

Dejan B Popovic

List of Publications by Year in descending order

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131
papers

3,632
citations

117625

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144013

57
g-index

136
all docs

136
docs citations

136
times ranked

2607
citing authors

#	ARTICLE	IF	CITATIONS
1	Foot Drop Stimulator. , 2022, , 1241-1255.		0
2	Influence of alumina addition on structural and catalytic properties of sulphated zirconia in isomerization of n-hexane. Processing and Application of Ceramics, 2021, 15, 111-119.	0.8	2
3	Hybrid Tongue - Myoelectric Control Improves Functional Use of a Robotic Hand Prosthesis. IEEE Transactions on Biomedical Engineering, 2021, 68, 2011-2020.	4.2	4
4	A principal component analysis (PCA) based assessment of the gait performance. Biomedizinische Technik, 2021, 66, 449-457.	0.8	6
5	New scale for assessing spasticity based on the pendulum test. Computer Methods in Biomechanics and Biomedical Engineering, 2021, , 1-10.	1.6	5
6	EMG map image processing for recognition of fingers movement. Journal of Electromyography and Kinesiology, 2019, 49, 102364.	1.7	11
7	Anthocyanins Protect Hepatocytes against CCL4-Induced Acute Liver Injury in Rats by Inhibiting Pro-inflammatory mediators, Polyamine Catabolism, Lipocalin-2, and Excessive Proliferation of Kupffer Cells. Antioxidants, 2019, 8, 451.	5.1	27
8	Functional Electric Stimulation Therapy. , 2019, , 614-620.		1
9	Two different melatonin treatment regimens prevent an increase in kidney injury marker-1 induced by carbon tetrachloride in rat kidneys. Canadian Journal of Physiology and Pharmacology, 2019, 97, 422-428.	1.4	11
10	Protective effects of anthocyanins from bilberry extract in rats exposed to nephrotoxic effects of carbon tetrachloride. Chemico-Biological Interactions, 2019, 304, 61-72.	4.0	31
11	Assessment of Spasticity by a Pendulum Test in SCI Patients Who Exercise FES Cycling or Receive Only Conventional Therapy. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 181-187.	4.9	19
12	Hybrid FES-robot devices for training of activities of daily living. , 2018, , 277-287.		4
13	Does galvanic vestibular stimulation decrease spasticity in clinically complete spinal cord injury?. International Journal of Rehabilitation Research, 2018, 41, 251-257.	1.3	5
14	Pendulum test: Quantified assessment of the type and level of spasticity in persons with central nervous system lesions. Serbian Journal of Electrical Engineering, 2018, 15, 1-12.	0.4	2
15	The assessment of spasticity: Pendulum test based smart phone movie of passive markers. Serbian Journal of Electrical Engineering, 2018, 15, 29-39.	0.4	1
16	Antioxidant and proapoptotic effects of anthocyanins from bilberry extract in rats exposed to hepatotoxic effects of carbon tetrachloride. Life Sciences, 2016, 157, 168-177.	4.3	30
17	Stimulation map for control of functional grasp based on multi-channel EMG recordings. Medical Engineering and Physics, 2016, 38, 1251-1259.	1.7	18
18	Control of a Robotic Hand Using a Tongue Control Systemâ€™A Prosthesis Application. IEEE Transactions on Biomedical Engineering, 2016, 63, 1368-1376.	4.2	51

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19	A comparative study of virtual hand prosthesis control using an inductive tongue control system. <i>Assistive Technology</i> , 2016, 28, 22-29.	2.0	3
20	Posture in dentists: Sitting vs. standing positions during dentistry work - an EMG study. <i>Srpski Arhiv Za Celokupno Lekarstvo</i> , 2016, 144, 181-187.	0.2	19
21	GammaKey software for acquiring, storing, retrieving and processing images obtained by gamma camera "Benefits for clinical practice. , 2015, , .		0
22	Recording and assessment of evoked potentials with electrode arrays. <i>Medical and Biological Engineering and Computing</i> , 2015, 53, 857-867.	2.8	3
23	Sensor fusion and computer vision for context-aware control of a multi degree-of-freedom prosthesis. <i>Journal of Neural Engineering</i> , 2015, 12, 066022.	3.5	89
24	Foot Drop Stimulator. , 2015, , 1-12.		0
25	EMG based biofeedback with the smarting system. , 2014, , .		2
26	Microsoft Kinect-Based Artificial Perception System for Control of Functional Electrical Stimulation Assisted Grasping. <i>BioMed Research International</i> , 2014, 2014, 1-12.	1.9	13
27	Computer vision with Microsoft Kinect for control of functional electrical stimulation: ANN classification of the grasping intentions. , 2014, , .		1
28	Stereovision and augmented reality for closed-loop control of grasping in hand prostheses. <i>Journal of Neural Engineering</i> , 2014, 11, 046001.	3.5	95
29	GammaKey system for improved diagnostics with gamma cameras. <i>Computers in Biology and Medicine</i> , 2014, 50, 97-106.	7.0	3
30	Advances in functional electrical stimulation (FES). <i>Journal of Electromyography and Kinesiology</i> , 2014, 24, 795-802.	1.7	124
31	Controlling hand-assistive devices: utilizing electrooculography as a substitute for vision. <i>IEEE Robotics and Automation Magazine</i> , 2013, 20, 40-52.	2.0	20
32	A method for assessing the arm movement performance: probability tube. <i>Medical and Biological Engineering and Computing</i> , 2013, 51, 1315-1323.	2.8	6
33	Multi-Pad Electrode for Effective Grasping: Design. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2013, 21, 648-654.	4.9	54
34	Surface-distributed low-frequency asynchronous stimulation delays fatigue of stimulated muscles. <i>Muscle and Nerve</i> , 2013, 48, 930-937.	2.2	60
35	Muscle synergies with Walkaround® postural support vs. "cane/therapist" assistance. <i>NeuroRehabilitation</i> , 2013, 33, 491-501.	1.3	0
36	Third-party application for quantitative salivary gland scintigraphy. , 2013, , .		1

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37	Assisting Persons after Stroke to Restore Gait: Hybrid System. Biosystems and Biorobotics, 2013, , 209-213.	0.3	1
38	Control of robot assistant for rehabilitation of upper extremities. , 2012, 2012, 3918-21.		2
39	Software Tool for the Prosthetic Foot Modeling and Stiffness Optimization. Computational and Mathematical Methods in Medicine, 2012, 2012, 1-8.	1.3	4
40	Principal Component Analysis of Gait Kinematics Data in Acute and Chronic Stroke Patients. Computational and Mathematical Methods in Medicine, 2012, 2012, 1-8.	1.3	41
41	Nonlinear optimization for drift removal in estimation of gait kinematics based on accelerometers. Journal of Biomechanics, 2012, 45, 2849-2854.	2.1	20
42	WiiMote control: Gaming feedback for motivational training of the arm movements. , 2012, , .		4
43	H-reflex recorded by multi-pad EMG electrodes. , 2012, , .		1
44	Wireless distributed functional electrical stimulation system. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 54.	4.6	27
45	A multi-pad electrode based functional electrical stimulation system for restoration of grasp. Journal of NeuroEngineering and Rehabilitation, 2012, 9, 66.	4.6	130
46	Guest Editorial Motor Skill Learning and Neuro-Rehabilitation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2012, 20, 237-238.	4.9	7
47	Kinect in neurorehabilitation: Computer vision system for real time hand and object detection and distance estimation. , 2012, , .		11
48	A Novel Hand Prosthesis Control Scheme Implementing a Tongue Control System. International Journal of Engineering and Manufacturing, 2012, 2, 14-21.	0.7	8
49	Influence of planar manipulandum to the hand trajectory during point to point movement. , 2011, 2011, 5975396.		10
50	A soft wearable robot for tremor assessment and suppression. , 2011, , .		29
51	New generation of assistive systems for humans with disability: New tool for neurorehabilitation. , 2011, , .		1
52	Advances in the use of electrical stimulation for the recovery of motor function. Progress in Brain Research, 2011, 194, 215-225.	1.4	14
53	Functional Electrical Therapy for Hemiparesis Alleviates Disability and Enhances Neuroplasticity. Tohoku Journal of Experimental Medicine, 2011, 225, 71-76.	1.2	26
54	Transradial Prosthesis: Artificial Vision for Control of Prehension. Artificial Organs, 2011, 35, 37-48.	1.9	35

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55	Electrical stimulation for the suppression of pathological tremor. Medical and Biological Engineering and Computing, 2011, 49, 1187-1193.	2.8	103
56	Recovery of motor function after stroke: A polymyography-based analysis. Journal of Neuroscience Methods, 2011, 194, 321-328.	2.5	15
57	Action representation of point to point movements: Classification with probability tube. , 2011, , .		3
58	Kinematics of Gait: New Method for Angle Estimation Based on Accelerometers. Sensors, 2011, 11, 10571-10585.	3.8	74
59	Wearable Neural Prostheses. IEEE Engineering in Medicine and Biology Magazine, 2010, 29, 64-69.	0.8	42
60	Distributed low-frequency functional electrical stimulation delays muscle fatigue compared to conventional stimulation. Muscle and Nerve, 2010, 42, 556-562.	2.2	98
61	Cognitive vision system for control of dexterous prosthetic hands: Experimental evaluation. Journal of NeuroEngineering and Rehabilitation, 2010, 7, 42.	4.6	96
62	Learning Arm/Hand Coordination with an Altered Visual Input. Computational Intelligence and Neuroscience, 2010, 2010, 1-12.	1.7	13
63	Action representation for Wii bowling: Classification. , 2010, , .		3
64	An EMG system for studying motor control strategies and fatigue. , 2010, , .		6
65	Mapping of sensory representation of walking and EMG of prime joint movers: Control of functional electrical stimulation. , 2010, , .		4
66	Beginnings of the Societies. , 2009, , 49-60.		0
67	Reproducibility of 'BUDA' multisensor system for gait analysis. , 2009, , .		3
68	Influence on walking dynamics of a gait training device that is connected through a lumbar belt. , 2009, , .		0
69	Electrical stimulation as a means for achieving recovery of function in stroke patients. NeuroRehabilitation, 2009, 25, 45-58.	1.3	72
70	Neurorehabilitation Technologies " Present and Future Possibilities. NeuroRehabilitation, 2009, 25, 1-3.	1.3	7
71	Control of the Lower Leg During Walking: A Versatile Model of the Foot. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2009, 17, 63-69.	4.9	5
72	Moving-Window Dynamic Optimization: Design of Stimulation Profiles for Walking. IEEE Transactions on Biomedical Engineering, 2009, 56, 1298-1309.	4.2	18

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73	Lumbar Stimulation Belt for Therapy of Low Back Pain. Artificial Organs, 2009, 33, 54-60.	1.9	6
74	Automatic determination of the optimal shape of a surface electrode: Selective stimulation. Journal of Neuroscience Methods, 2009, 178, 174-181.	2.5	69
75	Sensor-driven four-channel stimulation of paretic leg: Functional electrical walking therapy. Journal of Neuroscience Methods, 2009, 181, 100-105.	2.5	47
76	AAU-BOT1: a platform for studying dynamic, life-like walking. Applied Bionics and Biomechanics, 2009, 6, 285-299.	1.1	0
77	Biomechanical Modeling for Biologically Inspired Control of Neural Prostheses for Walking. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 359-364.	0.4	0
78	Control of prehension for the transradial prosthesis: Natural-like image recognition system. Journal of Automatic Control, 2009, 19, 27-31.	1.0	12
79	Cortical excitability changes following grasping exercise augmented with electrical stimulation. Experimental Brain Research, 2008, 191, 57-66.	1.5	118
80	Accelerometers and Force Sensing Resistors for Optimal Control of Walking of a Hemiplegic. IEEE Transactions on Biomedical Engineering, 2008, 55, 1973-1984.	4.2	25
81	Walkaround: Mobile Balance Support for Therapy of Walking. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2008, 16, 264-269.	4.9	31
82	External control of movements and artificial neural networks. , 2008, , .		1
83	Functional electrical stimulation for walking: rule based controller using accelerometers. , 2008, , .		2
84	Rule-based control of walking by using decision trees and practical sensors. , 2008, , .		2
85	Central nervous system lesions leading to disability. Journal of Automatic Control, 2008, 18, 11-23.	1.0	8
86	Neural prostheses for walking restoration. Journal of Automatic Control, 2008, 18, 63-71.	1.0	8
87	Control Aspects of Motor Neural Prosthesis: Sensory Interface. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 4361-3.	0.5	2
88	Online adaptation of optimal control of externally controlled walking of a hemiplegic individual. , 2007, , .		4
89	Optiwalk. Un nouvel outil pour la conception et la simulation de lois de commande pour le contrÃ1le de la marche de patients atteints de dÃ©ficits moteurs. Journal Europeen Des Systemes Automatises, 2007, 41, 239-259.	0.4	6
90	Design of a Control for a Neural Prosthesis for Walking: Use of Artificial Neural Networks. , 2006, , .		4

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91	Finite State Model of Walking Determined by Adaptive Logic Networks. , 2006, , .		1
92	Symmetry of post-movement beta-ERS and motor recovery from stroke: a low-resolution EEG pilot study. European Journal of Neurology, 2006, 13, 1312-1323.	3.3	17
93	Functional Electrical Stimulation: A MatLab Based Tool for Designing Stimulation Patterns. , 2006, 2006, 5404-7.		3
94	Hybrid Assistive Systems for Rehabilitation: Lessons Learned from Functional Electrical Therapy in Hemiplegics. , 2006, 2006, 2146-9.		10
95	Hybrid Assistive Systems for Rehabilitation: Lessons Learned from Functional Electrical Therapy in Hemiplegics. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
96	Multi-Field Surface Electrode for Selective Electrical Stimulation. Artificial Organs, 2005, 29, 448-452.	1.9	88
97	Life-like Control for Neural Prostheses: "Proximal Controls Distal". , 2005, 2005, 7648-51.		6
98	The Drawing Test: Assessment of coordination abilities and correlation with clinical measurement of spasticity. Archives of Physical Medicine and Rehabilitation, 2005, 86, 289-295.	0.9	15
99	Therapy of paretic arm in hemiplegic subjects augmented with a neural prosthesis: A cross-over study. Canadian Journal of Physiology and Pharmacology, 2004, 82, 749-756.	1.4	101
100	Functional Electrical Therapy (FET): Clinical Trial in Chronic Hemiplegic Subjects. Neuromodulation, 2004, 7, 133-140.	0.8	30
101	E Actitrode: The new selective stimulation interface for functional movements in hemiplegics patients. Serbian Journal of Electrical Engineering, 2004, 1, 21-28.	0.4	19
102	CONTROL ISSUES FOR MOTOR NEUROPROSTHESES. Series on Bioengineering and Biomedical Engineering, 2004, , 809-843.	0.1	2
103	Automatic vs hand-controlled walking of paraplegics. Medical Engineering and Physics, 2003, 25, 63-73.	1.7	51
104	Control of current and future neural prostheses. Medical Engineering and Physics, 2003, 25, 1-2.	1.7	2
105	Clinical evaluation of Functional Electrical Therapy in acute hemiplegic subjects. Journal of Rehabilitation Research and Development, 2003, 40, 443.	1.6	140
106	Optimal control of a two-wheeled mobile robot: Simulation for selecting of the motors. Facta Universitatis - Series Electronics and Energetics, 2003, 16, 55-65.	0.9	0
107	Control of leg movements driven by electrically stimulated muscles. Journal of Automatic Control, 2003, 13, 35-41.	1.0	1
108	Neuroprostheses for grasping. Neurological Research, 2002, 24, 443-452.	1.3	149

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109	Automatic recognition of alertness and drowsiness from EEG by an artificial neural network. Medical Engineering and Physics, 2002, 24, 349-360.	1.7	176
110	Neurorehabilitation of Upper Extremities in Humans with Sensory-Motor Impairment. Neuromodulation, 2002, 5, 54-66.	0.8	41
111	Restitution of Reaching and Grasping Promoted by Functional Electrical Therapy. Artificial Organs, 2002, 26, 271-275.	1.9	84
112	Control of arm movement: reaching synergies for neuroprosthesis with life-like control. Journal of Automatic Control, 2002, 12, 9-15.	1.0	15
113	New controller for functional electrical stimulation systems. Medical Engineering and Physics, 2001, 23, 391-399.	1.7	27
114	Functional postural responses after perturbations in multiple directions in a standing man: a principle of decoupled control. Journal of Biomechanics, 2001, 34, 187-196.	2.1	38
115	Cloning biological synergies improves control of elbow neuroprostheses. IEEE Engineering in Medicine and Biology Magazine, 2001, 20, 74-81.	0.8	60
116	Improved Control for Functional Electrical Stimulation to Restore Walking. Hong Kong Physiotherapy Journal, 2000, 18, 12-20.	1.0	3
117	Feedback error learning neural network for trans-femoral prosthesis. IEEE Transactions on Rehabilitation Engineering: A Publication of the IEEE Engineering in Medicine and Biology Society, 2000, 8, 71-80.	1.4	46
118	Nonanalytical Control for Assisting Reaching in Humans with Disabilities. , 2000, , 535-550.		4
119	Automatic synthesis of synergies for control of reaching â€” hierarchical clustering. Medical Engineering and Physics, 1999, 21, 329-341.	1.7	6
120	Three machine learning techniques for automatic determination of rules to control locomotion. IEEE Transactions on Biomedical Engineering, 1999, 46, 300-310.	4.2	97
121	Optimal control of walking with functional electrical stimulation: a computer simulation study. IEEE Transactions on Rehabilitation Engineering: A Publication of the IEEE Engineering in Medicine and Biology Society, 1999, 7, 69-79.	1.4	124
122	Clinical evaluation of the bionic glove. Archives of Physical Medicine and Rehabilitation, 1999, 80, 299-304.	0.9	108
123	Kinematic redundancy and sensor redundancy for enhancement of robot tracking performance. Journal of Intelligent and Robotic Systems: Theory and Applications, 1996, 15, 263-289.	3.4	4
124	Variable structure systems for control of redundant robot. Robotics and Autonomous Systems, 1994, 13, 13-24.	5.1	9
125	Chapter 35 Finite state model of locomotion for functional electrical stimulation systems. Progress in Brain Research, 1993, 97, 397-407.	1.4	30
126	Control aspects of active above-knee prosthesis. International Journal of Man-Machine Studies, 1991, 35, 751-767.	0.7	54

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127	Properties of implanted electrodes for functional electrical stimulation. Annals of Biomedical Engineering, 1991, 19, 303-316.	2.5	59
128	Strategies for Functional Electrical Stimulation: Implications for Control. Advances in Psychology, 1991, 78, 413-438.	0.1	1
129	Peripheral nerve stimulation in neurological rehabilitation. , 0, , .		6
130	Reliability of Discrete-Event Control at Coordination Level for a Powered Transfemoral Prosthesis. , 0, , .		2
131	Restoration of Movement by Implantable Neural Motor Prostheses. , 0, , 227-241.		0