Kevin J Deluzio

List of Publications by Year
in descending order

59	3,345	159585 30	149698 56
papers	citations	h-index	g-index

62	62	62	2853
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Biomechanical changes at the hip, knee, and ankle joints during gait are associated with knee osteoarthritis severity. Journal of Orthopaedic Research, 2008, 26, 332-341.	2.3	396
2	Knee and hip kinetics during normal stair climbing. Gait and Posture, 2002, 16, 31-37.	1.4	252
3	Gait and neuromuscular pattern changes are associated with differences in knee osteoarthritis severity levels. Journal of Biomechanics, 2008, 41, 868-876.	2.1	237
4	Knee biomechanics of moderate OA patients measured during gait at a self-selected and fast walking speed. Journal of Biomechanics, 2007, 40, 1754-1761.	2.1	197
5	Principal component models of knee kinematics and kinetics: Normal vs. pathological gait patterns. Human Movement Science, 1997, 16, 201-217.	1.4	169
6	Effect of a Home Program of Hip Abductor Exercises on Knee Joint Loading, Strength, Function, and Pain in People With Knee Osteoarthritis: A Clinical Trial. Physical Therapy, 2010, 90, 895-904.	2.4	142
7	Gender differences exist in osteoarthritic gait. Clinical Biomechanics, 2007, 22, 400-409.	1.2	127
8	Neuromuscular and Lower Limb Biomechanical Differences Exist between Male and Female Elite Adolescent Soccer Players during an Unanticipated Side-cut Maneuver. American Journal of Sports Medicine, 2007, 35, 1888-1900.	4.2	119
9	Effects of Pelvic Asymmetry and Low Back Pain on Trunk Kinematics During Sitting: A Comparison With Standing. Spine, 2006, 31, E135-E143.	2.0	102
10	Interpreting principal components in biomechanics: Representative extremes and single component reconstruction. Journal of Electromyography and Kinesiology, 2013, 23, 1304-1310.	1.7	101
11	Concurrent assessment of gait kinematics using marker-based and markerless motion capture. Journal of Biomechanics, 2021, 127, 110665.	2.1	98
12	Muscle co-activation patterns during walking in those with severe knee osteoarthritis. Clinical Biomechanics, 2008, 23, 71-80.	1.2	89
13	Comparative Fixation of Tibial Plateau Fractures Using ??-BSM???, a Calcium Phosphate Cement, Versus Cancellous Bone Graft. Journal of Orthopaedic Trauma, 2005, 19, 698-702.	1.4	67
14	Biomechanical strategies implemented to compensate for mild leg length discrepancy during gait. Gait and Posture, 2016, 46, 147-153.	1.4	67
15	Differentiating lifting technique between those who develop low back pain and those who do not. Clinical Biomechanics, 2005, 20, 254-263.	1.2	66
16	Factors affecting the stability of reverse shoulder arthroplasty: a biomechanical study. Journal of Shoulder and Elbow Surgery, 2013, 22, 439-444.	2.6	65
17	Increased unilateral foot pronation affects lower limbs and pelvic biomechanics during walking. Gait and Posture, 2015, 41, 395-401.	1.4	65
18	Effects of Pelvic Skeletal Asymmetry on Trunk Movement. Spine, 2006, 31, E71-E79.	2.0	64

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19	Assessment of spatiotemporal gait parameters using a deep learning algorithm-based markerless motion capture system. Journal of Biomechanics, 2021, 122, 110414.	2.1	64
20	Economics of less invasive spinal surgery: an analysis of hospital cost differences between open and minimally invasive instrumented spinal fusion procedures during the perioperative period. Risk Management and Healthcare Policy, 2012, 5, 65.	2.5	63
21	Gender differences exist in neuromuscular control patterns during the pre-contact and early stance phase of an unanticipated side-cut and cross-cut maneuver in 15â€“18 years old adolescent soccer players. Journal of Electromyography and Kinesiology, 2009, 19, e370-e379.	1.7	61
22	Inter-session repeatability of markerless motion capture gait kinematics. Journal of Biomechanics, 2021, 121, 110422.	2.1	60
23	A procedure to validate three-dimensional motion assessment systems. Journal of Biomechanics, 1993, 26, 753-759.	2.1	56
24	Gait assessment in unicompartmental knee arthroplasty patients: Principal component modelling of gait waveforms and clinical status. Human Movement Science, 1999, 18, 701-711.	1.4	52
25	Selective lateral muscle activation in moderate medial knee osteoarthritis subjects does not unload medial knee condyle. Journal of Biomechanics, 2014, 47, 1409-1415.	2.1	49
26	A biomechanical analysis of trunk and pelvis motion during gait in subjects with knee osteoarthritis compared to control subjects. Clinical Biomechanics, 2010, 25, 1003-1010.	1.2	43
27	Accuracy of single-plane fluoroscopy in determining relative position and orientation of total knee replacement components. Journal of Biomechanics, 2011, 44, 784-787.	2.1	43
28	A Comparison of Self-Selected Walking Speeds and Walking Speed Variability When Data Are Collected During Repeated Discrete Trials and During Continuous Walking. Journal of Applied Biomechanics, 2017, 33, 384-387.	0.8	42
29	Mild leg length discrepancy affects lower limbs, pelvis and trunk biomechanics of individuals with knee osteoarthritis during gait. Clinical Biomechanics, 2016, 38, 1-7.	1.2	39
30	Principal component analysis of lifting waveforms. Clinical Biomechanics, 2006, 21, 567-578.	1.2	37
31	The effect of articular geometry features identified using statistical shape modelling on knee biomechanics. Medical Engineering and Physics, 2019, 66, 47-55.	1.7	33
32	A Global Gait Asymmetry Index. Journal of Applied Biomechanics, 2016, 32, 171-177.	0.8	29
33	Sensitivity of medial and lateral knee contact force predictions to frontal plane alignment and contact locations. Journal of Biomechanics, 2017, 57, 125-130.	2.1	23
34	Detecting differences between asymptomatic and osteoarthritic gait is influenced by changing the knee adduction moment model. Gait and Posture, 2008, 27, 485-492.	1.4	22
35	Robust features of knee osteoarthritis in joint moments are independent of reference frame selection. Clinical Biomechanics, 2011, 26, 65-70.	1.2	22
36	Ipsilateral and contralateral foot pronation affect lower limb and trunk biomechanics of individuals with knee osteoarthritis during gait. Clinical Biomechanics, 2016, 34, 30-37.	1.2	21

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37	Contributions of muscles and external forces to medial knee load reduction due to osteoarthritis braces. Knee, 2019, 26, 564-577.	1.6	19
38	Self-Selected walking speed increases when individuals are aware of being recorded. Gait and Posture, 2019, 68, 78-80.	1.4	17
39	Clothing condition does not affect meaningful clinical interpretation in markerless motion capture. Journal of Biomechanics, 2022, 141, 111182.	2.1	14
40	Implementation and validation of an implant-based coordinate system for RSA migration calculation. Journal of Biomechanics, 2009, 42, 2387-2393.	2.1	12
41	Effect of implant geometry on range of motion in reverse shoulder arthroplasty assessed using glenohumeral separation distance. Journal of Shoulder and Elbow Surgery, 2015, 24, 1359-1366.	2.6	12
42	Energy expended and knee joint load accumulated when walking, running, or standing for the same amount of time. Gait and Posture, 2015, 41, 326-328.	1.4	12
43	A comparison of centre of pressure behaviour and ground reaction force magnitudes when individuals walk overground and on an instrumented treadmill. Gait and Posture, 2021, 83, 174-176.	1.4	11
44	How symmetric are metal-on-metal hip resurfacing patients during gait? Insights for the rehabilitation. Journal of Biomechanics, 2017, 58, 37-44.	2.1	7
45	Operator Bias Errors Are Reduced Using Standing Marker Alignment Device for Repeated Visit Studies. Journal of Biomechanical Engineering, 2018, 140, .	1.3	6
46	Movement and Mobility. Advances in Nursing Science, 2019, 42, E11-E23.	1.1	6
47	Knee extension moment arm variations relate to mechanical function in walking and running. Journal of the Royal Society Interface, 2021, 18, 20210326.	3.4	6
48	The Effect of Ankle Brace Use on a 3-Step Volleyball Spike Jump Height. Arthroscopy, Sports Medicine, and Rehabilitation, 2020, 2, e461-e467.	1.7	5
49	Identification of good candidates for valgus bracing as a treatment for medial knee osteoarthritis. Journal of Orthopaedic Research, 2018, 36, 351-356.	2.3	4
50	Measures of movement and mobility used in clinical practice and research: a scoping review. JBI Evidence Synthesis, 2021, 19, 341-403.	1.3	4
51	Relationship Between Lateral Patellar Stability and Tibial Tubercle Location for Varying Patellofemoral Geometries. Journal of Biomechanical Engineering, 2019, 141, .	1.3	4
52	Influence of Articular Geometry and Tibial Tubercle Location on Patellofemoral Kinematics and Contact Mechanics. Journal of Applied Biomechanics, 2022, 38, 58-66.	0.8	4
53	Correcting waveform bias using principal component analysis: Applications in multicentre motion analysis studies. Gait and Posture, 2017, 51, 153-158.	1.4	3
54	Measures of movement and mobility used in clinical practice and research. JBI Database of Systematic Reviews and Implementation Reports, 2018, 16, 2279-2287.	1.7	3

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55	Prediction of Knee Joint Contact Forces From External Measures Using Principal Component Prediction and Reconstruction. Journal of Applied Biomechanics, 2018, 34, 419-423.	0.8	2
56	Validation of method for analysing mechanics of unloader brace for medial knee osteoarthritis. Journal of Biomechanics, 2018, 76, 253-258.	2.1	2
57	Pendulum-based method for determining the temporal accuracy of digital video-based motion capture systems. Gait and Posture, 2009, 29, 349-353.	1.4	1
58	Response to Letter to the Editor concerning â€œHow symmetric are metal-on-metal hip resurfacing patients during gait? Insights for the rehabilitationâ€. Journal of Biomechanics, 2017, 63, 204-205.	2.1	1
59	Commentary on â€œModelling knee flexion effects on joint power absorption and adduction momentâ€. Knee, 2017, 24, 1256-1257.	1.6	0