

# Milos R Popovic

## List of Publications by Year in descending order

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Version: 2024-02-01

245  
papers

6,543  
citations

66250

44  
h-index

111975

67  
g-index

257  
all docs

257  
docs citations

257  
times ranked

5606  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence That Brain-Controlled Functional Electrical Stimulation Could Elicit Targeted Corticospinal Facilitation of Hand Muscles in Healthy Young Adults. <i>Neuromodulation</i> , 2023, 26, 1612-1621.	0.4	7
2	Modeling and Reproducing Textile Sensor Noise: Implications for Textile-Compatible Signal Processing Algorithms. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2022, 26, 243-253.	3.9	1
3	A Mass-Produced Washable Smart Garment with Embedded Textile EMG Electrodes for Control of Myoelectric Prostheses: A Pilot Study. <i>Sensors</i> , 2022, 22, 666.	2.1	15
4	Exploring textile-based electrode materials for electromyography smart garments. <i>Journal of Rehabilitation and Assistive Technologies Engineering</i> , 2022, 9, 205566832110619.	0.6	8
5	Short-term facilitation effects elicited by cortical priming through theta burst stimulation and functional electrical stimulation of upper-limb muscles. <i>Experimental Brain Research</i> , 2022, , 1.	0.7	2
6	Flexible, Air Dryable, and Fiber Modified Aerogel-Based Wet Electrode for Electrophysiological Monitoring. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 1820-1827.	2.5	10
7	End-user and clinician perspectives on the viability of wearable functional electrical stimulation garments after stroke and spinal cord injury. <i>Disability and Rehabilitation: Assistive Technology</i> , 2021, 16, 241-250.	1.3	14
8	3-Dimensional printing in rehabilitation: feasibility of printing an upper extremity gross motor function assessment tool. <i>BioMedical Engineering OnLine</i> , 2021, 20, 2.	1.3	1
9	Brain-computer interface-triggered functional electrical stimulation therapy for rehabilitation of reaching and grasping after spinal cord injury: a feasibility study. <i>Spinal Cord Series and Cases</i> , 2021, 7, 24.	0.3	19
10	Operant conditioning reveals task-specific responses of single neurons in a brain-machine interface. <i>Journal of Neural Engineering</i> , 2021, 18, 045003.	1.8	1
11	A theoretical framework for the site-specific and frequency-dependent neuronal effects of deep brain stimulation. <i>Brain Stimulation</i> , 2021, 14, 807-821.	0.7	24
12	Cortical Re-organization After Traumatic Brain Injury Elicited Using Functional Electrical Stimulation Therapy: A Case Report. <i>Frontiers in Neuroscience</i> , 2021, 15, 693861.	1.4	13
13	Characterizing the stimulation interference in electroencephalographic signals during brain-computer interface-controlled functional electrical stimulation therapy. <i>Artificial Organs</i> , 2021, , .	1.0	1
14	Volitional control of individual neurons in the human brain. <i>Brain</i> , 2021, 144, 3651-3663.	3.7	7
15	A Generic Sequential Stimulation Adapter for Reducing Muscle Fatigue during Functional Electrical Stimulation. <i>Sensors</i> , 2021, 21, 7248.	2.1	2
16	Feasibility and significance of stimulating interscapular muscles using transcutaneous functional electrical stimulation in able-bodied individuals. <i>Journal of Spinal Cord Medicine</i> , 2021, 44, S185-S192.	0.7	2
17	KITE-BCI: A brain-computer interface system for functional electrical stimulation therapy. <i>Journal of Spinal Cord Medicine</i> , 2021, 44, S203-S214.	0.7	4
18	Comparing preference related to comfort in torque-matched muscle contractions between two different types of functional electrical stimulation pulses in able-bodied participants. <i>Journal of Spinal Cord Medicine</i> , 2021, 44, S215-S224.	0.7	5

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19	Preliminary evaluation of the reliability and validity of the 3D printed Toronto Rehabilitation Institute-Hand Function Test in individuals with spinal cord injury. <i>Journal of Spinal Cord Medicine</i> , 2021, 44, S225-S233.	0.7	0
20	Restoration of Upper Limb Function After Chronic Severe Hemiplegia. <i>American Journal of Physical Medicine and Rehabilitation</i> , 2020, 99, e35-e40.	0.7	26
21	Multicentre, single-blind randomised controlled trial comparing MyndMove neuromodulation therapy with conventional therapy in traumatic spinal cord injury: a protocol study. <i>BMJ Open</i> , 2020, 10, e039650.	0.8	6
22	Necessary Conditions for Reliable Propagation of Slowly Time-Varying Firing Rate. <i>Frontiers in Computational Neuroscience</i> , 2020, 14, 64.	1.2	3
23	Novel Electrode Designs for Neurostimulation in Regenerative Medicine: Activation of Stem Cells. <i>Bioelectricity</i> , 2020, 2, 348-361.	0.6	11
24	Modeling and Reconstructing Textile Sensor Noise: Implications for Wearable Technology. , 2020, 2020, 4563-4566.		2
25	Operant conditioning of motor cortex neurons reveals neuron-subtype-specific responses in a brain-machine interface task. <i>Scientific Reports</i> , 2020, 10, 19992.	1.6	6
26	Why brain-controlled neuroprosthetics matter: mechanisms underlying electrical stimulation of muscles and nerves in rehabilitation. <i>BioMedical Engineering OnLine</i> , 2020, 19, 81.	1.3	31
27	Multichannel ECG recording from waist using textile sensors. <i>BioMedical Engineering OnLine</i> , 2020, 19, 48.	1.3	23
28	Functional Electrical Stimulation Therapy for Retraining Reaching and Grasping After Spinal Cord Injury and Stroke. <i>Frontiers in Neuroscience</i> , 2020, 14, 718.	1.4	58
29	Substrate-Dependent Galvanotaxis of Directly Reprogrammed Human Neural Precursor Cells. <i>Bioelectricity</i> , 2020, 2, 229-237.	0.6	3
30	Neuronal Activity and Synaptic Plasticity in a Reimplanted STN-DBS Patient with Parkinson's Disease: Recordings from Two Surgeries. <i>Stereotactic and Functional Neurosurgery</i> , 2020, 98, 206-212.	0.8	0
31	Functional electrical stimulation therapy for restoration of motor function after spinal cord injury and stroke: a review. <i>BioMedical Engineering OnLine</i> , 2020, 19, 34.	1.3	148
32	Electric Field Application <i>In Vivo</i> Regulates Neural Precursor Cell Behavior in the Adult Mammalian Forebrain. <i>ENeuro</i> , 2020, 7, ENEURO.0273-20.2020.	0.9	13
33	A 3D Printed Device for Low Cost Neural Stimulation in Mice. <i>Frontiers in Neuroscience</i> , 2019, 13, 784.	1.4	11
34	Garments for functional electrical stimulation: Design and proofs of concept. <i>Journal of Rehabilitation and Assistive Technologies Engineering</i> , 2019, 6, 205566831985434.	0.6	22
35	Case Studies in Neuroscience: Lack of inhibitory synaptic plasticity in the substantia nigra pars reticulata of a patient with lithium-induced tremor. <i>Journal of Neurophysiology</i> , 2019, 122, 1367-1372.	0.9	3
36	Effects of water immersion on gait initiation: part II of a case series after incomplete spinal cord injury. <i>Spinal Cord Series and Cases</i> , 2019, 5, 84.	0.3	3

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37	Cluster tendency assessment in neuronal spike data. PLoS ONE, 2019, 14, e0224547.	1.1	11
38	Fatigue and Discomfort During Spatially Distributed Sequential Stimulation of Tibialis Anterior. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1566-1573.	2.7	5
39	Subthalamic suppression defines therapeutic threshold of deep brain stimulation in Parkinson's disease. Journal of Neurology, Neurosurgery and Psychiatry, 2019, 90, 1105-1108.	0.9	16
40	Lessons learned from the pilot study of an orthostatic hypotension intervention in the subacute phase following spinal cord injury. Journal of Spinal Cord Medicine, 2019, 42, 176-185.	0.7	1
41	The relationship between pressure offloading and ischial tissue health in individuals with spinal cord injury: An exploratory study. Journal of Spinal Cord Medicine, 2019, 42, 186-195.	0.7	2
42	Welcome to the 8th National Spinal Cord Injury conference!. Journal of Spinal Cord Medicine, 2019, 42, 4-7.	0.7	0
43	Effect of calf muscle electrical stimulation on rostral fluid shift, snoring and obstructive sleep apnea. Sleep Medicine, 2019, 57, 36-42.	0.8	4
44	Functional electrical stimulation of the facial muscles to improve symptoms in individuals with major depressive disorder: pilot feasibility study. BioMedical Engineering OnLine, 2019, 18, 109.	1.3	7
45	Modulation of inhibitory plasticity in basal ganglia output nuclei of patients with Parkinson's disease. Neurobiology of Disease, 2019, 124, 46-56.	2.1	26
46	Short-term inhibition of spinal reflexes in multiple lower limb muscles after neuromuscular electrical stimulation of ankle plantar flexors. Experimental Brain Research, 2019, 237, 467-476.	0.7	20
47	Effects of water immersion on quasi-static standing exploring center of pressure sway and trunk acceleration: a case series after incomplete spinal cord injury. Spinal Cord Series and Cases, 2019, 5, 5.	0.3	4
48	Relationship Between Posturography, Clinical Balance and Executive Function in Parkinson's Disease. Journal of Motor Behavior, 2019, 51, 212-221.	0.5	20
49	Charge-Balanced Electrical Stimulation Can Modulate Neural Precursor Cell Migration in the Presence of Endogenous Electric Fields in Mouse Brains. ENeuro, 2019, 6, ENEURO.0382-19.2019.	0.9	18
50	Neuronal inhibition and synaptic plasticity of basal ganglia neurons in Parkinson's disease. Brain, 2018, 141, 177-190.	3.7	91
51	Detecting inspiratory flow limitation with temporal features of nasal airflow. Sleep Medicine, 2018, 48, 70-78.	0.8	6
52	Lower extremity outcome measures: considerations for clinical trials in spinal cord injury. Spinal Cord, 2018, 56, 628-642.	0.9	23
53	Interpreting Cluster Structure in Waveform Data with Visual Assessment and Dunn's Index. Studies in Computational Intelligence, 2018, , 73-101.	0.7	9
54	Dynamic cortical participation during bilateral, cyclical ankle movements: Effects of Parkinson's disease. PLoS ONE, 2018, 13, e0196177.	1.1	10

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55	Kinematics-based prediction of trunk muscle activity in response to multi-directional perturbations during sitting. <i>Medical Engineering and Physics</i> , 2018, 58, 56-63.	0.8	5
56	Quantification of multi-segment trunk kinetics during multi-directional trunk bending. <i>Gait and Posture</i> , 2018, 64, 205-212.	0.6	8
57	Skin-derived precursor cells undergo substrate-dependent galvanotaxis that can be modified by neighbouring cells. <i>Stem Cell Research</i> , 2018, 31, 95-101.	0.3	5
58	Optimal Estimation of Anthropometric Parameters for Quantifying Multisegment Trunk Kinetics. <i>Journal of Biomechanical Engineering</i> , 2018, 140, .	0.6	7
59	Calcium influx differentially regulates migration velocity and directedness in response to electric field application. <i>Experimental Cell Research</i> , 2018, 368, 202-214.	1.2	21
60	Quantitative ultrasound imaging over the ischial tuberosity: An exploratory study to inform tissue health. <i>Journal of Tissue Viability</i> , 2018, 27, 173-180.	0.9	5
61	Brain-computer interfaces for neurorehabilitation: enhancing functional electrical stimulation. , 2018, , 425-451.		0
62	Physiological mechanisms of thalamic ventral intermediate nucleus stimulation for tremor suppression. <i>Brain</i> , 2018, 141, 2142-2155.	3.7	96
63	Functional electrical stimulation therapy for severe hemiplegia: Randomized control trial revisited. <i>Canadian Journal of Occupational Therapy</i> , 2017, 84, 87-97.	0.8	16
64	Optimizing the design of bipolar nerve cuff electrodes for improved recording of peripheral nerve activity. <i>Journal of Neural Engineering</i> , 2017, 14, 036015.	1.8	16
65	Trunk Function and Ischial Pressure Offloading in Individuals with Spinal Cord Injury. <i>Journal of Spinal Cord Medicine</i> , 2017, 40, 723-732.	0.7	8
66	Lateral hypothalamic activity indicates hunger and satiety states in humans. <i>Annals of Clinical and Translational Neurology</i> , 2017, 4, 897-901.	1.7	19
67	The influence of the aquatic environment on the center of pressure, impulses and upper and lower trunk accelerations during gait initiation. <i>Gait and Posture</i> , 2017, 58, 469-475.	0.6	7
68	Neuron-Type-Specific Utility in a Brain-Machine Interface: a Pilot Study. <i>Journal of Spinal Cord Medicine</i> , 2017, 40, 715-722.	0.7	2
69	Evaluating the efficacy of functional electrical stimulation therapy assisted walking after chronic motor incomplete spinal cord injury: effects on bone biomarkers and bone strength. <i>Journal of Spinal Cord Medicine</i> , 2017, 40, 748-758.	0.7	18
70	Prediction of specific hand movements using electroencephalographic signals. <i>Journal of Spinal Cord Medicine</i> , 2017, 40, 696-705.	0.7	4
71	Wheelchair Neuroprosthesis for Improving Dynamic Trunk Stability. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2017, 25, 2472-2479.	2.7	8
72	Dynamic cortical participation during bilateral, cyclical ankle movements: effects of aging. <i>Scientific Reports</i> , 2017, 7, 44658.	1.6	15

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73	The Effect of Electrical Stimulation of the Calf Muscle on Leg Fluid Accumulation over a Long Period of Sitting. Scientific Reports, 2017, 7, 6055.	1.6	8
74	Muscle synergies reveal impaired trunk muscle coordination strategies in individuals with thoracic spinal cord injury. Journal of Electromyography and Kinesiology, 2017, 36, 40-48.	0.7	44
75	Fatigue reduction during aggregated and distributed sequential stimulation. Muscle and Nerve, 2017, 56, 271-281.	1.0	20
76	The influence of the aquatic environment on the control of postural sway. Gait and Posture, 2017, 51, 70-76.	0.6	21
77	The Influence of the Aquatic Environment on Gait Initiation: A Pilot Study. Motor Control, 2017, 21, 211-226.	0.3	4
78	True North Strong and Free. Journal of Spinal Cord Medicine, 2017, 40, 630-630.	0.7	0
79	Brain-computer interface and functional electrical stimulation for upper limb rehabilitation after stroke. , 2017, , .		3
80	Closed-loop control of standing neuroprosthesis using PID controller. , 2017, , .		2
81	Dynamic Increase in Corticomuscular Coherence during Bilateral, Cyclical Ankle Movements. Frontiers in Human Neuroscience, 2017, 11, 155.	1.0	25
82	PID Controller Design for FES Applied to Ankle Muscles in Neuroprosthesis for Standing Balance. Frontiers in Neuroscience, 2017, 11, 347.	1.4	25
83	Reconstruction of reaching movement trajectories using electrocorticographic signals in humans. PLoS ONE, 2017, 12, e0182542.	1.1	17
84	Functional Electrical Stimulation. Artificial Organs, 2017, 41, 977-978.	1.0	2
85	Minimizing muscle fatigue through optimization of electrical stimulation parameters. Journal of Biomedical Engineering and Informatics, 2016, 3, 33.	0.2	2
86	BCI-Triggered functional electrical stimulation therapy for upper limb. European Journal of Translational Myology, 2016, 26, 6222.	0.8	9
87	EEG-Triggered Functional Electrical Stimulation Therapy for Restoring Upper Limb Function in Chronic Stroke with Severe Hemiplegia. Case Reports in Neurological Medicine, 2016, 2016, 1-11.	0.3	26
88	Restoration of Upper Limb Function in an Individual with Cervical Spondylotic Myelopathy using Functional Electrical Stimulation Therapy: A Case Study. Frontiers in Neurology, 2016, 7, 81.	1.1	10
89	Directionally-sensitive peripheral nerve recording: Bipolar nerve cuff design. , 2016, 2016, 6178-6181.		1
90	Leg fluid accumulation during prolonged sitting. , 2016, 2016, 4284-4287.		6

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91	Multisegment Kinematics of the Spinal Column: Soft Tissue Artifacts Assessment. Journal of Biomechanical Engineering, 2016, 138, .	0.6	16
92	Identification of ankle plantar-flexors dynamics in response to electrical stimulation. Medical Engineering and Physics, 2016, 38, 1166-1171.	0.8	7
93	Factors predisposing to worsening of sleep apnea in response to fluid overload in men. Sleep Medicine, 2016, 23, 65-72.	0.8	7
94	Closed-Loop Interruption of Hippocampal Ripples through Fornix Stimulation in the Non-Human Primate. Brain Stimulation, 2016, 9, 911-918.	0.7	23
95	Time-course of coherence in the human basal ganglia during voluntary movements. Scientific Reports, 2016, 6, 34930.	1.6	25
96	Responsiveness, Sensitivity, and Minimally Detectable Difference of the Graded and Redefined Assessment of Strength, Sensibility, and Prehension, Version 1.0. Journal of Neurotrauma, 2016, 33, 307-314.	1.7	35
97	Merged Flybackâ€“SC-Based Output Stage for Versatile Portable Transcutaneous Electrical Stimulators. IEEE Journal of Emerging and Selected Topics in Power Electronics, 2016, 4, 318-331.	3.7	1
98	Anticipation of direction and time of perturbation modulates the onset latency of trunk muscle responses during sitting perturbations. Journal of Electromyography and Kinesiology, 2016, 26, 94-101.	0.7	13
99	A Phase-Based Electrical Plethysmography Approach to Bladder Volume Measurement. Annals of Biomedical Engineering, 2016, 44, 1299-1309.	1.3	5
100	Why Is Functional Electrical Stimulation Therapy Capable of Restoring Motor Function Following Severe Injury to the Central Nervous System?. , 2016, , 479-498.		9
101	Functional Electrical Stimulation Therapy: Recovery of Function Following Spinal Cord Injury and Stroke. , 2016, , 513-532.		11
102	Trunk muscle co-activation using functional electrical stimulation modifies center of pressure fluctuations during quiet sitting by increasing trunk stiffness. Journal of NeuroEngineering and Rehabilitation, 2015, 12, 99.	2.4	12
103	Biphasic monopolar electrical stimulation induces rapid and directed galvanotaxis in adult subependymal neural precursors. Stem Cell Research and Therapy, 2015, 6, 67.	2.4	31
104	Assistive technologies for self-managed pressure ulcer prevention in spinal cord injury: A scoping review. Journal of Rehabilitation Research and Development, 2015, 52, 131-146.	1.6	30
105	Authorsâ€™ response. Journal of Spinal Cord Medicine, 2015, 38, 421-421.	0.7	0
106	Sensitivity of Intersegmental Angles of the Spinal Column to Errors Due to Marker Misplacement. Journal of Biomechanical Engineering, 2015, 137, .	0.6	4
107	Modeling sleep apnea severity using bioimpedance measurements. , 2015, 2015, 5998-6001.		4
108	Method to Reduce Muscle Fatigue During Transcutaneous Neuromuscular Electrical Stimulation in Major Knee and Ankle Muscle Groups. Neurorehabilitation and Neural Repair, 2015, 29, 722-733.	1.4	25

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109	Low-intensity functional electrical stimulation can increase multidirectional trunk stiffness in able-bodied individuals during sitting. <i>Medical Engineering and Physics</i> , 2015, 37, 777-782.	0.8	16
110	Heel strike detection using split force-plate treadmill. <i>Gait and Posture</i> , 2015, 41, 863-866.	0.6	4
111	Trunk control impairment is responsible for postural instability during quiet sitting in individuals with cervical spinal cord injury. <i>Clinical Biomechanics</i> , 2015, 30, 507-512.	0.5	53
112	Short-Term Neuroplastic Effects of Brain-Controlled and Muscle-Controlled Electrical Stimulation. <i>Neuromodulation</i> , 2015, 18, 233-240.	0.4	45
113	Functional Electrical Stimulation Therapy: Enabling Function Through Reaching and Grasping. , 2015, , 587-605.		9
114	Defining the Role of Sensation, Strength, and Prehension for Upper Limb Function in Cervical Spinal Cord Injury. <i>Neurorehabilitation and Neural Repair</i> , 2014, 28, 66-74.	1.4	13
115	Use of screening to recruitment ratios as a tool for planning and implementing spinal cord injury rehabilitation research. <i>Spinal Cord</i> , 2014, 52, 764-768.	0.9	11
116	International Spinal Cord Injury Upper Extremity Basic Data Set. <i>Spinal Cord</i> , 2014, 52, 652-657.	0.9	19
117	Inverted Pendulum Standing Apparatus for Investigating Closed-Loop Control of Ankle Joint Muscle Contractions during Functional Electrical Stimulation. <i>International Scholarly Research Notices</i> , 2014, 2014, 1-8.	0.9	7
118	Influence of different rehabilitation therapy models on patient outcomes: Hand function therapy in individuals with incomplete SCI. <i>Journal of Spinal Cord Medicine</i> , 2014, 37, 734-743.	0.7	21
119	Outcome of the upper limb in cervical spinal cord injury: Profiles of recovery and insights for clinical studies. <i>Journal of Spinal Cord Medicine</i> , 2014, 37, 503-510.	0.7	32
120	Effect of whole-body vibration on lower-limb EMG activity in subjects with and without spinal cord injury. <i>Journal of Spinal Cord Medicine</i> , 2014, 37, 525-536.	0.7	14
121	Welcome to the 6th National Spinal Cord Injury Conference: Bioinformatics Informs SCI Rehabilitation!. <i>Journal of Spinal Cord Medicine</i> , 2014, 37, 485-486.	0.7	0
122	Muscle activity, cross-sectional area, and density following passive standing and whole body vibration: A case series. <i>Journal of Spinal Cord Medicine</i> , 2014, 37, 575-581.	0.7	13
123	Failure of spinal paired associative stimulation to induce neuroplasticity in the human corticospinal tract. <i>Journal of Spinal Cord Medicine</i> , 2014, 37, 565-574.	0.7	15
124	A randomized trial of functional electrical stimulation for walking in incomplete spinal cord injury: Effects on walking competency. <i>Journal of Spinal Cord Medicine</i> , 2014, 37, 511-524.	0.7	90
125	Exploring the determinants of fracture risk among individuals with spinal cord injury. <i>Osteoporosis International</i> , 2014, 25, 177-185.	1.3	64
126	Spinal cord stimulation for gait impairment in spinocerebellar ataxia 7. <i>Journal of Neurology</i> , 2014, 261, 570-574.	1.8	4



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127	Reducing muscle fatigue during transcutaneous neuromuscular electrical stimulation by spatially and sequentially distributing electrical stimulation sources. <i>European Journal of Applied Physiology</i> , 2014, 114, 793-804.	1.2	72
128	Neuromodulation of Emotion Using Functional Electrical Stimulation Applied to Facial Muscles. <i>Neuromodulation</i> , 2014, 17, 85-92.	0.4	12
129	Multidirectional quantification of trunk stiffness and damping during unloaded natural sitting. <i>Medical Engineering and Physics</i> , 2014, 36, 102-109.	0.8	20
130	Functional electrical stimulation post-spinal cord injury improves locomotion and increases afferent input into the central nervous system in rats. <i>Journal of Spinal Cord Medicine</i> , 2014, 37, 93-100.	0.7	33
131	Functional Electrical Stimulation Therapy for Recovery of Reaching and Grasping in Severe Chronic Pediatric Stroke Patients. <i>Journal of Child Neurology</i> , 2014, 29, 493-499.	0.7	42
132	Variability of vibrations produced by commercial whole-body vibration platforms. <i>Journal of Rehabilitation Medicine</i> , 2014, 46, 937-940.	0.8	16
133	Temporal alignment of electrocorticographic recordings for upper limb movement. <i>Frontiers in Neuroscience</i> , 2014, 8, 431.	1.4	5
134	Action Possibility Judgments of People with Varying Motor Abilities Due to Spinal Cord Injury. <i>PLoS ONE</i> , 2014, 9, e110250.	1.1	7
135	Hand contour detection in wearable camera video using an adaptive histogram region of interest. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2013, 10, 114.	2.4	18
136	Effects of sensorimotor trunk impairments on trunk and upper limb joint kinematics and kinetics during sitting pivot transfers in individuals with a spinal cord injury. <i>Clinical Biomechanics</i> , 2013, 28, 1-9.	0.5	20
137	Magnitude of forward trunk flexion influences upper limb muscular efforts and dynamic postural stability requirements during sitting pivot transfers in individuals with spinal cord injury. <i>Journal of Electromyography and Kinesiology</i> , 2013, 23, 1325-1333.	0.7	19
138	Cardiovascular Response of Individuals With Spinal Cord Injury to Dynamic Functional Electrical Stimulation Under Orthostatic Stress. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2013, 21, 37-46.	2.7	15
139	Knowledge Translation in Rehabilitation Engineering Research and Development: A Knowledge Ecosystem Framework. <i>Archives of Physical Medicine and Rehabilitation</i> , 2013, 94, S9-S19.	0.5	14
140	Comparison of multidirectional seated postural stability between individuals with spinal cord injury and able-bodied individuals. <i>Journal of Rehabilitation Medicine</i> , 2013, 45, 47-54.	0.8	27
141	Effect of Intensive Functional Electrical Stimulation Therapy on Upper-Limb Motor Recovery after Stroke: Case Study of a Patient with Chronic Stroke. <i>Physiotherapy Canada</i> <i>Physiotherapie Canada</i> , 2013, 65, 20-28.	0.3	38
142	Spatially distributed sequential stimulation reduces muscle fatigue during neuromuscular electrical stimulation. , 2013, 2013, 3614-7.		6
143	Randomized Trial of Functional Electrical Stimulation Therapy for Walking in Incomplete Spinal Cord Injury: Effects on Quality of Life and Community Participation. <i>Topics in Spinal Cord Injury Rehabilitation</i> , 2013, 19, 245-258.	0.8	28
144	Restoring Voluntary Grasping Function in Individuals with Incomplete Chronic Spinal Cord Injury: Pilot Study. <i>Topics in Spinal Cord Injury Rehabilitation</i> , 2013, 19, 279-287.	0.8	57

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145	Closed-loop control of ankle plantarflexors and dorsiflexors using an inverted pendulum apparatus: A pilot study. <i>Journal of Automatic Control</i> , 2013, 21, 31-36.	1.0	9
146	Typing with eye-gaze and tooth-clicks. , 2012, , .		19
147	Feasibility and efficacy of upper limb robotic rehabilitation in a subacute cervical spinal cord injury population. <i>Spinal Cord</i> , 2012, 50, 220-226.	0.9	74
148	Co-contraction of antagonist muscles during knee extension against gravity: Insights for functional electrical stimulation control design. , 2012, 2012, 1843-6.		9
149	Real-time two-dimensional asynchronous control of a computer cursor with a single subdural electrode. <i>Journal of Spinal Cord Medicine</i> , 2012, 35, 382-391.	0.7	5
150	A randomized trial of functional electrical stimulation for walking in incomplete spinal cord injury: Effects on body composition. <i>Journal of Spinal Cord Medicine</i> , 2012, 35, 351-360.	0.7	41
151	Which trunk inclination directions best predict multidirectional-seated limits of stability among individuals with spinal cord injury?. <i>Journal of Spinal Cord Medicine</i> , 2012, 35, 343-350.	0.7	19
152	A Galvanotaxis Assay for Analysis of Neural Precursor Cell Migration Kinetics in an Externally Applied Direct Current Electric Field. <i>Journal of Visualized Experiments</i> , 2012, , .	0.2	11
153	Visualization of Trunk Muscle Synergies During Sitting Perturbations Using Self-Organizing Maps (SOM). <i>IEEE Transactions on Biomedical Engineering</i> , 2012, 59, 2516-2523.	2.5	24
154	The Graded Redefined Assessment of Strength Sensibility and Prehension: Reliability and Validity. <i>Journal of Neurotrauma</i> , 2012, 29, 905-914.	1.7	129
155	Effects of balance training with visual feedback during mechanically unperturbed standing on postural corrective responses. <i>Gait and Posture</i> , 2012, 35, 339-344.	0.6	40
156	A universal functional electrical stimulator based on merged flyback-SC circuit. , 2012, , .		17
157	Relationship Between Clinical Assessments of Function and Measurements From an Upper-Limb Robotic Rehabilitation Device in Cervical Spinal Cord Injury. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2012, 20, 341-350.	2.7	94
158	A Comparison of Closed-Loop Control Algorithms for Regulating Electrically Stimulated Knee Movements in Individuals With Spinal Cord Injury. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2012, 20, 539-548.	2.7	74
159	Effects of upper limb positions and weight support roles on quasi-static seated postural stability in individuals with spinal cord injury. <i>Gait and Posture</i> , 2012, 36, 572-579.	0.6	28
160	Whole-Body Vibration During Passive Standing in Individuals With Spinal Cord Injury: Effects of Plate Choice, Frequency, Amplitude, and Subject's Posture on Vibration Propagation. <i>PM and R</i> , 2012, 4, 963-975.	0.9	25
161	A comprehensive three-dimensional dynamic model of the human head and trunk for estimating lumbar and cervical joint torques and forces from upper body kinematics. <i>Medical Engineering and Physics</i> , 2012, 34, 640-649.	0.8	16
162	Functional Electrical Stimulation Therapy: Recovery of Function Following Spinal Cord Injury and Stroke. , 2012, , 105-121.		9

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163	Toronto Rehabilitation Instituteâ€™Hand Function Test: Assessment of Gross Motor Function in Individuals With Spinal Cord Injury. Topics in Spinal Cord Injury Rehabilitation, 2012, 18, 167-186.	0.8	54
164	Including non-ideal behavior in simulations of functional electrical stimulation. , 2011, , .		1
165	Temporal alignment of electrocorticographic recordings using upper limb kinematics. , 2011, , .		0
166	Effect of a robotic rehabilitation device on upper limb function in a sub-acute cervical spinal cord injury population. , 2011, 2011, 5975400.		20
167	Functional Electrical Stimulation in Rehabilitation and Neurorehabilitation. , 2011, , 877-896.		16
168	Functional Electrical Stimulation Therapy for Grasping in Spinal Cord Injury: An Overview. Topics in Spinal Cord Injury Rehabilitation, 2011, 17, 70-76.	0.8	10
169	Functional Electrical Stimulation Therapy of Voluntary Grasping Versus Only Conventional Rehabilitation for Patients With Subacute Incomplete Tetraplegia. Neurorehabilitation and Neural Repair, 2011, 25, 433-442.	1.4	148
170	Smaller sway size during quiet standing is associated with longer preceding time of motor command to body sway. Gait and Posture, 2011, 33, 14-17.	0.6	11
171	Adult Subependymal Neural Precursors, but Not Differentiated Cells, Undergo Rapid Cathodal Migration in the Presence of Direct Current Electric Fields. PLoS ONE, 2011, 6, e23808.	1.1	64
172	Spatially Distributed Sequential Stimulation Reduces Fatigue in Paralyzed Triceps Surae Muscles: A Case Study. Artificial Organs, 2011, 35, 1174-1180.	1.0	58
173	Functional Electrical Stimulation Therapy for Grasping in Traumatic Incomplete Spinal Cord Injury: Randomized Control Trial. Artificial Organs, 2011, 35, 212-216.	1.0	65
174	Including Nonideal Behavior in Simulations of Functional Electrical Stimulation Applications. Artificial Organs, 2011, 35, 267-269.	1.0	8
175	A Stochastic Model of Knee Angle in Response to Electrical Stimulation of the Quadriceps and Hamstrings Muscles. Artificial Organs, 2011, 35, 1169-1174.	1.0	6
176	Reducing fall risk by improving balance control: Development, evaluation and knowledge-translation of new approaches. Journal of Safety Research, 2011, 42, 473-485.	1.7	58
177	Use of an Experimentally Derived Leadfield in the Peripheral Nerve Pathway Discrimination Problem. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2011, 19, 147-156.	2.7	32
178	A complete, non-lumped, and verifiable set of upper body segment parameters for three-dimensional dynamic modeling. Medical Engineering and Physics, 2011, 33, 70-79.	0.8	23
179	Video game-based neuromuscular electrical stimulation system for calf muscle training: A case study. Medical Engineering and Physics, 2011, 33, 249-255.	0.8	10
180	A framework for the discrimination of neural pathways using multi-contact nerve cuff electrodes. , 2011, 2011, 4645-8.		1

#	ARTICLE	IF	CITATIONS
181	A generic model of real-world non-ideal behaviour of FES-induced muscle contractions: simulation tool. <i>Journal of Neural Engineering</i> , 2011, 8, 046034.	1.8	12
182	Quantitative Analysis of the Limits of Stability in Sitting. <i>Journal of Applied Biomechanics</i> , 2010, 26, 265-272.	0.3	18
183	Responses of the Trunk to Multidirectional Perturbations during Unsupported Sitting in Normal Adults. <i>Journal of Applied Biomechanics</i> , 2010, 26, 332-340.	0.3	24
184	Neural-Mechanical Feedback Control Scheme Generates Physiological Ankle Torque Fluctuation During Quiet Stance. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2010, 18, 86-95.	2.7	52
185	Posturographic measures in healthy young adults during quiet sitting in comparison with quiet standing. <i>Medical Engineering and Physics</i> , 2010, 32, 32-38.	0.8	52
186	Positive effect of balance training with visual feedback on standing balance abilities in people with incomplete spinal cord injury. <i>Spinal Cord</i> , 2010, 48, 886-893.	0.9	74
187	Acute effects of whole body vibration during passive standing on soleus H-reflex in subjects with and without spinal cord injury. <i>Neuroscience Letters</i> , 2010, 482, 66-70.	1.0	76
188	Three-dimensional spine kinematics during multidirectional, target-directed trunk movement in sitting. <i>Journal of Electromyography and Kinesiology</i> , 2010, 20, 823-832.	0.7	58
189	Application of singular spectrum-based change-point analysis to EMG-onset detection. <i>Journal of Electromyography and Kinesiology</i> , 2010, 20, 750-760.	0.7	36
190	Localization of Active Pathways in Peripheral Nerves: A Simulation Study. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2009, 17, 53-62.	2.7	37
191	Influence of the Number and Location of Recording Contacts on the Selectivity of a Nerve Cuff Electrode. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2009, 17, 420-427.	2.7	28
192	Erratum to "Influence of the Number and Location of Recording Contacts on the Selectivity of a Nerve Cuff Electrode". <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2009, 17, 605-605.	2.7	1
193	Control of a neuroprosthesis for grasping using off-line classification of electrocorticographic signals: case study. <i>Spinal Cord</i> , 2009, 47, 802-808.	0.9	29
194	Closed-Loop Control of Functional Electrical Stimulation-Assisted Arm-Free Standing in Individuals With Spinal Cord Injury: A Feasibility Study. <i>Neuromodulation</i> , 2009, 12, 22-32.	0.4	37
195	Postural reactions of the trunk muscles to multi-directional perturbations in sitting. <i>Clinical Biomechanics</i> , 2009, 24, 176-182.	0.5	53
196	Functional Electrical Stimulation Therapy: Individualized Neuroprosthesis for Grasping and Reaching. , 2009, , 99-107.		1
197	Real-Time Two-Dimensional Asynchronous Control of a Remote-Controlled Car Using a Single Electroencephalographic Electrode. <i>Topics in Spinal Cord Injury Rehabilitation</i> , 2009, 14, 62-68.	0.8	2
198	Effects of Trunk Impairments on Manual Wheelchair Propulsion Among Individuals with a Spinal Cord Injury: A Brief Overview and Future Challenges. <i>Topics in Spinal Cord Injury Rehabilitation</i> , 2009, 15, 59-70.	0.8	17

#	ARTICLE	IF	CITATIONS
199	Bioelectric Source Localization in the Rat Sciatic Nerve: Initial Assessment Using an Idealized Nerve Model. IFMBE Proceedings, 2009, , 138-141.	0.2	4
200	Body Movement Induced by Electrical Stimulation of Toe Muscles During Standing. Artificial Organs, 2008, 32, 5-12.	1.0	8
201	Rehabilitation of Reaching and Grasping Function in Severe Hemiplegic Patients Using Functional Electrical Stimulation Therapy. Neurorehabilitation and Neural Repair, 2008, 22, 706-714.	1.4	195
202	Cardiovascular response to functional electrical stimulation and dynamic tilt table therapy to improve orthostatic tolerance. Journal of Electromyography and Kinesiology, 2008, 18, 900-907.	0.7	25
203	Functional electrical stimulation of walking: Function, exercise and rehabilitation. Annales De R�adaptation Et De M�decine Physique: Revue Scientifique De La Soci�t� Fran�saise De R��ducation.8 Fonctionnelle De R�adaptation Et De M�decine Physique, 2008, 51, 452-460.		79
204	Neuromusculoskeletal Torque-Generation Process Has a Large Destabilizing Effect on the Control Mechanism of Quiet Standing. Journal of Neurophysiology, 2008, 100, 1465-1475.	0.9	61
205	Selected topics in the field of spinal cord research. Neurological Research, 2008, 30, 3-4.	0.6	1
206	Neural-mechanical feedback control scheme can generate physiological ankle torque fluctuation during quiet standing: A comparative analysis of contributing torque components. , 2008, , .		5
207	Solution space reduction in the peripheral nerve source localization problem using forward field similarities. Journal of Neural Engineering, 2008, 5, 191-202.	1.8	7
208	Application of EEG source localization algorithms to the monitoring of active pathways in peripheral nerves. , 2008, 2008, 4216-9.		14
209	A Portable and Automated Postural Perturbation System for Balance Assessment, Training, and Neuromuscular System Identification. Journal of Medical Devices, Transactions of the ASME, 2008, 2, .	0.4	10
210	Functional electrical stimulation therapy improves grasping in chronic cervical spinal cord injury: Two case studies. Journal of Automatic Control, 2008, 18, 53-61.	1.0	7
211	Neuroprostheses. , 2008, , 1924-1933.		1
212	Electric stimulation approaches to the restoration and rehabilitation of swallowing: a review. Neurological Research, 2007, 29, 9-15.	0.6	25
213	Optimal Combination of Minimum Degrees of Freedom to be Actuated in the Lower Limbs to Facilitate Arm-Free Paraplegic Standing. Journal of Biomechanical Engineering, 2007, 129, 838-847.	0.6	19
214	Identification of Arm Movements Using Electrocardiographic Signals. , 2007, , .		2
215	Identification of arm movements using correlation of electrocardiographic spectral components and kinematic recordings. Journal of Neural Engineering, 2007, 4, 146-158.	1.8	27
216	Larger center of pressure minus center of gravity in the elderly induces larger body acceleration during quiet standing. Neuroscience Letters, 2007, 422, 202-206.	1.0	99

#	ARTICLE	IF	CITATIONS
217	Step Prediction During Perturbed Standing Using Center Of Pressure Measurements. <i>Sensors</i> , 2007, 7, 459-472.	2.1	3
218	Implementation of a Physiologically Identified PD Feedback Controller for Regulating the Active Ankle Torque During Quiet Stance. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2007, 15, 235-243.	2.7	54
219	Instability Prediction by Monitoring Center of Pressure During Standing. , 2006, 2006, 5412-5.		5
220	Dynamic force-sharing in multi-digit task. <i>Clinical Biomechanics</i> , 2006, 21, 138-146.	0.5	15
221	Controlling balance during quiet standing: Proportional and derivative controller generates preceding motor command to body sway position observed in experiments. <i>Gait and Posture</i> , 2006, 23, 164-172.	0.6	145
222	Functional electrical therapy: retraining grasping in spinal cord injury. <i>Spinal Cord</i> , 2006, 44, 143-151.	0.9	146
223	Gait training regimen for incomplete spinal cord injury using functional electrical stimulation. <i>Spinal Cord</i> , 2006, 44, 357-361.	0.9	103
224	Dynamic modeling and torque estimation of FES-assisted arm-free standing for paraplegics. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2006, 14, 46-54.	2.7	26
225	The effect of random modulation of functional electrical stimulation parameters on muscle fatigue. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2006, 14, 38-45.	2.7	58
226	Transcutaneous Electrical Stimulation Technology for Functional Electrical Therapy Applications. , 2006, 2006, 2142-5.		5
227	Transcutaneous Electrical Stimulation Technology for Functional Electrical Therapy Applications. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
228	Modular transcutaneous functional electrical stimulation system. <i>Medical Engineering and Physics</i> , 2005, 27, 81-92.	0.8	81
229	Reducing Muscle Fatigue Due to Functional Electrical Stimulation Using Random Modulation of Stimulation Parameters. <i>Artificial Organs</i> , 2005, 29, 453-458.	1.0	69
230	Neuroprosthesis for Retraining Reaching and Grasping Functions in Severe Hemiplegic Patients. <i>Neuromodulation</i> , 2005, 8, 58-72.	0.4	72
231	Complex Motion: neuroprosthesis for grasping applications. , 2004, , 197-215.		2
232	A Reliable Gyroscope-Based Gait-Phase Detection Sensor Embedded in a Shoe Insole. <i>IEEE Sensors Journal</i> , 2004, 4, 268-274.	2.4	172
233	Importance of Body Sway Velocity Information in Controlling Ankle Extensor Activities During Quiet Stance. <i>Journal of Neurophysiology</i> , 2003, 90, 3774-3782.	0.9	274
234	Experimental study on low velocity friction compensation and tracking control. <i>Journal of Automatic Control</i> , 2003, 13, 17-22.	1.0	3

#	ARTICLE	IF	CITATIONS
235	Neuroprostheses for grasping. Neurological Research, 2002, 24, 443-452.	0.6	149
236	Transcutaneous Functional Electrical Stimulator "Complex Motion". Artificial Organs, 2002, 26, 219-223.	1.0	67
237	Sacral root stimulation. Spinal Cord, 2002, 40, 431-431.	0.9	6
238	Functional electrical stimulation for grasping and walking: indications and limitations. Spinal Cord, 2001, 39, 403-412.	0.9	113
239	Stability criterion for controlling standing in able-bodied subjects. Journal of Biomechanics, 2000, 33, 1359-1368.	0.9	54
240	High-precision positioning of a mechanism with nonlinear friction using a fuzzy logic pulse controller. IEEE Transactions on Control Systems Technology, 2000, 8, 151-158.	3.2	31
241	Modeling of friction using spectral analysis. IEEE Transactions on Automation Science and Engineering, 1998, 14, 114-122.	2.4	17
242	Grasping in high lesioned tetraplegic subjects using the EMG controlled neuroprosthesis. NeuroRehabilitation, 1998, 10, 251-255.	0.5	12
243	Grasping in high lesioned tetraplegic subjects using the EMG controlled neuroprosthesis. NeuroRehabilitation, 1998, 10, 251-255.	0.5	17
244	Rehabilitation Engineering Laboratory Research Program: Past, Present and Future. , 0, , .		0
245	Scoping Review on Brain-Computer Interface-Controlled Electrical Stimulation Interventions for Upper Limb Rehabilitation in Adults: A Look at Participants, Interventions, and Technology. Physiotherapy Canada Physiotherapie Canada, 0, , .	0.3	2