

Jonathan Bates Dingwell

List of Publications by Citations

Source: <https://exaly.com/author-pdf/952459/jonathan-bates-dingwell-publications-by-citations.pdf>

Version: 2024-02-21

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

80
papers

5,318
citations

39
h-index

72
g-index

91
ext. papers

6,145
ext. citations

2.9
avg, IF

6.06
L-index

#	Paper	IF	Citations
80	Local dynamic stability versus kinematic variability of continuous overground and treadmill walking. <i>Journal of Biomechanical Engineering</i> , 2001 , 123, 27-32	2.1	449
79	Kinematic variability and local dynamic stability of upper body motions when walking at different speeds. <i>Journal of Biomechanics</i> , 2006 , 39, 444-52	2.9	424
78	Nonlinear time series analysis of normal and pathological human walking. <i>Chaos</i> , 2000 , 10, 848-863	3.3	406
77	Learning to move amid uncertainty. <i>Journal of Neurophysiology</i> , 2001 , 86, 971-85	3.2	315
76	Separating the effects of age and walking speed on gait variability. <i>Gait and Posture</i> , 2008 , 27, 572-7	2.6	284
75	Effects of walking speed, strength and range of motion on gait stability in healthy older adults. <i>Journal of Biomechanics</i> , 2008 , 41, 2899-905	2.9	213
74	Slower speeds in patients with diabetic neuropathy lead to improved local dynamic stability of continuous overground walking. <i>Journal of Biomechanics</i> , 2000 , 33, 1269-77	2.9	184
73	Do humans optimally exploit redundancy to control step variability in walking?. <i>PLoS Computational Biology</i> , 2010 , 6, e1000856	5	133
72	Differences between local and orbital dynamic stability during human walking. <i>Journal of Biomechanical Engineering</i> , 2007 , 129, 586-93	2.1	133
71	Walking variability during continuous pseudo-random oscillations of the support surface and visual field. <i>Journal of Biomechanics</i> , 2010 , 43, 1470-5	2.9	129
70	Dynamic margins of stability during human walking in destabilizing environments. <i>Journal of Biomechanics</i> , 2012 , 45, 1053-9	2.9	120
69	Dynamic stability of human walking in visually and mechanically destabilizing environments. <i>Journal of Biomechanics</i> , 2011 , 44, 644-9	2.9	116
68	Increased variability of continuous overground walking in neuropathic patients is only indirectly related to sensory loss. <i>Gait and Posture</i> , 2001 , 14, 1-10	2.6	116
67	Re-interpreting detrended fluctuation analyses of stride-to-stride variability in human walking. <i>Gait and Posture</i> , 2010 , 32, 348-53	2.6	112
66	The effects of neuromuscular fatigue on task performance during repetitive goal-directed movements. <i>Experimental Brain Research</i> , 2008 , 187, 573-85	2.3	95
65	Voluntary changes in step width and step length during human walking affect dynamic margins of stability. <i>Gait and Posture</i> , 2012 , 36, 219-24	2.6	91
64	Dynamic stability of superior vs. inferior segments during walking in young and older adults. <i>Gait and Posture</i> , 2009 , 30, 260-3	2.6	81

63	A direct comparison of local dynamic stability during unperturbed standing and walking. <i>Experimental Brain Research</i> , 2006 , 172, 35-48	2.3	80
62	Experimentally confirmed mathematical model for human control of a non-rigid object. <i>Journal of Neurophysiology</i> , 2004 , 91, 1158-70	3.2	80
61	Kinematic strategies for walking across a destabilizing rock surface. <i>Gait and Posture</i> , 2012 , 35, 36-42	2.6	74
60	Manipulating objects with internal degrees of freedom: evidence for model-based control. <i>Journal of Neurophysiology</i> , 2002 , 88, 222-35	3.2	73
59	Voluntarily changing step length or step width affects dynamic stability of human walking. <i>Gait and Posture</i> , 2012 , 35, 472-7	2.6	71
58	Changes in muscle activity and kinematics of highly trained cyclists during fatigue. <i>IEEE Transactions on Biomedical Engineering</i> , 2008 , 55, 2666-74	5	71
57	Neuropathic gait shows only trends towards increased variability of sagittal plane kinematics during treadmill locomotion. <i>Gait and Posture</i> , 1999 , 10, 21-9	2.6	71
56	Dynamics and stability of muscle activations during walking in healthy young and older adults. <i>Journal of Biomechanics</i> , 2009 , 42, 2231-7	2.9	70
55	Dynamic stability of passive dynamic walking on an irregular surface. <i>Journal of Biomechanical Engineering</i> , 2007 , 129, 802-10	2.1	70
54	Dynamic instability during post-stroke hemiparetic walking. <i>Gait and Posture</i> , 2014 , 40, 457-63	2.6	65
53	Frontal plane dynamic margins of stability in individuals with and without transtibial amputation walking on a loose rock surface. <i>Gait and Posture</i> , 2013 , 38, 570-5	2.6	57
52	The effects of sensory loss and walking speed on the orbital dynamic stability of human walking. <i>Journal of Biomechanics</i> , 2007 , 40, 1723-30	2.9	57
51	Peripheral neuropathy does not alter the fractal dynamics of stride intervals of gait. <i>Journal of Applied Physiology</i> , 2007 , 102, 965-71	3.7	56
50	Possible Biomechanical Origins of the Long-Range Correlations in Stride Intervals of Walking. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2007 , 380, 259-270	3.3	55
49	Intra-session reliability of local dynamic stability of walking. <i>Gait and Posture</i> , 2006 , 24, 386-90	2.6	51
48	Gait characteristics of individuals with transtibial amputations walking on a destabilizing rock surface. <i>Gait and Posture</i> , 2012 , 36, 33-9	2.6	49
47	Comparison of different state space definitions for local dynamic stability analyses. <i>Journal of Biomechanics</i> , 2009 , 42, 1345-9	2.9	49
46	Effects of an attention demanding task on dynamic stability during treadmill walking. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2008 , 5, 12	5.3	48

45	Influence of simulated neuromuscular noise on movement variability and fall risk in a 3D dynamic walking model. <i>Journal of Biomechanics</i> , 2010 , 43, 2929-35	2.9	43
44	Identifying stride-to-stride control strategies in human treadmill walking. <i>PLoS ONE</i> , 2015 , 10, e0124879	3.7	42
43	Margins of stability in young adults with traumatic transtibial amputation walking in destabilizing environments. <i>Journal of Biomechanics</i> , 2014 , 47, 1138-43	2.9	41
42	Movement variability near goal equivalent manifolds: fluctuations, control, and model-based analysis. <i>Human Movement Science</i> , 2013 , 32, 899-923	2.4	40
41	Comparison of walking overground and in a Computer Assisted Rehabilitation Environment (CAREN) in individuals with and without transtibial amputation. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2012 , 9, 81	5.3	39
40	The effects of muscle fatigue and movement height on movement stability and variability. <i>Experimental Brain Research</i> , 2011 , 209, 525-36	2.3	37
39	Influence of simulated neuromuscular noise on the dynamic stability and fall risk of a 3D dynamic walking model. <i>Journal of Biomechanics</i> , 2011 , 44, 1514-20	2.9	36
38	Increased gait variability may not imply impaired stride-to-stride control of walking in healthy older adults: Winner: 2013 Gait and Clinical Movement Analysis Society Best Paper Award. <i>Gait and Posture</i> , 2017 , 55, 131-137	2.6	33
37	Dynamic stability of individuals with transtibial amputation walking in destabilizing environments. <i>Journal of Biomechanics</i> , 2014 , 47, 1675-81	2.9	31
36	Effects of perturbation magnitude on dynamic stability when walking in destabilizing environments. <i>Journal of Biomechanics</i> , 2012 , 45, 2084-91	2.9	31
35	Lyapunov Exponents 2006 ,		28
34	Trial-to-trial dynamics and learning in a generalized, redundant reaching task. <i>Journal of Neurophysiology</i> , 2013 , 109, 225-37	3.2	26
33	Mediolateral angular momentum changes in persons with amputation during perturbed walking. <i>Gait and Posture</i> , 2015 , 41, 795-800	2.6	25
32	Muscle fatigue does not lead to increased instability of upper extremity repetitive movements. <i>Journal of Biomechanics</i> , 2010 , 43, 913-9	2.9	24
31	Adaptability of stride-to-stride control of stepping movements in human walking. <i>Journal of Biomechanics</i> , 2016 , 49, 229-37	2.9	21
30	Using dynamic walking models to identify factors that contribute to increased risk of falling in older adults. <i>Human Movement Science</i> , 2013 , 32, 984-96	2.4	21
29	A rehabilitation treadmill with software for providing real-time gait analysis and visual feedback. <i>Journal of Biomechanical Engineering</i> , 1996 , 118, 253-5	2.1	21
28	Error Correction and the Structure of Inter-Trial Fluctuations in a Redundant Movement Task. <i>PLoS Computational Biology</i> , 2016 , 12, e1005118	5	20

27	How humans use visual optic flow to regulate stepping during walking. <i>Gait and Posture</i> , 2017 , 57, 15-20	2.6	19
26	Differential Changes with Age in Multiscale Entropy of Electromyography Signals from Leg Muscles during Treadmill Walking. <i>PLoS ONE</i> , 2016 , 11, e0162034	3.7	19
25	Amplitude effects of medio-lateral mechanical and visual perturbations on gait. <i>Journal of Biomechanics</i> , 2012 , 45, 1979-86	2.9	17
24	Reliability and Minimum Detectable Change of Temporal-Spatial, Kinematic, and Dynamic Stability Measures during Perturbed Gait. <i>PLoS ONE</i> , 2015 , 10, e0142083	3.7	15
23	Dynamic stability of superior vs. inferior body segments in individuals with transtibial amputation walking in destabilizing environments. <i>Journal of Biomechanics</i> , 2014 , 47, 3072-9	2.9	13
22	Effects of local and widespread muscle fatigue on movement timing. <i>Experimental Brain Research</i> , 2014 , 232, 3939-48	2.3	13
21	Humans use multi-objective control to regulate lateral foot placement when walking. <i>PLoS Computational Biology</i> , 2019 , 15, e1006850	5	12
20	Humans control stride-to-stride stepping movements differently for walking and running, independent of speed. <i>Journal of Biomechanics</i> , 2018 , 76, 144-151	2.9	11
19	A nonlinear approach to tracking slow-time-scale changes in movement kinematics. <i>Journal of Biomechanics</i> , 2007 , 40, 1629-34	2.9	11
18	Use of Perturbation-Based Gait Training in a Virtual Environment to Address Mediolateral Instability in an Individual With Unilateral Transfemoral Amputation. <i>Physical Therapy</i> , 2016 , 96, 1896-1904	3.3	10
17	Influence of neuromuscular noise and walking speed on fall risk and dynamic stability in a 3D dynamic walking model. <i>Journal of Biomechanics</i> , 2013 , 46, 1722-8	2.9	10
16	Slow-time changes in human EMG muscle fatigue states are fully represented in movement kinematics. <i>Journal of Biomechanical Engineering</i> , 2009 , 131, 021004	2.1	10
15	Proximal versus distal control of two-joint planar reaching movements in the presence of neuromuscular noise. <i>Journal of Biomechanical Engineering</i> , 2012 , 134, 061007	2.1	8
14	Nonlinear smooth orthogonal decomposition of kinematic features of sawing reconstructs muscle fatigue evolution as indicated by electromyography. <i>Journal of Biomechanical Engineering</i> , 2011 , 133, 031009	2.1	7
13	Cognitively Demanding Object Negotiation While Walking and Texting. <i>Scientific Reports</i> , 2018 , 8, 17880	4.9	7
12	How healthy older adults regulate lateral foot placement while walking in laterally destabilizing environments. <i>Journal of Biomechanics</i> , 2020 , 104, 109714	2.9	6
11	Task-level regulation enhances global stability of the simplest dynamic walker. <i>Journal of the Royal Society Interface</i> , 2020 , 17, 20200278	4.1	6
10	Correlations of pelvis state to foot placement do not imply within-step active control. <i>Journal of Biomechanics</i> , 2019 , 97, 109375	2.9	5

9	Healthy individuals are more maneuverable when walking slower while navigating a virtual obstacle course. <i>Gait and Posture</i> , 2018 , 61, 466-472	2.6	4
8	The dynamical analysis of inter-trial fluctuations near goal equivalent manifolds. <i>Advances in Experimental Medicine and Biology</i> , 2014 , 826, 125-45	3.6	2
7	How persons with transtibial amputation regulate lateral stepping while walking in laterally destabilizing environments. <i>Gait and Posture</i> , 2021 , 83, 88-95	2.6	2
6	Dynamical Analysis of Sawing Motion Tracks Muscle Fatigue Evolution 2009 ,		1
5	Cross-Sectional Study Using Virtual Reality to Measure Cognition. <i>Frontiers in Sports and Active Living</i> , 2020 , 2, 543676	2.3	1
4	Effects of age, physical and self-perceived balance abilities on lateral stepping adjustments during competing lateral balance tasks. <i>Gait and Posture</i> , 2021 , 88, 311-317	2.6	1
3	Walking humans trade off different task goals to regulate lateral stepping. <i>Journal of Biomechanics</i> , 2021 , 119, 110314	2.9	0
2	BOTH HUMAN AND PASSIVE WALKING ARE BOTH LOCALLY UNSTABLE AND ORBITALLY STABLE. <i>Journal of Biomechanics</i> , 2007 , 40, S205	2.9	
1	Obstacle Avoidance and Secondary Task Performance During Locomotion. <i>Journal of Vision</i> , 2017 , 17, 708	0.4	