Mark D Grabiner

List of Publications by Year
in descending order

53 papers	3,176 citations	147801 31 h-index	175258 52 g-index
53 all docs	53 docs citations	53 times ranked	2426 citing authors

#	Article	IF	Citations
1	Variability of step kinematics in young and older adults. Gait and Posture, 2004, 20, 26-29.	1.4	218
2	Effect of an Ankle Orthosis and Ankle Ligament Anesthesia on Ankle Joint Proprioception. American Journal of Sports Medicine, 1994, 22, 223-229.	4.2	213
3	Step width variability, but not step length variability or step time variability, discriminates gait of healthy young and older adults during treadmill locomotion. Journal of Biomechanics, 2004, 37, 935-938.	2.1	208
4	Mechanisms of failed recovery following postural perturbations on a motorized treadmill mimic those associated with an actual forward trip. Clinical Biomechanics, 2001, 16, 813-819.	1.2	174
5	Age-related changes in spatial and temporal gait variables. Archives of Physical Medicine and Rehabilitation, 2001, 82, 31-35.	0.9	172
6	Measuring step kinematic variability on an instrumented treadmill: how many steps are enough?. Journal of Biomechanics, 2003, 36, 1215-1218.	2.1	149
7	Measures of frontal plane stability during treadmill and overground walking. Gait and Posture, 2010, 31, 380-384.	1.4	136
8	Foot displacement but not velocity predicts the outcome of a slip induced in young subjects while walking. Journal of Biomechanics, 2000, 33, 803-808.	2.1	121
9	Trunk kinematics and fall risk of older adults: Translating biomechanical results to the clinic. Journal of Electromyography and Kinesiology, 2008, 18, 197-204.	1.7	120
10	In vivo tracking of the human patella. Journal of Biomechanics, 1992, 25, 637-643.	2.1	114
11	Body segment inertial parameter estimation for the general population of older adults. Journal of Biomechanics, 2002, 35, 707-712.	2.1	105
12	Measures of Postural Stability Are Not Predictors of Recovery from Large Postural Disturbances in Healthy Older Adults. Journal of the American Geriatrics Society, 2000, 48, 42-50.	2.6	99
13	Task-Specific Training Reduces Trip-Related Fall Risk in Women. Medicine and Science in Sports and Exercise, 2012, 44, 2410-2414.	0.4	98
14	Variation in trunk kinematics influences variation in step width during treadmill walking by older and younger adults. Gait and Posture, 2010, 31, 461-464.	1.4	95
15	Influence of Lower Extremity Strength of Healthy Older Adults on the Outcome of an Induced Trip. Journal of the American Geriatrics Society, 2002, 50, 256-262.	2.6	92
16	Cross talk in surface electromyograms of human hamstring muscles. Journal of Orthopaedic Research, 1992, 10, 701-709.	2.3	77
17	Exercise-Based Fall Prevention. Exercise and Sport Sciences Reviews, 2014, 42, 161-168.	3.0	75
18	Attention demanding tasks during treadmill walking reduce step width variability in young adults. Journal of NeuroEngineering and Rehabilitation, 2005, 2, 25.	4.6	72

#	Article	IF	Citations
19	An apparent contradiction: increasing variability to achieve greater precision?. Experimental Brain Research, 2014, 232, 403-413.	1.5	54
20	Task-specific Fall Prevention Training Is Effective for Warfighters With Transtibial Amputations. Clinical Orthopaedics and Related Research, 2014, 472, 3076-3084.	1.5	53
21	The effects of age on stabilization of the mediolateral trajectory of the swing foot. Gait and Posture, 2013, 38, 923-928.	1.4	51
22	Effects of an attention demanding task on dynamic stability during treadmill walking. Journal of NeuroEngineering and Rehabilitation, 2008, 5, 12.	4.6	50
23	The discriminant capabilities of stability measures, trunk kinematics, and step kinematics in classifying successful and failed compensatory stepping responses by young adults. Journal of Biomechanics, 2012, 45, 129-133.	2.1	47
24	Lower Extremity Strength Plays Only a Small Role in Determining the Maximum Recoverable Lean Angle in Older Adults. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2005, 60, 1447-1450.	3.6	46
25	Recovery responses to surrogate slipping tasks differ from responses to actual slips. Gait and Posture, 2006, 24, 441-447.	1.4	43
26	Frontal plane margin of stability is increased during texting while walking. Gait and Posture, 2014, 40, 243-246.	1.4	42
27	Does Lower Extremity Osteoarthritis Exacerbate Risk Factors for Falls in Older Adults?. Women's Health, 2012, 8, 685-698.	1.5	41
28	Modifiable performance domain risk-factors associated with slip-related falls. Gait and Posture, 2008, 28, 461-465.	1.4	37
29	Measures of paraspinal muscle performance do not predict initial trunk kinematics after tripping. Journal of Biomechanics, 1996, 29, 735-744.	2.1	35
30	The presence of an obstacle influences the stepping response during induced trips and surrogate tasks. Experimental Brain Research, 2005, 161, 343-350.	1.5	35
31	Characteristics and adaptive strategies linked with falls in stroke survivors from analysis of laboratory-induced falls. Journal of Biomechanics, 2016, 49, 3313-3319.	2.1	35
32	Age-related differences in the maintenance of frontal plane dynamic stability while stepping to targets. Journal of Biomechanics, 2015, 48, 592-597.	2.1	33
33	Expectation of an upcoming large postural perturbation influences the recovery stepping response and outcome. Gait and Posture, 2015, 41, 335-337.	1.4	32
34	Trip recoveries of people with unilateral, transfemoral or knee disarticulation amputations: Initial findings. Gait and Posture, 2013, 38, 534-536.	1.4	26
35	Three-Dimensional in Vivo Kinematics of the Shoulder during Humeral Elevation. Journal of Applied Biomechanics, 1998, 14, 312-326.	0.8	24
36	Obesity as a Factor Contributing to Falls by Older Adults. Current Obesity Reports, 2014, 3, 348-354.	8.4	24

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37	Sensitivity of Dynamic Stability to Changes in Step Width During Treadmill Walking by Young Adults. Journal of Applied Biomechanics, 2012, 28, 616-621.	0.8	22
38	A single session of trip-specific training modifies trunk control following treadmill induced balance perturbations in stroke survivors. Gait and Posture, 2019, 70, 222-228.	1.4	22
39	The influence of age on the thresholds of compensatory stepping and dynamic stability maintenance. Gait and Posture, 2014, 40, 363-368.	1.4	19
40	Knee osteoarthritis negatively affects the recovery step following large forward-directed postural perturbations. Journal of Biomechanics, 2016, 49, 1128-1133.	2.1	11
41	Performance of an attention-demanding task during treadmill walking shifts the noise qualities of step-to-step variation in step width. Gait and Posture, 2018, 63, 154-158.	1.4	9
42	Trip-specific training enhances recovery after large postural disturbances for which there is NO expectation. Gait and Posture, 2018, 61, 382-386.	1.4	8
43	Increased reflex activation of the peroneus longus following application of an ankle brace declines over time. Journal of Orthopaedic Research, 2002, 20, 1323-1326.	2.3	7
44	Developing and Establishing Biomechanical Variables as Risk Biomarkers for Preventable Gait-Related Falls and Assessment of Intervention Effectiveness. Frontiers in Sports and Active Living, 2021, 3, 722363.	1.8	5
45	Bilateral early activity in the hip flexors associated with falls in stroke survivors: Preliminary evidence from laboratory-induced falls. Clinical Neurophysiology, 2018, 129, 258-264.	1.5	5
46	Can Fall-Related Hip Fractures Be Prevented by Characterizing the Biomechanical Mechanisms of Failed Recovery?. Endocrine, 2002, 17, 15-20.	2.2	4
47	Ensuring accurate estimates of step width variability during treadmill walking requires more than 400 consecutive steps. Journal of Biomechanics, 2019, 91, 160-163.	2.1	4
48	Assessments of trunk postural control within a fall-prevention training program for service members with lower limb trauma and loss. Gait and Posture, 2022, 92, 493-497.	1.4	4
49	Revisiting the Work-Relatedness of Carpal Tunnel Syndrome. Exercise and Sport Sciences Reviews, 2003, 31, 123-126.	3.0	3
50	Treadmill-belt width, but not feedback from the lower visual field, influences the noise characteristics of step width time series. Journal of Biomechanics, 2020, 109, 109943.	2.1	3
51	Letters to the Editor-in-Chief. Medicine and Science in Sports and Exercise, 2000, 32, 1185.	0.4	2
52	The Problem Is Falls: The Answer Is Kinesiology. Kinesiology Review, 2012, 1, 32-36.	0.6	2
53	Exercise-based fall prevention programmes decrease fall-related injuries. Evidence-based Nursing, 2014, 17, 125-125.	0.2	0