 2013, 61, 843-854.	2.5	54
330	A simple and effective semi-invasive method for inducing local hypothermia in rat spinal cord. , 2013, 2013, 6321-4.		4
331	Effect of hypothermia on cortical and thalamic signals in anesthetized rats. , 2013, 2013, 6317-20.		2
332	Designing closed-loop brain-machine interfaces using optimal receding horizon control. , 2013, , .		9
333	Band specific changes in thalamocortical synchrony in field potentials after Cardiac Arrest induced global hypoxia. , 2013, 2013, 7112-5.		1
334	Multiple time-lag canonical correlation analysis for removing muscular artifacts in EEC. , 2013, 2013, 6792-5.		2
335	Listening to the music of the brain: Live analysis of ECoG recordings using digital audio workstation software. , 2013, , .		0
336	Nucleotide Composition of Cellular Internal Ribosome Entry Sites Defines Dependence on NF45 and Predicts a Posttranscriptional Mitotic Regulon. Molecular and Cellular Biology, 2013, 33, 307-318.	1.1	23
337	Design and implementation of a human ECoG simulator for testing brain-machine interfaces. , 2013, , .		1
338	A 24 V <inf>pp</inf> compliant biphasic stimulator for inductively powered animal behavior studies. , 2013, 2013, 3242-5.		1
339	Toll/Interleukin-1 Receptor Domain-Containing Adapter Inducing Interferon-β Mediates Microglial Phagocytosis of Degenerating Axons. Journal of Neuroscience, 2012, 32, 7745-7757.	1.7	91
340	Increased electroencephalographic gamma activity reveals awakening from isoflurane anaesthesia in rats. British Journal of Anaesthesia, 2012, 109, 782-789.	1.5	28
341	Longitudinal <i>in vivo</i> monitoring of rodent glioma models through thinned skull using laser speckle contrast imaging. Journal of Biomedical Optics, 2012, 17, 126017.	1.4	11
342	EEG-based detection of awakening from isoflurane anesthesia in rats. , 2012, 2012, 4279-82.		9

EEG-based detection of awakening from isoflurane anesthesia in rats. , 2012, 2012, 4279-82. 342

#	Article	IF	CITATIONS
343	Directed causality of the human electrocorticogram during dexterous movement. , 2012, 2012, 1872-5.		3
344	Improving long term myoelectric decoding, using an adaptive classifier with label correction. , 2012, , .		14
345	Effect of hypothermia on the thalamocortical function in the rat model. , 2012, 2012, 4680-3.		1
346	Highlights: Transcranial Imaging of Functional Cerebral Hemodynamic Changes in Single Blood Vessels. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 936-937.	2.4	4
347	CONNECTIVITY MAPPING OF HUMAN BRAIN BY PHASE BASED EVOLUTION MAP APPROACH. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250225.	0.7	1
348	Electrocorticographic decoding of ipsilateral reach in the setting of contralateral arm weakness from a cortical lesion. , 2012, 2012, 4104-7.		4
349	Factor analyzed hidden Markov models for estimating prosthetic limb motions using premotor cortical ensembles. , 2012, , .		1
350	Electrophysiological evaluation of sensory and motor pathways after incomplete unilateral spinal cord contusion. Journal of Neurosurgery: Spine, 2012, 16, 414-423.	0.9	50
351	Potential long-term benefits of acute hypothermia after spinal cord injury. Critical Care Medicine, 2012, 40, 573-579.	0.4	63
352	Toward Electrocorticographic Control of a Dexterous Upper Limb Prosthesis: Building Brain-Machine Interfaces. IEEE Pulse, 2012, 3, 38-42.	0.1	58
353	Natural and Accelerated Recovery from Brain Damage: Experimental and Theoretical Approaches. IEEE Pulse, 2012, 3, 61-65.	0.1	1
354	Short- and long-latency somatosensory neuronal responses reveal selective brain injury and effect of hypothermia in global hypoxic ischemia. Journal of Neurophysiology, 2012, 107, 1164-1171.	0.9	22
355	Granger causality analysis reveals the changes of thalamocortical functionality after cardiac arrest induced hypoxic-ischemic injury. , 2012, , .		0
356	A Miniaturized Platform for Laser Speckle Contrast Imaging. IEEE Transactions on Biomedical Circuits and Systems, 2012, 6, 437-445.	2.7	11
357	Plenary lectures: Problems in neurosurgery — A rich environment for engineer. , 2012, , .		3
358	Optimal Control-Based Bayesian Detection of Clinical and Behavioral State Transitions. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 708-719.	2.7	23
359	Decoding of finger, hand and arm kinematics using switching linear dynamical systems with pre-motor cortical ensembles. , 2012, 2012, 1732-5.		2
360	Neuron selection by relative importance for neural decoding of dexterous finger prosthesis control application. Biomedical Signal Processing and Control, 2012, 7, 632-639.	3.5	3

#	Article	IF	CITATIONS
361	Axon Myelination and Electrical Stimulation in a Microfluidic, Compartmentalized Cell Culture Platform. NeuroMolecular Medicine, 2012, 14, 112-118.	1.8	51
362	Anisotropic Processing of Laser Speckle Images Improves Spatiotemporal Resolution. IEEE Transactions on Biomedical Engineering, 2012, 59, 1272-1280.	2.5	40
363	Aggregate Input-Output Models of Neuronal Populations. IEEE Transactions on Biomedical Engineering, 2012, 59, 2030-2039.	2.5	13
364	Connectivity Analysis as a Novel Approach to Motor Decoding for Prosthesis Control. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 143-152.	2.7	33
365	Guest Editorial Special Issue of DARPA NEST Proceedings. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 113-116.	2.7	2
366	In vivo laser speckle imaging reveals microvascular remodeling and hemodynamic changes during wound healing angiogenesis. Angiogenesis, 2012, 15, 87-98.	3.7	57
367	A Low-Cost Multi-Electrode Array System for the Simultaneous Acquisition of Electrophysiological Signal and Cellular Morphology. Journal of Neuroscience and Neuroengineering, 2012, 1, 131-142.	0.2	4
368	Optical Imaging of Microvascular Morphology and Perfusion. Current Angiogenesis, 2012, 1, 243-260.	0.1	5
369	Decoding Cognitive States from Neural Activities of Somatosensory Cortex. Lecture Notes in Computer Science, 2012, , 68-75.	1.0	0
370	Causal interactions between thalamic and cortical LFPs following hypoxic-ischemic brain injury. , 2011, , .		1
371	Cerebellar ataxia patients are able to use motor imagery to modulate mu-band power in a pilot study of EEG-based brain-computer interface control. , 2011, , .		0
372	Cortical control of reach and grasp kinematics in a virtual environment using musculoskeletal modeling software. , 2011, , .		10
373	M1 neural decoding of finger movements using a priori neural activities before movements. , 2011, , .		0
374	An in vivo optical system: Control and monitor cortical activity with improved laser speckle contrast imaging and optogenetics. , 2011, , .		2
375	Identifying neuron communities during a reach and grasp task using an unsupervised clustering analysis. , 2011, 2011, 6401-4.		2
376	Wireless micro-ECoG recording in primates during reach-to-grasp movements. , 2011, , .		3
377	Valve-based microfluidic compression platform: single axon injury and regrowth. Lab on A Chip, 2011, 11, 3888.	3.1	87
378	A VLSI Neural Monitoring System With Ultra-Wideband Telemetry for Awake Behaving Subjects. IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 112-119.	2.7	43

#	Article	IF	CITATIONS
379	Time jitter of somatosensory evoked potentials in recovery from hypoxic–ischemic brain injury. Journal of Neuroscience Methods, 2011, 201, 355-360.	1.3	15
380	Special Section on Grand Challenges in Neuroengineering. IEEE Transactions on Biomedical Engineering, 2011, 58, 1883-1883.	2.5	2
381	A CMOS In-Pixel CTIA High-Sensitivity Fluorescence Imager. IEEE Transactions on Biomedical Circuits and Systems, 2011, 5, 449-458.	2.7	62
382	Efficient Generation of Schwann Cells from Human Embryonic Stem Cell-Derived Neurospheres. Stem Cell Reviews and Reports, 2011, 7, 394-403.	5.6	103
383	Quantitative temporal proteomic analysis of human embryonic stem cell differentiation into oligodendrocyte progenitor cells. Proteomics, 2011, 11, 4007-4020.	1.3	39
384	A micropower integrated platform for wireless multichannel recording of ECoG activity. , 2011, , .		0
385	Single and multi-finger movements are correlated in neuronal population activities as well as in natural behaviors. , 2011, , .		1
386	Asynchronous decoding of grasp aperture from human ECoG during a reach-to-grasp task. , 2011, 2011, 4584-7.		8
387	Improved BCI performance with sequential hypothesis testing. , 2011, 2011, 4215-8.		2
388	Engineering neuronal growth cones to promote axon regeneration over inhibitory molecules. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5057-5062.	3.3	127
389	Neuron selection for decoding dexterous finger movements. , 2011, 2011, 4605-8.		6
390	Plasticity associated changes in cortical somatosensory evoked potentials following spinal cord injury in rats. , 2011, 2011, 2005-8.		14
391	Multiexposure laser speckle contrast imaging of the angiogenic microenvironment. Journal of Biomedical Optics, 2011, 16, 056006.	1.4	29
392	Spatiotemporal Variation of Multiple Neurophysiological Signals in the Primary Motor Cortex during Dexterous Reach-to-Grasp Movements. Journal of Neuroscience, 2011, 31, 15531-15543.	1.7	64
393	Varicella-Zoster Virus (VZV) Infection of Neurons Derived from Human Embryonic Stem Cells: Direct Demonstration of Axonal Infection, Transport of VZV, and Productive Neuronal Infection. Journal of Virology, 2011, 85, 6220-6233.	1.5	75
394	An optimal control problem in closed-loop neuroprostheses. , 2011, , .		2
395	DETECTION OF NONLINEAR INTERACTIONS OF EEG ALPHA WAVES IN THE BRAIN BY A NEW COHERENCE MEASURE AND ITS APPLICATION TO EPILEPSY AND ANTI-EPILEPTIC DRUG THERAPY. International Journal of Neural Systems, 2011, 21, 115-126.	3.2	36
396	Optogenetic-guided cortical plasticity after nerve injury. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8838-8843.	3.3	61

#	Article	IF	CITATIONS
397	A Bayesian framework for analyzing iEEG data from a rat model of epilepsy. , 2011, 2011, 1435-8.		11
398	Radio frequency identification — An innovative solution to guide dexterous prosthetic hands. , 2011, 2011, 3511-4.		14
399	Laser speckle imaging reveals multiple aspects of cerebral vascular responses to whole body mild hypothermia in rats. , 2011, 2011, 2049-52.		7
400	Statistical model applied to motor evoked potentials analysis. , 2011, 2011, 2001-4.		2
401	Spinal cord injury evaluation using morphological difference of somatosensory evoked potentials. , 2011, , .		5
402	Connectivity analysis as a novel approach to motor decoding for prosthesis control. IEEE Transactions on Biomedical Engineering, 2011, , .	2.5	1
403	Quantitative assessment of somatosensory-evoked potentials after cardiac arrest in rats: Prognostication of functional outcomes*. Critical Care Medicine, 2010, 38, 1709-1717.	0.4	38
404	Characterization of Graded Multicenter Animal Spinal Cord Injury Study Contusion Spinal Cord Injury Using Somatosensory-Evoked Potentials. Spine, 2010, 35, 1122-1127.	1.0	72
405	DETECTING CEREBRAL ARTERIES AND VEINS: FROM LARGE TO SMALL. Journal of Innovative Optical Health Sciences, 2010, 03, 61-67.	0.5	6
406	Neural Decoding of Finger Movements Using Skellam-Based Maximum-Likelihood Decoding. IEEE Transactions on Biomedical Engineering, 2010, 57, 754-760.	2.5	45
407	Application of Tsallis Entropy to EEG: Quantifying the Presence of Burst Suppression After Asphyxial Cardiac Arrest in Rats. IEEE Transactions on Biomedical Engineering, 2010, 57, 867-874.	2.5	35
408	High Resolution Cerebral Blood Flow Imaging by Registered Laser Speckle Contrast Analysis. IEEE Transactions on Biomedical Engineering, 2010, 57, 1152-1157.	2.5	80
409	Quantifying Time-Varying Multiunit Neural Activity Using Entropy-Based Measures. IEEE Transactions on Biomedical Engineering, 2010, 57, 2771-2777.	2.5	35
410	Evolution of somatosensory evoked potentials after cardiac arrest induced hypoxic–ischemic injury. Resuscitation, 2010, 81, 893-897.	1.3	23
411	Spinal cord integrity monitoring by adaptive coherence measurement. Journal of Neuroscience Methods, 2010, 193, 90-99.	1.3	8
412	MicroRNA Expression Profiling of Oligodendrocyte Differentiation from Human Embryonic Stem Cells. PLoS ONE, 2010, 5, e10480.	1.1	98
413	Imaging microvascular flow characteristics using laser speckle contrast imaging. , 2010, 2010, 1978-81.		16
414	Electrocorticographic amplitude predicts finger positions during slow grasping motions of the hand. Journal of Neural Engineering, 2010, 7, 046002.	1.8	134

#	Article	IF	CITATIONS
415	Characterization of neurologic injury using novel morphological analysis of Somatosensory Evoked Potentials. , 2010, 2010, 2798-801.		3
416	A VLSI neural monitoring system with ultra-wideband telemetry for awake behaving subjects. , 2010, , .		7
417	Histogram based quantification of spinal cord injury level using somatosensory evoked potentials. , 2010, 2010, 4942-5.		9
418	Optimal parameter estimation of the Izhikevich single neuron model using experimental inter-spike interval (ISI) data. , 2010, , .		3
419	Exploring high-frequency oscillation as a marker of brain ischemia using S-transform. , 2010, 2010, 6099-102.		3
420	Burst Suppression EEG during Hypothermia and Rapid Rewarming in Isoflurane-Anesthetized Rats. International Conference on Bioinformatics and Biomedical Engineering: [proceedings] International Conference on Bioinformatics and Biomedical Engineering, 2010, , .	0.0	2
421	Probabilistic independent component analysis for laser speckle contrast images reveals in vivo multi - component vascular responses to forepaw stimulation. , 2010, 2010, 1982-5.		Ο
422	Quantification of Spinal Cord Injury Level Using Somatosensory Evoked Potentials. International Conference on Bioinformatics and Biomedical Engineering: [proceedings] International Conference on Bioinformatics and Biomedical Engineering, 2010, , .	0.0	5
423	Ensemble Fractional Sensitivity: A Quantitative Approach to Neuron Selection for Decoding Motor Tasks. Computational Intelligence and Neuroscience, 2010, 2010, 1-9.	1.1	15
424	Signal Processing for Neural Spike Trains. Computational Intelligence and Neuroscience, 2010, 2010, 1-2.	1.1	2
425	Efficient Differentiation of Human Embryonic Stem Cells into Oligodendrocyte Progenitors for Application in a Rat Contusion Model of Spinal Cord Injury. International Journal of Neuroscience, 2010, 120, 305-313.	0.8	86
426	Random process estimator for laser speckle imaging of cerebral blood flow. Optics Express, 2010, 18, 218.	1.7	42
427	Influence of hypoxic-preconditioning on autonomic regulation following global ischemic brain injury in rats. Neuroscience Letters, 2010, 480, 191-195.	1.0	2
428	Study of the origin of short- and long-latency SSEP during recovery from brain ischemia in a rat model. Neuroscience Letters, 2010, 485, 157-161.	1.0	15
429	Slope analysis of somatosensory evoked potentials in spinal cord injury for detecting contusion injury and focal demyelination. Journal of Clinical Neuroscience, 2010, 17, 1159-1164.	0.8	75
430	An integrated imaging microscope for untethered cortical imaging in freely-moving animals. , 2010, 2010, 5795-8.		27
431	Connectivity mapping of the human ECoG during a motor task with a time-varying dynamic Bayesian network. , 2010, 2010, 130-3.		10
432	Circular compartmentalized microfluidic platform: Study of axon–glia interactions. Lab on A Chip, 2010, 10, 741.	3.1	79

#	Article	IF	CITATIONS
433	Information theoretical assessment of neural spiking activity with temperature modulation. , 2009, 2009, 4990-33.		1
434	Hypoxic-ischemic brain injury in neonatal piglets with different histological outcomes: An amplitude-integrated EEG study. , 2009, 2009, 1127-30.		5
435	Design and characterization of a miniaturized epi-illuminated microscope. , 2009, 2009, 5369-72.		11
436	Neural signals in cortex and thalamus during brain injury from cardiac arrest in rats. , 2009, 2009, 5946-9.		5
437	Model based reconstruction for simultaneously imaging cerebral blood flow and De-oxygen hemoglobin distribution. , 2009, 2009, 3236-93.		4
438	Coherency between spike and LFP activity in M1 during hand movements. , 2009, , .		10
439	Cortical decoding of individual finger and wrist kinematics for an upper-limb neuroprosthesis. , 2009, 2009, 4535-8.		19
440	Multiresolution entropy measure for neuronal multiunit activity. , 2009, 2009, 4715-8.		2
441	Computational complexity versus accuracy in classification of cortical neural signals. , 2009, , .		1
442	Long-term assessment of post-cardiac-arrest neurological outcomes with somatosensory evoked potential in rats. , 2009, 2009, 2196-9.		3
443	Assessment of post-cardiac-arrest somatosensory evoked potential in rats. , 2009, , .		0
444	Multifunction - Laser speckle blood flow and deoxy-hemoglobin saturation - Imaging of cerebrovascular response. , 2009, , .		2
445	Honors Biomedical instrumentation — A course model for accelerated design. , 2009, 2009, 2015-8.		0
446	Decoding of Individuated Finger Movements Using Surface Electromyography. IEEE Transactions on Biomedical Engineering, 2009, 56, 1427-1434.	2.5	291
447	Multiscale Entropy Analysis of EEG for Assessment of Post-Cardiac Arrest Neurological Recovery Under Hypothermia in Rats. IEEE Transactions on Biomedical Engineering, 2009, 56, 1023-1031.	2.5	45
448	Spinal Cord Injury Detection and Monitoring Using Spectral Coherence. IEEE Transactions on Biomedical Engineering, 2009, 56, 1971-1979.	2.5	29
449	Intraventricular orexin-A improves arousal and early EEG entropy in rats after cardiac arrest. Brain Research, 2009, 1255, 153-161.	1.1	11
450	High spatiotemporal resolution imaging of the neurovascular response to electrical stimulation of rat peripheral trigeminal nerve as revealed by in vivo temporal laser speckle contrast. Journal of Neuroscience Methods, 2009, 176, 230-236.	1.3	63

#	Article	IF	CITATIONS
451	Scaling exponents of EEG are related to the temporal process of the therapeutic hypothermia following ischemic brain injury. , 2009, 2009, 2192-5.		1
452	In the spotlight: neuroengineering. IEEE Reviews in Biomedical Engineering, 2009, 2, 18-20.	13.1	11
453	Compartmentalized microfluidic culture platform to study mechanism of paclitaxel-induced axonal degeneration. Experimental Neurology, 2009, 218, 124-128.	2.0	111
454	Evoked potential versus behavior to detect minor insult to the spinal cord in a rat model. Journal of Clinical Neuroscience, 2009, 16, 1052-1055.	0.8	78
455	Micropower CMOS Integrated Low-Noise Amplification, Filtering, and Digitization of Multimodal Neuropotentials. IEEE Transactions on Biomedical Circuits and Systems, 2009, 3, 1-10.	2.7	142
456	Effect of MOG sensitization on somatosensory evoked potential in Lewis rats. Journal of the Neurological Sciences, 2009, 284, 81-89.	0.3	71
457	Shape analysis of Somatosensory Evoked Potentials to detect a focal spinal cord lesion. , 2009, , .		4
458	Which Photodiode to Use: A Comparison of CMOS-Compatible Structures. IEEE Sensors Journal, 2009, 9, 752-760.	2.4	59
459	Bench to beside: Motivation for university industry partnership. , 2009, 2009, 154-6.		3
460	Features of burst-suppression EEG after asphyxial cardiac arrest in rats. , 2009, , .		2
461	Wireless Micropower Instrumentation for Multimodal Acquisition of Electrical and Chemical Neural Activity. IEEE Transactions on Biomedical Circuits and Systems, 2009, 3, 388-397.	2.7	57
462	Real-time myoelectric decoding of individual finger movements for a virtual target task. , 2009, 2009, 2376-9.		31
463	Laser Speckle Contrast Analysis Using Adaptive Window. IFMBE Proceedings, 2009, , 444-447.	0.2	4
464	Neural Decoding of Single and Multi-finger Movements Based on ML. IFMBE Proceedings, 2009, , 448-451.	0.2	0
465	Improving neurological outcomes post-cardiac arrest in a rat model: Immediate hypothermia and quantitative EEG monitoring. Resuscitation, 2008, 76, 431-442.	1.3	161
466	Post-cardiac arrest temperature manipulation alters early EEG bursting in rats. Resuscitation, 2008, 78, 367-373.	1.3	32
467	A Subband-Based Information Measure of EEG During Brain Injury and Recovery After Cardiac Arrest. IEEE Transactions on Biomedical Engineering, 2008, 55, 1985-1990.	2.5	18
468	Decoding Individuated Finger Movements Using Volume-Constrained Neuronal Ensembles in the M1 Hand Area. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 15-23.	2.7	64

#	Article	IF	CITATIONS
469	Asynchronous Decoding of Dexterous Finger Movements Using M1 Neurons. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 3-14.	2.7	87
470	Guest Editorial Special Theme on Neural and Myoelectric Control of Prostheses. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 1-2.	2.7	3
471	Correction to "Asynchronous Decoding of Dexterous Finger Movements Using M1 Neurons" [Feb 08 3-14]. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 421-421.	2.7	1
472	Chimeras of bacterial translation factors Tet(O) and EFâ€G. FEBS Letters, 2008, 582, 1386-1390.	1.3	2
473	Continuous decoding of finger position from surface EMG signals for the control of powered prostheses. , 2008, 2008, 197-200.		88
474	Wireless multichannel acquisition of neuropotentials. , 2008, , .		12
475	Quantifying Prosthesis Control Improvements Using a Vibrotactile Representation of Grip Force. , 2008, , .		27
476	Spectral modulation of LFP activity in M1 during dexterous finger movements. , 2008, 2008, 5314-7.		12
477	"Medical device development: An Industry-Academia joint venture?â€; , 2008, , .		0
478	Neuroengineering: Building interfaces from neurons to brain. , 2008, 2008, 1602-3.		2
479	In the spotlight: Neuroengineering. IEEE Reviews in Biomedical Engineering, 2008, 1, 18-20.	13.1	1
480	Towards closed-loop decoding of dexterous hand movements using a virtual integration environment. , 2008, 2008, 1703-6.		7
481	Predict the neurological recovery under hypothermia after cardiac arrest using C0 complexity measure of EEG signals. , 2008, 2008, 2133-6.		5
482	Monitoring of global cerebral ischemia using instantaneous phase variation plots. , 2008, 2008, 4182-5.		0
483	From spikes to EEG: Integrated multichannel and selective acquisition of neuropotentials. , 2008, 2008, 2741-4.		10
484	Towards control of dexterous hand manipulations using a silicon Pattern Generator. , 2008, 2008, 3455-8.		4
485	A novel shape analysis technique for somatosensory evoked potentials. , 2008, 2008, 4688-91.		9
486	Testing a Prosthetic Haptic Feedback Simulator With an Interactive Force Matching Task. Journal of Prosthetics and Orthotics, 2008, 20, 27-34.	0.2	94

#	Article	IF	CITATIONS
487	Simultaneous wireless electrophysiological and neurochemical monitoring. Proceedings of SPIE, 2008, , .	0.8	1
488	"Frontiers of Neuroengineering with focus on brain machine interface and neural prostheses". , 2008, , .		2
489	Early electrophysiologic markers predict functional outcome associated with temperature manipulation after cardiac arrest in rats. Critical Care Medicine, 2008, 36, 1909-1916.	0.4	91
490	Wireless Temperature Sensing Cosmesis for Prosthesis. , 2007, , .		7
491	Operation of a Brain-Computer Interface Using Vibrotactile Biofeedback. , 2007, , .		2
492	Including planning activity in feature space distributes activation over a broader neuron population. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 5349-52.	0.5	2
493	Towards a Brain-Computer Interface for Dexterous Control of a Multi-Fingered Prosthetic Hand. , 2007, , .		16
494	Detection and Assessment of Spinal Cord Injury Using Spectral Coherence. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 1426-9.	0.5	5
495	An improved procedure for expression and purification of ribosomal protection protein Tet(O) for high-resolution structural studies. Protein Expression and Purification, 2007, 55, 388-394.	0.6	6
496	Contrast-enhanced imaging of cerebral vasculature with laser speckle. Applied Optics, 2007, 46, 5340.	2.1	64
497	Towards the Control of Individual Fingers of a Prosthetic Hand Using Surface EMG Signals. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 6146-9.	0.5	114
498	Brain-Computer Interface for a Prosthetic Hand Using Local Machine Control and Haptic Feedback. , 2007, , .		31
499	VLSI Potentiostat Array With Oversampling Gain Modulation for Wide-Range Neurotransmitter Sensing. IEEE Transactions on Biomedical Circuits and Systems, 2007, 1, 63-72.	2.7	114
500	Long range correlations in the heart rate variability following the injury of cardiac arrest. Physica A: Statistical Mechanics and Its Applications, 2007, 380, 250-258.	1.2	6
501	Long-lasting cognitive injury in rats with apparent full gross neurological recovery after short-term cardiac arrest. Resuscitation, 2007, 75, 105-113.	1.3	19
502	A brain-computer interface with vibrotactile biofeedback for haptic information. Journal of NeuroEngineering and Rehabilitation, 2007, 4, 40.	2.4	159
503	Describing the Nonstationarity Level of Neurological Signals Based on Quantifications of Time–Frequency Representation. IEEE Transactions on Biomedical Engineering, 2007, 54, 1780-1785.	2.5	34

504 Wireless Integrated Voltametric and Amperometric Biosensing. , 2006, , .

#	Article	IF	CITATIONS
505	16-Channel Integrated Potentiostat for Distributed Neurochemical Sensing. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2006, 53, 2371-2376.	0.1	81
506	AB30-3. Heart Rhythm, 2006, 3, S62-S63.	0.3	0
507	Clinical Neurophysiologic Monitoring and Brain Injury from Cardiac Arrest. Neurologic Clinics, 2006, 24, 89-106.	0.8	77
508	Quantitative EEG Assessment of Brain Injury and Hypothermic Neuroprotection after Cardiac Arrest. , 2006, 2006, 6229-32.		10
509	Complex character analysis of heart rate variability following brain asphyxia. Medical Engineering and Physics, 2006, 28, 297-303.	0.8	10
510	Quantitative EEG and neurological recovery with therapeutic hypothermia after asphyxial cardiac arrest in rats. Brain Research, 2006, 1111, 166-175.	1.1	97
511	From bench to bedside. IEEE Engineering in Medicine and Biology Magazine, 2006, 25, 18-19.	1.1	Ο
512	Quantitative EEG assessment. IEEE Engineering in Medicine and Biology Magazine, 2006, 25, 20-25.	1.1	8
513	Intraoperative neurological monitoring. IEEE Engineering in Medicine and Biology Magazine, 2006, 25, 39-45.	1.1	6
514	Therapeutic technologies in neuroengineering. IEEE Engineering in Medicine and Biology Magazine, 2006, 25, 30-31.	1.1	8
515	Monotonicity of Approximate Entropy During Transition From Awareness to Unresponsiveness Due to Propofol Anesthetic Induction. IEEE Transactions on Biomedical Engineering, 2006, 53, 669-675.	2.5	46
516	Quantitative EEG and Effect of Hypothermia on Brain Recovery After Cardiac Arrest. IEEE Transactions on Biomedical Engineering, 2006, 53, 1016-1023.	2.5	53
517	Phase-Dependent Effects of Spinal Cord Stimulation on Locomotor Activity. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2006, 14, 257-265.	2.7	51
518	Spatiotemporal Source Tuning Filter Bank for Multiclass EEG based Brain Computer Interfaces. , 2006, 2006, 327-30.		0
519	Spatiotemporal Source Tuning Filter Bank for Multiclass EEG based Brain Computer Interfaces. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	Ο
520	Quantitative EEG Assessment of Brain Injury and Hypothermic Neuroprotection after Cardiac Arrest. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
521	Interfacing Neural Tissue with Microsystems. , 2005, , 49-83.		2
522	Investigation of the effects of ischemic preconditioning on the HRV response to transient global ischemia using linear and nonlinear methods. Medical Engineering and Physics, 2005, 27, 465-473.	0.8	13

#	Article	IF	CITATIONS
523	Biosynthesis of medium chain length poly(3-hydroxyalkanoates) (mcl-PHAs) by Comamonas testosteroni during cultivation on vegetable oils. Bioresource Technology, 2005, 96, 1843-1850.	4.8	67
524	Effect of acute hypoxic preconditioning on qEEG and functional recovery after cardiac arrest in rats. Brain Research, 2005, 1064, 146-154.	1.1	19
525	Integrated potentiostat for neurotransmitter sensing. IEEE Engineering in Medicine and Biology Magazine, 2005, 24, 23-29.	1.1	44
526	Spatiotemporal characteristics of low-frequency functional activation measured by laser speckle imaging. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2005, 13, 179-185.	2.7	11
527	Monitoring of Global Cerebral Ischemia Using Wavelet Entropy Rate of Change. IEEE Transactions on Biomedical Engineering, 2005, 52, 2119-2122.	2.5	24
528	MEMSurgery: an integrated test-bed for vascular surgery. International Journal of Medical Robotics and Computer Assisted Surgery, 2005, 1, 21-30.	1.2	5
529	Application of the BPEC Pathway for Large-Scale Biotechnological Production of Poly(3-Mercaptopropionate) by Recombinant Escherichia coli , Including a Novel In Situ Isolation Method. Applied and Environmental Microbiology, 2005, 71, 835-841.	1.4	36
530	Transient phase synchrony of independent cognitive components underlying scalp EEC. , 2005, 2005, 2037-40.		3
531	Wireless Multichannel Integrated Potentiostat for Distributed Neurotransmitter Sensing. , 2005, 2005, 7329-32.		9
532	Structural Complexity of Neural Signals by Matching Pursuits. , 2005, 2005, 2025-8.		0
533	Spectral Subtraction and Cepstral Distance for Enhancing EEG Entropy. , 2005, 2005, 2751-4.		2
534	Cortical Vascular Blood Flow Pattern By Laser Speckle Imaging. , 2005, 2005, 3328-31.		0
535	Power harvesting and telemetry in CMOS for implanted devices. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2005, 52, 2605-2613.	0.1	208
536	QRS depolarization based intra-cardiac myocardial ischemia and infarction detection. Heart Rhythm, 2005, 2, S162.	0.3	0
537	Poly(3-mercaptopropionate):Â A Nonbiodegradable Biopolymer?. Biomacromolecules, 2005, 6, 897-901.	2.6	48
538	Characterization of Heart Rate Variability Changes Following Asphyxia in Rats. Methods of Information in Medicine, 2004, 43, 118-121.	0.7	9
539	Cellular Effects of Deep Brain Stimulation: Model-Based Analysis of Activation and Inhibition. Journal of Neurophysiology, 2004, 91, 1457-1469.	0.9	716

540 Subband EEG complexity after global hypoxic-ischemic brain injury. , 2004, 2006, 562-5.

0

#	Article	IF	CITATIONS
541	Wide-range, picoampere-sensitivity multichannel VLSI potentiostat for neurotransmitter sensing. , 2004, 2004, 4063-6.		24
542	EEG Signal Modeling Using Adaptive Markov Process Amplitude. IEEE Transactions on Biomedical Engineering, 2004, 51, 744-751.	2.5	41
543	Sinusoidal Modeling of Ictal Activity Along a Thalamus-to-Cortex Seizure Pathway I: New Coherence Approaches. Annals of Biomedical Engineering, 2004, 32, 1252-1264.	1.3	12
544	Effects of somatosensory electrical stimulation on neuronal injury after global hypoxia-ischemia. Experimental Brain Research, 2004, 158, 336-44.	0.7	22
545	BCL-xL-Dependent Light Scattering by Apoptotic Cells. Biophysical Journal, 2004, 87, 4163-4171.	0.2	45
546	Advances in Quantitative Electroencephalogram Analysis Methods. Annual Review of Biomedical Engineering, 2004, 6, 453-495.	5.7	226
547	Electric field and stimulating influence generated by deep brain stimulation of the subthalamic nucleus. Clinical Neurophysiology, 2004, 115, 589-595.	0.7	455
548	From Cellular Electrophysiology to Electrocardiography. Bioelectric Engineering, 2004, , 1-42.	0.7	0
549	Title is missing!. Biomedical Microdevices, 2003, 5, 147-155.	1.4	22
550	Time-Dependent Entropy Estimation of EEG Rhythm Changes Following Brain Ischemia. Annals of Biomedical Engineering, 2003, 31, 221-232.	1.3	109
551	Wavelet Entropy for Subband Segmentation of EEG During Injury and Recovery. Annals of Biomedical Engineering, 2003, 31, 653-658.	1.3	45
552	Human ECoG analysis during speech perception using matching pursuit: a comparison between stochastic and dyadic dictionaries. IEEE Transactions on Biomedical Engineering, 2003, 50, 1371-1373.	2.5	23
553	Parameterized entropy analysis of EEG following hypoxic–ischemic brain injury. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 314, 354-361.	0.9	51
554	Anterior Thalamic Mediation of Experimental Seizures: Selective EEG Spectral Coherence. Epilepsia, 2003, 44, 355-365.	2.6	54
555	Parkin Facilitates the Elimination of Expanded Polyglutamine Proteins and Leads to Preservation of Proteasome Function. Journal of Biological Chemistry, 2003, 278, 22044-22055.	1.6	252
556	VLSI multichannel track-and-hold potentiostat. , 2003, , .		8
557	Light scattering by apoptotic cells. , 2003, , .		0

Light Scatter Spectroscopy and Imaging of Cellular and Subcellular Events. , 2003, , .

#	Article	IF	CITATIONS
559	Real-Time Measurement of Blood Vessel Occlusion During Microsurgery. Computer Aided Surgery, 2002, 7, 364-370.	1.8	3
560	Early Restitution of Electrocorticogram Predicts Subsequent Behavioral Recovery from Cardiac Arrest. Journal of Clinical Neurophysiology, 2002, 19, 540-546.	0.9	14
561	Diagnostic instrumentation for neurological injury. IEEE Instrumentation and Measurement Magazine, 2002, 5, 28-35.	1.2	13
562	Calcium-Induced Alterations in Mitochondrial Morphology Quantified in Situ with Optical Scatter Imaging. Biophysical Journal, 2002, 83, 1691-1700.	0.2	86
563	Optical Scatter Imaging Detects Mitochondrial Swelling in Living Tissue Slices. NeuroImage, 2002, 17, 1649-1657.	2.1	19
564	Vulnerability of the thalamic somatosensory pathway after prolonged global hypoxic–ischemic injury. Neuroscience, 2002, 115, 917-929.	1.1	24
565	Protection by rapid chemical preconditioning of stressed hippocampal slice: a study of cellular swelling using optical scatter imaging. Brain Research, 2002, 945, 79-87.	1.1	5
566	Detection of asphyxia using heart rate variability. Medical and Biological Engineering and Computing, 2002, 40, 618-624.	1.6	17
567	Modulation of rodent cortical motor excitability by somatosensory input. Experimental Brain Research, 2002, 142, 562-569.	0.7	87
568	Neurological recovery by EEG bursting after resuscitation from cardiac arrest in rats. Resuscitation, 2002, 55, 193-200.	1.3	42
569	Nonextensive entropy measure of EEG following brain injury from cardiac arrest. Physica A: Statistical Mechanics and Its Applications, 2002, 305, 619-628.	1.2	94
570	Uncovering the Mechanisms of Deep Brain Stimulation for Parkinson's Disease through Functional Imaging, Neural Recording, and Neural Modeling. Critical Reviews in Biomedical Engineering, 2002, 30, 249-282.	0.5	51
571	Measurement and calculation of angular scatter change in mitochondria during calcium overload. , 2002, , .		0
572	Real-time measurement of blood vessel occlusion during microsurgery. Computer Aided Surgery, 2002, 7, 364-370.	1.8	1
573	Detection of non-linearity in the EEG of schizophrenic patients. Clinical Neurophysiology, 2001, 112, 1288-1294.	0.7	79
574	Surgical Motion Adaptive Robotic Technology (S.M.A.R.T): Taking the Motion out of Physiological Motion. Lecture Notes in Computer Science, 2001, , 317-325.	1.0	43
575	Optical scatter imaging: subcellular morphometry in situ with Fourier filtering. Optics Letters, 2001, 26, 1063.	1.7	67
576	Optical Scatter Imaging for In situ Subcellular Morphometry. Optics and Photonics News, 2001, 12, 15.	0.4	0

#	Article	IF	CITATIONS
577	Transcranial magnetic stimulation in the rat. Experimental Brain Research, 2001, 140, 112-121.	0.7	82
578	Removal of ECG interference from the EEG recordings in small animals using independent component analysis. Journal of Neuroscience Methods, 2001, 108, 11-17.	1.3	80
579	Fabrication of Screen-Printed Carbon Electrode Arrays for Sensing Neuronal Messengers. Biomedical Microdevices, 2001, 3, 307-313.	1.4	7
580	A short-time multifractal approach for arrhythmia detection based on fuzzy neural network. IEEE Transactions on Biomedical Engineering, 2001, 48, 989-995.	2.5	105
581	Coherence-weighted wiener filtering of somatosensory evoked potentials. IEEE Transactions on Biomedical Engineering, 2001, 48, 1483-1488.	2.5	11
582	Pathological analysis of myocardial cell under ventricular tachycardia and fibrillation based on symbolic dynamics. Journal of Medical Engineering and Technology, 2001, 25, 112-117.	0.8	0
583	The nonlinear dynamical analysis of the EEG in schizophrenia with temporal and spatial embedding dimension. Journal of Medical Engineering and Technology, 2001, 25, 79-83.	0.8	22
584	Sensing Nitric Oxide Neuronal Messengers Using Screen-Printed Carbon Micro-Electrode Arrays. , 2001, , 378-381.		0
585	Optical light scatter imaging of cellular and sub-cellular morphology changes in stressed rat hippocampal slices. Journal of Neuroscience Methods, 2000, 98, 21-31.	1.3	18
586	Noninvasive early detection of focal cerebral ischemia. IEEE Engineering in Medicine and Biology Magazine, 2000, 19, 74-81.	1.1	6
587	Wavelet analysis and time-frequency distributions of the body surface ECG before and after angioplasty. Computer Methods and Programs in Biomedicine, 2000, 62, 87-98.	2.6	45
588	Ectopic Activity in Ventricular Cells Induced by Early Afterdepolarizations Developed in Purkinje Cells. Annals of Biomedical Engineering, 2000, 28, 1343-1351.	1.3	15
589	Early electrophysiological and histologic changes after global cerebral ischemia in rats. Movement Disorders, 2000, 15, 14-21.	2.2	59
590	Effects of anodal vs. cathodal pacing on the mechanical performance of the isolated rabbit heart. Journal of Applied Physiology, 2000, 89, 1159-1164.	1.2	16
591	A novel quantitative EEG injury measure of global cerebral ischemia. Clinical Neurophysiology, 2000, 111, 1779-1787.	0.7	149
592	Mass and dimensional changes of single canola kernels during drying. Journal of Food Engineering, 1999, 40, 153-160.	2.7	55
593	Higher-order spectral analysis of burst patterns in EEG. IEEE Transactions on Biomedical Engineering, 1999, 46, 92-99.	2.5	92
594	Influence of electrical coupling on early after depolarizations in ventricular myocytes. IEEE Transactions on Biomedical Engineering, 1999, 46, 138-147.	2.5	42

#	Article	IF	CITATIONS
595	Modeling the relationship between concurrent epicardial action potentials and bipolar electrograms. IEEE Transactions on Biomedical Engineering, 1999, 46, 365-376.	2.5	9
596	Detecting ventricular tachycardia and fibrillation by complexity measure. IEEE Transactions on Biomedical Engineering, 1999, 46, 548-555.	2.5	281
597	Quantification of injury-related EEG signal changes using distance measures. IEEE Transactions on Biomedical Engineering, 1999, 46, 899-901.	2.5	23
598	Somatosensory stimulus entrains spindle oscillations in the thalamic VPL nucleus in barbiturate anesthetized rats. Neuroscience Letters, 1999, 262, 191-194.	1.0	10
599	Quantitative EEG during Early Recovery from Hypoxic-Ischemic Injury in Immature Piglets: Burst Occurrence and Duration. Clinical EEG (electroencephalography), 1999, 30, 175-183.	0.9	41
600	COMPUTER MODELS OF DEPOLARIZATION ALTERATIONS INDUCED BY MYOCARDIAL ISCHEMIA: THE EFFECT OF SUPERIMPOSED ISCHEMIC INHOMOGENEITIES ON PROPAGATION IN SPACE AND TIME-FREQUENCY DOMAINS. Journal of Biological Systems, 1999, 07, 553-574.	0.5	4
601	<title>Scatter imaging of injured brain slices: detection of mitochondrial injury</title> . , 1999, 3604, 18.		0
602	Biopotentials and Electrophysiology Measurement. , 1999, , .		40
603	Wavelet (Time-Scale) Analysis in Biomedical Signal Processing. The Electrical Engineering Handbook, 1999, , .	0.2	0
604	Adaptive cancelling of physiological tremor for improved precision in microsurgery. IEEE Transactions on Biomedical Engineering, 1998, 45, 839-846.	2.5	218
605	Electrophysiologic models of heart cells and cell networks. IEEE Engineering in Medicine and Biology Magazine, 1998, 17, 73-83.	1.1	39
606	In vivo nitric oxide sensor using non-conducting polymer-modified carbon fiber. Biosensors and Bioelectronics, 1998, 13, 1187-1195.	5.3	97
607	Spectral analysis methods for neurological signals. Journal of Neuroscience Methods, 1998, 83, 1-14.	1.3	163
608	Mechanism of Anode Break Stimulation in the Heart. Biophysical Journal, 1998, 74, 1850-1863.	0.2	86
609	Action potential duration inhomogeneities in acute myocardial ischemia: a simulation study. , 1998, , .		0
610	Role of the ATP-sensitive potassium current in extracellular potassium accumulation during myocardial ischemia: a simulation study. , 1998, , .		2
611	Simulation study of the effect of pinacidil on ATP-sensitive potassium current and action potential duration in myocardial tissue. , 1998, , .		3
612	<title>Near-infrared (NIR) spectroscopy for detection of water content in two in-vitro models of brain edema</title> . , 1997, 2979, 452.		0

#	Article	IF	CITATIONS
613	Propagation of action potentials in cardiac acute regional ischemia: a computer simulation study. , 1997, , .		1
614	Inhibitory effect of subthreshold high-frequency stimuli: a computer simulation study. , 1997, , .		0
615	Estimation of the ventricular fibrillation duration by autoregressive modeling. IEEE Transactions on Biomedical Engineering, 1997, 44, 349-356.	2.5	16
616	Spectral analysis of a thalamus-to-cortex seizure pathway. IEEE Transactions on Biomedical Engineering, 1997, 44, 657-664.	2.5	34
617	Effect of varying pacing waveform shapes on propagation and hemodynamics in the rabbit heart. American Journal of Cardiology, 1997, 79, 36-43.	0.7	27
618	Adaptive Fourier modeling for quantification of tremor. Journal of Neuroscience Methods, 1997, 74, 77-87.	1.3	74
619	A Model of the Possible Role of Gaseous Neuromessenger Nitric Oxide in Synaptic Potentiation. , 1997, , 29-35.		Ο
620	Mechanisms of cardiac cell excitation with premature monophasic and biphasic field stimuli: a model study. Biophysical Journal, 1996, 70, 1347-1362.	0.2	25
621	Detection of neurological injury using time-frequency analysis of the somatosensory evoked potential. Electroencephalography and Clinical Neurophysiology - Evoked Potentials, 1996, 100, 310-318.	2.0	23
622	Adaptive estimation of QRS complex wave features of ECG signal by the hermite model. Medical and Biological Engineering and Computing, 1996, 34, 58-68.	1.6	106
623	Adaptive estimation of latency changes in evoked potentials. IEEE Transactions on Biomedical Engineering, 1996, 43, 189-197.	2.5	41
624	Dominant frequency analysis of EEG reveals brain's response during injury and recovery. IEEE Transactions on Biomedical Engineering, 1996, 43, 1083-1092.	2.5	65
625	Modeling and canceling tremor in human-machine interfaces. IEEE Engineering in Medicine and Biology Magazine, 1996, 15, 29-36.	1.1	93
626	Modeling the Interaction Between Propagating Cardiac Waves and Monophasic and Biphasic Field Stimuli: Journal of Cardiovascular Electrophysiology, 1996, 7, 1183-1196.	0.8	22
627	DIMENSIONAL ANALYSIS OF THE ELECTRICAL ACTIVITY IN FIBRILLATING ISOLATED HEARTS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1996, 06, 1547-1561.	0.7	16
628	Fundamental Analyses of Ventricular Fibrillation Signals by Parametric, Nonparametric, and Dynamical Methods. , 1996, , 273-295.		5
629	Simulation of Action Potentials From Metabolically Impaired Cardiac Myocytes. Circulation Research, 1996, 79, 208-221.	2.0	144
630	Analyses of Transient and Time-Varying Evoked Potentials for Detection of Brain Injury. , 1996, , 145-165.		1

#	Article	IF	CITATIONS
631	Effects of age and disability on tracking tasks with a computer mouse: accuracy and linearity. Journal of Rehabilitation Research and Development, 1996, 33, 6-15.	1.6	33
632	Cardiac responses to premature monophasic and biphasic field stimuli. Journal of Electrocardiology, 1995, 28, 174-179.	0.4	18
633	Nonlinear changes in brain's response in the event of injury as detected by adaptive coherence estimation of evoked potentials. IEEE Transactions on Biomedical Engineering, 1995, 42, 42-51.	2.5	21
634	MOISTURE SORPTION and VOLUMETRIC CHANGES of CANOLA DURING HYDROTHERMAL PROCESSING. Journal of Food Process Engineering, 1995, 18, 233-242.	1.5	10
635	Rapid measurement of somatosensory evoked potential response to cerebral artery occlusion. Medical and Biological Engineering and Computing, 1995, 33, 396-402.	1.6	2
636	Multiresolution wavelet analysis of the body surface ECG before and after angioplasty. Annals of Biomedical Engineering, 1995, 23, 553-561.	1.3	18
637	Electrical stimulation of cardiac myocytes. Annals of Biomedical Engineering, 1995, 23, 812-821.	1.3	24
638	Dehulling of canola by hydrothermal treatments. JAOCS, Journal of the American Oil Chemists' Society, 1995, 72, 597-602.	0.8	24
639	A computer model study of the ventricular fibrillation vulnerable window: Sensitivity to regional conduction depressions. Annals of Biomedical Engineering, 1994, 22, 610-621.	1.3	8
640	Adaptive filters for analysis of intra-cardiac signals. Medical and Biological Engineering and Computing, 1994, 32, S19-S24.	1.6	2
641	Variable convergence adaptive filter and its application to cardiac action potentials. Medical and Biological Engineering and Computing, 1994, 32, 673-678.	1.6	2
642	Multiway sequential hypothesis testing for tachyarrhythmia discrimination. IEEE Transactions on Biomedical Engineering, 1994, 41, 480-487.	2.5	40
643	Ventricular late potentials characterization in time-frequency domain by means of a wavelet transform. IEEE Transactions on Biomedical Engineering, 1994, 41, 625-634.	2.5	92
644	An adaptive estimation of periodic signals using a Fourier linear combiner. IEEE Transactions on Signal Processing, 1994, 42, 1-10.	3.2	88
645	Model-based analysis of the ECG during early stages of ventricular fibrillation. Journal of Electrocardiology, 1994, 27, 84-90.	0.4	10
646	Orthonormal (Fourier and Walsh) models of time-varying evoked potentials in neurological injury. IEEE Transactions on Biomedical Engineering, 1993, 40, 213-221.	2.5	30
647	Multiresolution wavelet analysis of evoked potentials. IEEE Transactions on Biomedical Engineering, 1993, 40, 1085-1094.	2.5	128
648	Effects of defibrillation shock energy and timing on 3-D computer model of heart. Annals of Biomedical Engineering, 1993, 21, 19-31.	1.3	12

# ARTICLE IF CITATIONS Determination of current density distributions generated by electrical stimulation of the human 649 248 cerebral cortex. Electroencephalography and Clinical Neurophysiology, 1993, 86, 183-192. Adaptive coherence estimation reveals nonlinear processes in injured brain., 1993,,. 650 3 Modeling and Signal Processing in Cardiology. Biomedizinische Technik, 1993, 38, 27-34. Electrical stimulation of the human cerebral cortex. Theoretical approach. Advances in Neurology, 652 0.8 8 1993, 63, 61-85. Wavelet analysis of evoked potentials., 1992,,. Temporal variability of defibrillation threshold in a two-dimensional supercomputer model of 654 0 "ventricular fibrillation"., 1992, , . Presyncope caused by central hypovolaemia is not preceded by evoked potential alterations. Clinical Physiology, 1992, 12, 267-275. Adaptive filter for event-related bioelectric signals using an impulse correlated reference input: comparison with signal averaging techniques. IEEE Transactions on Biomedical Engineering, 1992, 39, 656 2.5133 1032-1044. Adaptive Fourier series modeling of time-varying evoked potentials: study of human somatosensory evoked response to etomidate anesthetic. Electroencephalography and Clinical Neurophysiology Evoked Potentials, 1991, 80, 108-118. A Massively Parallel Computer Model of Propagation Through a Two-Dimensional Cardiac Syncytium. 658 0.5 31 PACE - Pacing and Clinical Electrophysiology, 1991, 14, 1694-1699. Applications of adaptive filtering to ECG analysis: noise cancellation and arrhythmia detection. IEEE 697 Transactions on Biomedical Engineering, 1991, 38, 785-794. The automatic implantable cardioverter-defibrillator: technology for preventing sudden cardiac 660 0.1 0 death. Medical Design and Material, 1991, 1, 16-24. The Defibrillation Success Rate Versus Energy Relationship: Part I-Curve Fitting and the Most Efficient Defibrillation Energy. PACE - Pacing and Clinical Electrophysiology, 1990, 13, 326-338. The Defibrillation Success Rate Versus Energy Relationship: Part II-Estimation with the "Bootstrap". 662 0.5 4 PACE - Pacing and Clinical Electrophysiology, 1990, 13, 425-431. Low-pass differentiators for biological signals with known spectra: application to ECG signal processing. IEEE Transactions on Biomedical Engineering, 1990, 37, 420-425. Ventricular tachycardia and fibrillation detection by a sequential hypothesis testing algorithm. IEEE 664 2.5 221 Transactions on Biomedical Engineering, 1990, 37, 837-843. Tachycardia and fibrillation detection by automatic implantable cardioverter-defibrillators: 1.1 sequential testing in time domain. IEEE Engineering in Medicine and Biology Magazine, 1990, 9, 21-24. New algorithm for QT interval analysis in 24-hour Holter ECG: performance and applications. Medical 666 208 1.6

**NITISH THAKOR** 

and Biological Engineering and Computing, 1990, 28, 67-73.

#	Article	IF	CITATIONS
667	Noise reduction in biological step signals: application to saccadic EOG. Medical and Biological Engineering and Computing, 1990, 28, 544-549.	1.6	14
668	Neural interfacing. Science, 1990, 248, 1280-1281.	6.0	0
669	Adaptive Fourier estimation of time-varying evoked potentials. IEEE Transactions on Biomedical Engineering, 1989, 36, 448-455.	2.5	142
670	Three-dimensional computer model of the heart: Fibrillation induced by extrastimulation. Journal of Biomedical Informatics, 1989, 22, 532-545.	0.7	24
671	Success rate versus defibrillation energy: temporal profile and the most efficient defibrillation threshold. American Heart Journal, 1989, 118, 451-458.	1.2	18
672	The effect of an unsuccessful subthreshold shock on the energy requirement for the subsequent defibrillation. American Heart Journal, 1989, 117, 1065-1069.	1.2	9
673	A study of the range of motion of human fingers with application to anthropomorphic designs. IEEE Transactions on Biomedical Engineering, 1988, 35, 110-117.	2.5	45
674	Three-dimensional computer model of electric fields in internal defibrillation. Proceedings of the IEEE, 1988, 76, 720-730.	16.4	26
675	Simulation of ventricular fibrillation in a three-dimensional model of heart. , 1988, , .		0
676	Adaptive recurrent filter for ectopic beat and arrhythmia detection. , 1988, , .		0
677	Electric fields in the heart in internal defibrillation. , 1988, , .		0
678	Electrophysiologic depression in myocardium by defibrillation-level shocks. , 1988, , .		9
679	ECG waveform analysis by significant point extraction. Journal of Biomedical Informatics, 1987, 20, 410-427.	0.7	20
680	ECG waveform analysis by significant point extraction. Journal of Biomedical Informatics, 1987, 20, 428-442.	0.7	13
681	Application of a dynamic programming algorithm for trajectory planning of fingerâ€ŀike manipulators. Journal of Field Robotics, 1987, 4, 341-354.	0.7	2
682	Design and analysis of quantised coefficient digital filters: Application to biomedical signal processing with microprocessors. Medical and Biological Engineering and Computing, 1987, 25, 18-25.	1.6	18
683	Ventricular fibrillation detection by a regression test on the autocorrelation function. Medical and Biological Engineering and Computing, 1987, 25, 241-249.	1.6	102
684	Adaptive Filterng of Evoked Potentials. IEEE Transactions on Biomedical Engineering, 1987, BME-34, 6-12.	2.5	126

#	Article	IF	CITATIONS
685	Monitoring Brain Electrical and Magnetic Activity. IEEE Engineering in Medicine and Biology Magazine, 1986, 5, 11-15.	1.1	3
686	A Microprocessor-Based Two-Channel Thromboelastograph. IEEE Transactions on Biomedical Engineering, 1986, BME-33, 887-890.	2.5	1
687	Electrode studies for the long-term ambulatory ECG. Medical and Biological Engineering and Computing, 1985, 23, 116-121.	1.6	14
688	Design, implementation and evaluation of amicrocomputer-based portable arrhythmia monitor. Medical and Biological Engineering and Computing, 1984, 22, 151-159.	1.6	28
689	From Holter Monitors to Automatic Defibrillators: Developments in Ambulatory Arrhythmia Monitoring. IEEE Transactions on Biomedical Engineering, 1984, BME-31, 770-778.	2.5	55
690	Estimation of QRS Complex Power Spectra for Design of a QRS Filter. IEEE Transactions on Biomedical Engineering, 1984, BME-31, 702-706.	2.5	342
691	Multiattribute decision analysis of clinical errors: A case study of computerized arrhythmia detectors. Journal of Biomedical Informatics, 1984, 17, 116-128.	0.7	0
692	Optimal QRS detector. Medical and Biological Engineering and Computing, 1983, 21, 343-350.	1.6	123
693	A universal program for fully programmable pacemakers. Computers in Biology and Medicine, 1983, 13, 271-279.	3.9	2
694	Design and evaluation of QRS and noise detectors for ambulatory e.c.g. monitors. Medical and Biological Engineering and Computing, 1982, 20, 709-714.	1.6	14
695	A Battery-Powered Digital Modem for Telephone Transmission of ECG Data. IEEE Transactions on Biomedical Engineering, 1982, BME-29, 355-359.	2.5	5
696	Authors' Reply2. IEEE Transactions on Biomedical Engineering, 1981, BME-28, 839-839.	2.5	1
697	A Lecture/Laboratory Course on Microcomputer-Based Medical Instrumentation. IEEE Transactions on Education, 1981, 24, 96-101.	2.0	1
698	Ground-Free ECG Recording with Two Electrodes. IEEE Transactions on Biomedical Engineering, 1980, BME-27, 699-704.	2.5	106
699	Reliable R-wave detection from ambulatory subjects. Biomedical Sciences Instrumentation, 1978, 14, 67-72.	0.2	6
700	VLSI potentiostat array for distributed electrochemical neural recording. , 0, , .		39
701	Detection of brain injury based on adaptive latency analysis of evoked potentials. , 0, , .		0
702	EEG signal segmentation using adaptive Markov process amplitude modeling. , 0, , .		0

2

#	Article	IF	CITATIONS
703	Tachyarrhythmia threshold of ischemic heart in 3-dimensional computer model. , 0, , .		4
704	Tachyarrhythmia detection by implantable defibrillator. , 0, , .		0
705	Adaptive QRS shape estimation using Hermite model. , 0, , .		4
706	Curve fitting defibrillation success rate versus energy. , 0, , .		0
707	Time-varying Evoked Potentials: Monitoring And Signal Processing. , 0, , .		Ο
708	Finite Element Analysis Of Field Distributions In The Cerebral Cortex Generated By Electrical Stimulation. , 0, , .		0
709	Adaptive Estimation Of Event-related Bioelectric Signals: Effect Of Misalignment Errors. , 0, , .		3
710	A Sequential Hypothesis Testing Algorithm For Rapid Accurate Discrimination Of Tachyarrhythmias. , 0,		1
711	Rhythm Discrimination With A Floating Endocardial Catheter. , 0, , .		0
712	Variability Of Defibrillation Energy In"Heartsim". , 0, , .		0
713	Multiway tachyarrhythmia detection algorithm. , 0, , .		3
714	Multiresolution wavelet analysis of ECG during ischemia and reperfusion. , 0, , .		9
715	High speed optical imaging of the initiation and termination of self-sustaining cardiac spiral waves. , 0, , .		1
716	Auto-regressive analysis of EEG reveals brain's response to injury. , 0, , .		2
717	Teleoperation of a dextrous robotic hand using vibrotactile feedback. , 0, , .		0
718	Linearity of human commands for telerobotics. , 0, , .		0
719	Modeling electrical stimulation of the human cerebral cortex. , 0, , .		3

520 Simulation study of action potentials from metabolically impaired cardiac myocytes. , 0, , .

#	Article	IF	CITATIONS
721	Narrowband delay estimation for thalamocortical epileptic seizure pathways. , 0, , .		7
722	Simulation of triggered activity and abnormal automaticity in ventricular myocytes. , 0, , .		5
723	Quantification of injury-related EEG signal changes using Itakura distance measure. , 0, , .		5
724	Initiation and termination of spiral waves in a two-dimensional bidomain model of cardiac tissue. , 0, , .		1
725	Ectopic activity generated by early after-depolarizations in ventricular tissue: a computer simulation study. , 0, , .		0
726	StylPen: on-line adaptive canceling of pathological tremor for computer pen handwriting. , 0, , .		0
727	On the use of wavelets to separate dynamical activities embedded in a time series. , 0, , .		2
728	Role of the ATP-sensitive potassium current in the development of reentry in a ring model of cardiac tissue: a computer simulation study. , 0, , .		1
729	Study of near infrared imaging of a model of brain edema. , 0, , .		2
730	Prolongation of refractoriness by trains of subthreshold high-frequency stimuli: a simulation study. , 0, , .		0
731	Role of early afterdepolarizations on ectopic activity in ventricular tissue. A computer modeling study. , 0, , .		0
732	Noninvasive detecting the focal cerebral ischemia. , 0, , .		0
733	Nitric oxide changes in adult rat brain after transient global ischemia. , O, , .		1
734	Simulation study of epicardial action potential under normal and ischemic conditions. , 0, , .		0
735	Detecting EEG bursts after hypoxic-ischemic injury using energy operators. , 0, , .		10
736	Detection of EEG changes via a generalized Itakura distance. , 0, , .		2
737	On-line canceling of pathological tremor for computer interface. , 0, , .		1

Theory of diffusible messenger and learning in neural networks. , 0, , .

#	Article	IF	CITATIONS
739	Characteristics of thalamic multi-unit activity and EEG during recovery from asphyxia. , 0, , .		Ο
740	Simulation study of action potentials during acute myocardial ischemia. , 0, , .		1
741	Influence of Purkinje-muscle coupling on EAD development: a simulation study. , 0, , .		1
742	Spiral waves and rotors: computational and experimental models of cardiac arrhythmias. , 0, , .		1
743	A thalamus-to-cortex seizure pathway: a new coherence approach using sinusoidal modelling. , 0, , .		1
744	Dynamic differences between ventricular fibrillation types induced in human patients by different types of stimulation. , 0, , .		1
745	Computer models of the heart: from single beat to fatal arrhythmias. , 0, , .		0
746	Chaos in the heart: signals and models. , 0, , .		3
747	The higher order statistics of energy operators with application to neurological signals. , 0, , .		7
748	Simulation of ectopic activity induced by EADs in Purkinje fibers. Influence of Purkinje-muscle coupling. , 0, , .		0
749	Depolarization changes during ischemia detected through time-frequency analysis of the intracardiac electrogram. , 0, , .		1
750	Nonlinear changes in evoked potentials during recovery from hypoxic-ischemic injury. , 0, , .		0
751	Simulation study of the contribution of the ATP-dependent potassium current to extracellular potassium accumulation during myocardial ischemia. , 0, , .		3
752	Modeling and experimental imaging of arrhythmias in cardiac cell networks. , 0, , .		0
753	Novel microscopy system for imaging brain tissue structure and function. , 0, , .		0
754	Computer modeling of depolarization changes induced by myocardial ischemia. , 0, , .		1
755	Spectral correlation of action potential firing rates after hypoxic-ischemic brain injury. , 0, , .		1
756	Computer model of the effects of pinacidil on ATP-sensitive potassium current. , 0, , .		0

#	Article	IF	CITATIONS
757	Postrepolarization refractoriness in ventricular cardiac cells: a simulation study. , 0, , .		Ο
758	Partial coherence of the event related potential: a new and powerful index of cerebral activation. , 0, , .		2
759	Surface micro-machined polysilicon probes for neurophysiology. , 0, , .		1
760	On the application of model based distance metrics of signals for detection of brain injury. , 0, , .		0
761	Entropy of brain rhythms: normal versus injury EEG. , 0, , .		3
762	Nonadditive information theory for the analysis of brain rhythms. , 0, , .		0
763	Monitoring brain injury with Tsallis entropy. , 0, , .		2
764	Detection of brain herniation with spectral coherence analysis of somatosensory evoked potentials. , 0, , .		1
765	Model-based analysis of deep brain stimulation of the thalamus. , 0, , .		0
766	Synchronization and information processing across the cerebral cortex following cardiac arrest injury. , 0, , .		0
767	Optical scatter imaging of programmed cell death. , 0, , .		0
768	A microfabricated fluidic chamber for the perfusion of brain slices. , 0, , .		0
769	Wavelet entropy method for EEG analysis: application to global brain injury. , 0, , .		14
770	Distributed neurochemical sensing: in vitro experiments. , 0, , .		7
771	Time dependent entropy analysis of multiunit activity in the cortex following the hypoxic-ischemic brain injury. , 0, , .		0
772	A neural networks approach to EEG signals modeling. , 0, , .		1
773	Approaching brain injury after cardiac arrest: from bench to bedside. , 0, , .		1
774	Design and microfabrication of a polymer-modified carbon sensor array for the measurement of neurotransmitter signals. , 0, , .		8

#	Article	IF	CITATIONS
775	Four-wavelength near-infrared imaging of abdominal aorta blood flow under surgical occlusion. , 0, ,		1
776	Integrated multi-electrode fluidic nitric-oxide sensor and VLSI potentiostat array. , 0, , .		8
777	Electrical Stimulation of a Spinal Central Pattern Generator for Locomotion. , 0, , .		4
778	Spatio-temporal analysis of P300 using ICA and SSLOFO. , 0, , .		0
779	Continuous Quantitative Motor Evoked Potentials for Spinal Cord Injury Detection. , 0, , .		2
780	Dynamic control of spinal locomotion circuits. , 0, , .		2
781	Design of an Accelerometer-Controlled Myoelectric Human Computer Interface. Advanced Materials Research, 0, 403-408, 3973-3979.	0.3	0
782	Electrical stimulation. , 0, , 365-378.		1
783	Cardiac pacing effects on the electrical conduction in isolated rabbit hearts. , 0, , .		Ο