Arthur Prochazka

List of Publications by Year
in descending order

44 papers	3,206 citations	257101 24 h-index	315357 38 g-index
47 all docs	47 docs citations	47 times ranked	2323 citing authors

#	Article	IF	Citations
1	Proprioceptor Models. , 2022, , 2899-2917.		0
2	Proprioception: clinical relevance and neurophysiology. Current Opinion in Physiology, 2021, 23, 100440.	0.9	12
3	Secondary endings of muscle spindles: Structure, reflex action, role in motor control and proprioception. Experimental Physiology, 2021, 106, 2339-2366.	0.9	22
4	Motor Neuroprostheses. , 2018, 9, 127-148.		6
5	Neurophysiology and neural engineering: a review. Journal of Neurophysiology, 2017, 118, 1292-1309.	0.9	30
6	Neuromuscular Models for Locomotion. , 2017, , 401-453.		9
7	Targeted stimulation of the spinal cord to restore locomotor activity. Nature Medicine, 2016, 22, 125-126.	15.2	10
8	Neural Prostheses for Neurotrauma. , 2016, , 457-478.		1
9	Sensory control of normal movement and of movement aided by neural prostheses. Journal of Anatomy, 2015, 227, 167-177.	0.9	16
10	A Fully Automated, Quantitative Test of Upper Limb Function. Journal of Motor Behavior, 2015, 47, 19-28.	0.5	22
11	Proprioceptor Models. , 2014, , 1-20.		1
12	Sensory Systems in the Control of Movement. , 2012, 2, 2615-2627.		71
13	Passive Devices for Upper Limb Training. , 2012, , 159-171.		5
14	In-Home Tele-Rehabilitation Improves Tetraplegic Hand Function. Neurorehabilitation and Neural Repair, 2011, 25, 412-422.	1.4	100
15	Technology improves upper extremity rehabilitation. Progress in Brain Research, 2011, 192, 147-159.	0.9	13
16	Predictive and reactive tuning of the locomotor CPG. Integrative and Comparative Biology, 2007, 47, 474-481.	0.9	24
17	The neuromechanical tuning hypothesis. Progress in Brain Research, 2007, 165, 255-265.	0.9	40
18	A New Means of Transcutaneous Coupling for Neural Prostheses. IEEE Transactions on Biomedical Engineering, 2007, 54, 509-517.	2.5	22

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19	Movements elicited by electrical stimulation of muscles, nerves, intermediate spinal cord, and spinal roots in anesthetized and decerebrate cats. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2004, 12, 1-11.	2.7	36
20	A functional electric stimulationâ€"assisted exercise therapy system for hemiplegic hand function11No commercial party having a direct financial interest in the results of the research supporting this article has or will confer a benefit upon the authors(s) or upon any organization with which the author(s) is/are associated.. Archives of Physical Medicine and Rehabilitation, 2004, 85, 881-885.	0.5	62
21	SPINAL CORD AND ROOTLETS. Series on Bioengineering and Biomedical Engineering, 2004, , 786-806.	0.1	2
22	SPINAL CORD STIMULATION FOR RESTORING LOWER EXTREMITY FUNCTION. Series on Bioengineering and Biomedical Engineering, 2004, , 1035-1053.	0.1	1
23	Sensory Control of Locomotion: Reflexes Versus Higher-Level Control. Advances in Experimental Medicine and Biology, 2002, 508, 357-367.	0.8	51
24	Chapter 9 Activation and coordination of spinal motoneuron pools after spinal cord injury. Progress in Brain Research, 2002, 137, 109-124.	0.9	28
25	Intraspinal micro stimulation generates locomotor-like and feedback-controlled movements. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2002, 10, 68-81.	2.7	118
26	The man-machine analogy in robotics and neurophysiology. Journal of Automatic Control, 2002, 12, 4-8.	1.0	4
27	Neural prostheses. Journal of Physiology, 2001, 533, 99-109.	1.3	140
28	Adaptive changes in locomotor control after partial denervation of triceps surae muscles in the cat. Journal of Physiology, 2001, 533, 299-311.	1.3	36
29	Isometric muscle lengthâ€"tension curves do not predict angleâ€"torque curves of human wrist in continuous active movements. Journal of Biomechanics, 2000, 33, 1341-1348.	0.9	22
30	What do reflex and voluntary mean? Modern views on an ancient debate. Experimental Brain Research, 2000, 130, 417-432.	0.7	151
31	Voluntary and reflex control of human back muscles during induced pain. Journal of Physiology, 1999, 520, 591-604.	1.3	193
32	Chapter 11 Quantifying Proprioception. Progress in Brain Research, 1999, 123, 133-142.	0.9	62
33	Models of ensemble firing of muscle spindle afferents recorded during normal locomotion in cats. Journal of Physiology, 1998, 507, 277-291.	1.3	142
34	Ensemble firing of muscle afferents recorded during normal locomotion in cats. Journal of Physiology, 1998, 507, 293-304.	1.3	144
35	The continuing debate about CNS control of proprioception. Journal of Physiology, 1998, 513, 315-315.	1.3	16
36	The bionic glove: An electrical stimulator garment that provides controlled grasp and hand opening in quadriplegia. Archives of Physical Medicine and Rehabilitation, 1997, 78, 608-614.	0.5	211

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37	Implications of Positive Feedback in the Control of Movement. Journal of Neurophysiology, 1997, 77, 3237-3251.	0.9	160
38	Positive Force Feedback Control of Muscles. Journal of Neurophysiology, 1997, 77, 3226-3236.	0.9	152
39	Phasic activity in the human erector spinae during repetitive hand movements. Journal of Physiology, 1997, 504, 727-734.	1.3	28
40	Measurement of rigidity in Parkinson's disease. Movement Disorders, 1997, 12, 24-32.	2.2	121
41	Catching a ball: contributions of intrinsic muscle stiffness, reflexes, and higher order responses. Canadian Journal of Physiology and Pharmacology, 1994, 72, 525-534.	0.7	61
42	Attenuation of pathological tremors by functional electrical stimulation I: Method. Annals of Biomedical Engineering, 1992, 20, 205-224.	1.3	132
43	Attenuation of pathological tremors by functional electrical stimulation II: Clinical evaluation. Annals of Biomedical Engineering, 1992, 20, 225-236.	1.3	65
44	Sensorimotor gain control: A basic strategy of motor systems?. Progress in Neurobiology, 1989, 33, 281-307.	2.8	516