Christopher L Dembia

List of Publications by Year
in descending order

13 papers	2,140 citations	840776 11 h-index	1125743 13 g-index
16 all docs	16 docs citations	16 times ranked	1649 citing authors

#	ARTICLE	IF	CITATIONS
1	OpenSim: Simulating musculoskeletal dynamics and neuromuscular control to study human and animal movement. PLoS Computational Biology, 2018, 14, e1006223.	3.2	735
2	Full-Body Musculoskeletal Model for Muscle-Driven Simulation of Human Gait. IEEE Transactions on Biomedical Engineering, 2016, 63, 2068-2079.	4.2	580
3	Rapid predictive simulations with complex musculoskeletal models suggest that diverse healthy and pathological human gaits can emerge from similar control strategies. Journal of the Royal Society Interface, 2019, 16, 20190402.	3.4	158
4	Simulating Ideal Assistive Devices to Reduce the Metabolic Cost of Running. PLoS ONE, 2016, 11, e0163417.	2.5	127
5	Simulating ideal assistive devices to reduce the metabolic cost of walking with heavy loads. PLoS ONE, 2017, 12, e0180320.	2.5	121
6	OpenSim Moco: Musculoskeletal optimal control. PLoS Computational Biology, 2020, 16, e1008493.	3.2	96
7	Stretching Your Energetic Budget: How Tendon Compliance Affects the Metabolic Cost of Running. PLoS ONE, 2016, 11, e0150378.	2.5	95
8	Muscle-tendon mechanics explain unexpected effects of exoskeleton assistance on metabolic rate during walking. Journal of Experimental Biology, 2017, 220, 2082-2095.	1.7	73
9	Subject-Exoskeleton Contact Model Calibration Leads to Accurate Interaction Force Predictions. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1597-1605.	4.9	55
10	Algorithmic differentiation improves the computational efficiency of OpenSim-based trajectory optimization of human movement. PLoS ONE, 2019, 14, e0217730.	2.5	54
11	Foot strike pattern during running alters muscle-tendon dynamics of the gastrocnemius and the soleus. Scientific Reports, 2020, 10, 5872.	3.3	23
12	An object oriented implementation of the Yeadon human inertia model. F1000Research, 2014, 3, 223.	1.6	3
13	An object oriented implementation of the Yeadon human inertia model. F1000Research, 2014, 3, 223.	1.6	1