Sergiy Yakovenko

List of Publications by Year
in descending order

30 papers	1,091 citations	516710 16 h-index	552781 26 g-index
42 all docs	42 docs citations	42 times ranked	1197 citing authors

#	Article	IF	Citations
1	Cortical mechanisms involved in visuomotor coordination during precision walking. Brain Research Reviews, 2008, 57, 199-211.	9.0	172
2	Spatiotemporal Activation of Lumbosacral Motoneurons in the Locomotor Step Cycle. Journal of Neurophysiology, 2002, 87, 1542-1553.	1.8	140
3	Contribution of stretch reflexes to locomotor control: a modeling study. Biological Cybernetics, 2004, 90, 146-155.	1.3	126
4	Integration of Predictive Feedforward and Sensory Feedback Signals for Online Control of Visually Guided Movement. Journal of Neurophysiology, 2009, 102, 914-930.	1.8	108
5	Automated Assessment of Upper Extremity Movement Impairment due to Stroke. PLoS ONE, 2014, 9, e104487.	2.5	77
6	Sequential Activation of Motor Cortical Neurons Contributes to Intralimb Coordination During Reaching in the Cat by Modulating Muscle Synergies. Journal of Neurophysiology, 2011, 105, 388-409.	1.8	63
7	Sensory Control of Locomotion: Reflexes Versus Higher-Level Control. Advances in Experimental Medicine and Biology, 2002, 508, 357-367.	1.6	51
8	The neuromechanical tuning hypothesis. Progress in Brain Research, 2007, 165, 255-265.	1.4	40
9	Similar Motor Cortical Control Mechanisms for Precise Limb Control during Reaching and Locomotion. Journal of Neuroscience, 2015, 35, 14476-14490.	3.6	40
10	Intraspinal Stimulation Caudal to Spinal Cord Transections in Rats. Testing the Propriospinal Hypothesis. Journal of Neurophysiology, 2007, 97, 2570-2574.	1.8	39
11	A Motor Cortical Contribution to the Anticipatory Postural Adjustments That Precede Reaching in the Cat. Journal of Neurophysiology, 2009, 102, 853-874.	1.8	38
12	Chapter 9 Activation and coordination of spinal motoneuron pools after spinal cord injury. Progress in Brain Research, 2002, 137, 109-124.	1.4	28
13	Biomechanical Constraints Underlying Motor Primitives Derived from the Musculoskeletal Anatomy of the Human Arm. PLoS ONE, 2016, 11, e0164050.	2.5	28
14	A hierarchical perspective on rhythm generation for locomotor control. Progress in Brain Research, 2011, 188, 151-166.	1.4	25
15	Predictive and reactive tuning of the locomotor CPG. Integrative and Comparative Biology, 2007, 47, 474-481.	2.0	24
16	Isometric muscle length–tension curves do not predict angle–torque curves of human wrist in continuous active movements. Journal of Biomechanics, 2000, 33, 1341-1348.	2.1	22
17	Computational evidence for nonlinear feedforward modulation of fusimotor drive to antagonistic co-contracting muscles. Scientific Reports, 2020, 10, 10625.	3.3	11
18	Approximating complex musculoskeletal biomechanics using multidimensional autogenerating polynomials. PLoS Computational Biology, 2020, 16, e1008350.	3.2	10

#	Article	IF	Citations
19	Solving musculoskeletal biomechanics with machine learning. PeerJ Computer Science, 2021, 7, e663.	4.5	8
20	Conceptualizing the mammalian locomotor central pattern generator with modelling. Journal of Physiology, 2007, 580, 363-364.	2.9	3
21	Strengthening Corticospinal Connections with Chronic Electrical Stimulation after Injury. Journal of Neuroscience, 2008, 28, 3262-3263.	3.6	3
22	Asymmetric Walkway: A Novel Behavioral Assay for Studying Asymmetric Locomotion. Journal of Visualized Experiments, 2016, , e52921.	0.3	3
23	Model of a bilateral Brown-type central pattern generator for symmetric and asymmetric locomotion. Journal of Neurophysiology, 2018, 119, 1071-1083.	1.8	3
24	Young adults perceive small disturbances to their walking balance even when distracted. Gait and Posture, 2021, 91, 198-204.	1.4	3
25	Muscle synergy decomposition analysis using wavelet detection in human locomotor activity. , 2015, , .		1
26	The same muscle synergies are used to control symmetric and asymmetric locomotion. , 2021, , .		1
27	A novel method of identifying motor primitives using wavelet decomposition. , 2018, 2018, 122-125.		0
28	A segmented forearm model of hand pronation-supination approximates joint moments for real time applications**Research supported by National Institute of General Medical Sciences and the National Institute of Child Health and Human Development.. , 2021, 2021, 751-754.		0
29	Compensatory Strategies Due to Knee Flexion Constraint during Gait of Non-Disabled Adults. Journal of Motor Behavior, 2022, 54, 281-290.	0.9	0
30	Quantifying Performance in Robotic Surgery Training Using Muscle-Based Activity Metrics. , 2021, , .		0