Jack P Callaghan

List of Publications by Year in descending order

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278 papers 7,552 citations

50276 46 h-index 76900 74 g-index

279 all docs

279 docs citations

times ranked

279

4313 citing authors

#	Article	IF	Citations
1	Cervical Spine Motion Requirements From Night Vision Goggles May Play a Greater Role in Chronic Neck Pain than Helmet Mass Properties. Human Factors, 2024, 66, 363-376.	3.5	2
2	Defining the lumbar and trunk-thigh neutral zone from the passive stiffness curve: application to hybrid sit-stand postures and chair design. Ergonomics, 2023, 66, 338-349.	2.1	2
3	The Influence of Simulated Low Speed Vehicle Impacts and Posture on Passive Intervertebral Mechanics. Spine, 2022, 47, E362-E369.	2.0	1
4	Level of exoskeleton support influences shoulder elevation, external rotation and forearm pronation during simulated work tasks in females. Applied Ergonomics, 2022, 98, 103591.	3.1	10
5	Anti-fatigue mats can reduce low back discomfort in transient pain developers. Applied Ergonomics, 2022, 100, 103661.	3.1	3
6	Strain Response in the Facet Joint Capsule During Physiological Joint Rotation and Translation Following a Simulated Impact Exposure: An In Vitro Porcine Model. Journal of Biomechanical Engineering, 2022, 144, .	1.3	1
7	Reaction Forces and Flexion–Extension Moments Imposed on Functional Spinal Units With Constrained and Unconstrained In Vitro Testing Systems. Journal of Biomechanical Engineering, 2022, 144, .	1.3	5
8	Characterizing the Mechanical and Viscoelastic Response of the Porcine Facet Joint Capsule Ligament in Response to a Simulated Impact. Journal of Biomechanical Engineering, 2022, 144, .	1.3	0
9	Are rotational passive stiffness and translational passive stiffness correlated? A porcine in vitro study. Clinical Biomechanics, 2022, 94, 105610.	1.2	O
10	Does sitting on a stability ball increase fall risk during ergonomic reaching tasks?. Applied Ergonomics, 2022, 102, 103721.	3.1	2
11	Effects of weighing phase duration on vertical force-time analyses and repeatability. Sports Biomechanics, 2022, , 1 - 11 .	1.6	1
12	Characterizing Lumbar Spine Kinematics and Kinetics During Simulated Low-Speed Rear Impact Collisions. Journal of Applied Biomechanics, 2022, 38, 155-163.	0.8	1
13	Posture and Helmet Configuration Effects on Joint Reaction Loads in the Middle Cervical Spine. Aerospace Medicine and Human Performance, 2022, 93, 458-466.	0.4	2
14	Mechanically induced histochemical and structural damage in the annulus fibrosus and cartilaginous endplate: a multi-colour immunofluorescence analysis. Cell and Tissue Research, 2022, 390, 59-70.	2.9	4
15	Partitioning the total seatback reaction force amongst the lumbar spine motion segments during simulated rear-impact collisions. International Journal of Occupational Safety and Ergonomics, 2021, 27, 613-619.	1.9	4
16	Measurement of Sit-Stand Desk Usage by Desk-Mounted Sensors. Ergonomics in Design, 2021, 29, 4-10.	0.7	0
17	Analysis of invoked slips while wearing flip-flops in wet and dry conditions: Does alternative footwear alter slip kinematics?. Applied Ergonomics, 2021, 92, 103318.	3.1	3
18	Ergonomics training coupled with new Sit-Stand workstation implementation influences usage. Ergonomics, 2021, 64, 582-592.	2.1	2

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19	A one-dimensional collagen-based biomechanical model of passive soft tissue with viscoelasticity and failure. Journal of Theoretical Biology, 2021, 509, 110488.	1.7	5
20	Night Vision Goggle and Counterweight Use Affect Neck Muscle Activity During Reciprocal Scanning. Aerospace Medicine and Human Performance, 2021, 92, 172-181.	0.4	3
21	The rate of tendon failure in a collagen fibre recruitment-based model. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 115, 104273.	3.1	5
22	Interrelated hypoalgesia, creep, and muscle fatigue following a repetitive trunk flexion exposure. Journal of Electromyography and Kinesiology, 2021, 57, 102531.	1.7	0
23	A novel least-squares method to characterize in-vivo joint functional passive regional stiffness zones. Human Movement Science, 2021, 76, 102765.	1.4	2
24	An Appropriate Criterion Reveals that Low Pass Filtering Can Improve the Estimation of Counter-movement Jump Height from Force Plate Data. Measurement in Physical Education and Exercise Science, 2021, 25, 344-352.	1.8	4
25	Model-Aided Design of a Rear-Impact Collision Testing System for In Vivo Investigations. Journal of Biomechanical Engineering, 2021, 143 , .	1.3	4
26	Reconstructing an accelerometer-based pelvis segment for three-dimensional kinematic analyses during laboratory simulated tasks with obstructed line-of-sight. Journal of Biomechanics, 2021, 123, 110512.	2.1	4
27	Exploring the influence of impact severity and posture on vertebral joint mechanics in an in-vitro porcine model. Journal of Biomechanics, 2021, 122, 110479.	2.1	1
28	Exposure to Sustained Flexion Impacts Lumbar Extensor Spinae Muscle Fiber Orientation. Journal of Applied Biomechanics, 2021, 37, 248-253.	0.8	2
29	Quantifying supraspinatus tendon responses to exposures emulative of human physiological levels in an animal model. Journal of Biomechanics, 2021, 122, 110476.	2.1	0
30	Biomechanical comparison of a C1 posterior arch clamp with C1 lateral mass screws in constructs for C1-C2 fusion. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2021, 235, 1463-1470.	1.8	0
31	Predicting Cervical Spine Compression and Shear in Helicopter Helmeted Conditions Using Artificial Neural Networks. IISE Transactions on Occupational Ergonomics and Human Factors, 2021, 9, 154-166.	0.8	2
32	The relationship between external thoracopelvic angle and lumbar segmental axial twist angle using an ultrasound imaging technique. Human Movement Science, 2021, 78, 102824.	1.4	1
33	Higher body mass index and body fat percentage correlate to lower joint and functional strength in working age adults. Applied Ergonomics, 2021, 95, 103453.	3.1	2
34	Moving Toward Individual-Specific Automotive Seat Design: How Individual Characteristics and Time Alter the Selected Lumbar Support Prominence. Human Factors, 2021, , 001872082110427.	3.5	2
35	An Electromyographically Driven Cervical Spine Model in OpenSim. Journal of Applied Biomechanics, 2021, 37, 481-493.	0.8	7
36	Passive stiffness changes in the lumbar spine following simulated automotive low speed rear-end collisions. Clinical Biomechanics, 2021, 90, 105507.	1.2	2

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37	The impact of a progressive sit-stand rotation exposure duration on low back posture, muscle activation, and pain development. Ergonomics, 2021, 64, 502-511.	2.1	7
38	The Effects of an Acute Maximal Seated Lumbar Spine Flexion Exposure on Low Back Mechanical Pain Sensitivity. Journal of Applied Biomechanics, 2021, , 1-8.	0.8	0
39	Low back pain development differentially influences centre of pressure regularity following prolonged standing. Gait and Posture, 2020, 78, e1-e6.	1.4	17
40	Cervical spine joint loading with neck flexion. Ergonomics, 2020, 63, 101-108.	2.1	31
41	Strain of the facet joint capsule during rotation and translation range-of-motion tests: an in vitro porcine model as a human surrogate. Spine Journal, 2020, 20, 475-487.	1.3	4
42	A comparison of trunk control in people with no history, standing-induced, and recurrent low back pain during trunk extension. Journal of Manual and Manipulative Therapy, 2020, 28, 94-102.	1.2	4
43	Bathing frail seniors at home: Home care providers' approaches. Work, 2020, 66, 499-517.	1.1	4
44	Joint fatigue-failure: A demonstration of viscoelastic responses to rate and frequency loading parameters using the porcine cervical spine. Journal of Biomechanics, 2020, 113, 110081.	2.1	10
45	Footfall Deflection of Antifatigue Flooring During Simulated Human Stance. Ergonomics in Design, 2020, , 106480462097573.	0.7	0
46	Pain symptoms are reported earlier than quantitative measures of low back pain during prolonged standing. Work, 2020, 67, 149-155.	1.1	4
47	A Mobile Application to Measure Trunk Flexion Angles in Lifting Tasks. IISE Transactions on Occupational Ergonomics and Human Factors, 2020, 8, 63-71.	0.8	0
48	Exploring the regional disc bulge response of the cervical porcine intervertebral disc under varying loads and posture. Journal of Biomechanics, 2020, 104, 109713.	2.1	3
49	The effect of age, prolonged seated work and sex on posture and perceived effort during a lifting task. Applied Ergonomics, 2020, 89, 103198.	3.1	4
50	The effect of axial twist angle on <i>in vitro</i> cumulative injury load tolerance: a magnitude-weighting approach for axial twist exposures. Theoretical Issues in Ergonomics Science, 2020, 21, 463-477.	1.8	2
51	A computerised system for measurement of the radial displacement of the intervertebral disc using a laser scanning device. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2020, 8, 287-293.	1.9	3
52	Expressing angles relative to reference postures: A mathematical comparison of four approaches. Journal of Biomechanics, 2020, 104, 109733.	2.1	6
53	Office Chair Backrest Height Affects Physiological Responses to Sitting. IISE Transactions on Occupational Ergonomics and Human Factors, 2020, 8, 50-59.	0.8	1
54	A Comparison of Clinical Spinal Mobility Measures to Experimentally Derived Lumbar Spine Passive Stiffness. Journal of Applied Biomechanics, 2020, 36, 397-407.	0.8	6

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55	A pre/post evaluation of fatigue, stress and vigilance amongst commercially licensed truck drivers performing a prolonged driving task. International Journal of Occupational Safety and Ergonomics, 2019, 25, 344-354.	1.9	9
56	Spine loading during laboratory-simulated fireground operations $\hat{a} \in \text{``inter-individual variation and method of load quantification. Ergonomics, 2019, 62, 1426-1438.}$	2.1	10
57	Examining endplate fatigue failure during cyclic compression loading with variable and consistent peak magnitudes using a force weighting adjustment approach: an <i>in vitro</i> study. Ergonomics, 2019, 62, 1339-1348.	2.1	8
58	Author response: Re: Re: Fewster etÂal. (2019) Characterizing trunk muscle activations during simulated low-speed rear impact collisions. Traffic Injury Prevention, 2019, 20, 887-890.	1.4	0
59	The need to accommodate monitor height changes between sitting and standing. Ergonomics, 2019, 62, 1515-1523.	2.1	3
60	Incorporating loading variability into in vitro injury analyses and its effect on cumulative compression tolerance in porcine cervical spine units. Journal of Biomechanics, 2019, 88, 48-54.	2.1	11
61	Low-velocity motor vehicle collision characteristics associated with claimed low back pain. Traffic Injury Prevention, 2019, 20, 419-423.	1.4	8
62	Characterizing trunk muscle activations during simulated low-speed rear impact collisions. Traffic Injury Prevention, 2019, 20, 314-319.	1.4	5
63	The effect of age on <i>in-vivo</i> spine stiffness, postures and discomfort responses during prolonged sitting exposures. Ergonomics, 2019, 62, 917-927.	2.1	11
64	Does proactive cyclic usage of a footrest prevent the development of standing induced low back pain?. Human Movement Science, 2019, 66, 84-90.	1.4	7
65	Are hybrid sit–stand postures a good compromise between sitting and standing?. Ergonomics, 2019, 62, 811-822.	2.1	13
66	Evaluation of Fiberglass and Aluminum Ladder Stability During a Simulated Tethered Operator Fall Event. Proceedings of the Human Factors and Ergonomics Society, 2019, 63, 1797-1801.	0.3	0
67	Validation of an Ultrasound Protocol to Measure Intervertebral Axial Twist during Functional Twisting Movements in Isolated Functional Spinal Units. Ultrasound in Medicine and Biology, 2019, 45, 642-649.	1.5	5
68	Local dynamic stability of the lower extremity in novice and trained runners while running intraditional and minimal footwear. Gait and Posture, 2019, 68, 50-54.	1.4	10
69	Ergonomic evaluation of a new truck seat design: a field study. International Journal of Occupational Safety and Ergonomics, 2019, 25, 331-343.	1.9	7
70	Assisting Frail Seniors With Toileting in a Home Bathroom: Approaches Used by Home Care Providers. Journal of Applied Gerontology, 2019, 38, 717-749.	2.0	12
71	The effect of task type and perceived demands on postural movements during standing work. Applied Ergonomics, 2018, 69, 146-152.	3.1	4
72	The effects of shoulder abduction angle and wrist angle on upper extremity muscle activity in unilateral right handed push/pull tasks. International Journal of Industrial Ergonomics, 2018, 64, 102-107.	2.6	5

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73	Comparing the biomechanical and psychophysical demands imposed on paramedics when using manual and powered stretchers. Applied Ergonomics, 2018, 70, 167-174.	3.1	20
74	Biomechanical investigation of prolonged driving in an ergonomically designed truck seat prototype. Ergonomics, 2018, 61, 367-380.	2.1	26
75	Identifying interactive effects of task demands in lifting on estimates of in vivo low back joint loads. Applied Ergonomics, 2018, 67, 203-210.	3.1	20
76	Hip Abductor Fatigability and Recovery Are Related to the Development of Low Back Pain During Prolonged Standing. Journal of Applied Biomechanics, 2018, 34, 39-46.	0.8	15
77	A procedure for determining parameters of a simplified ligament model. Journal of Biomechanics, 2018, 66, 175-179.	2.1	4
78	A versatile approach to determine instantaneous co-activation: Development, implementation and comparison to existing measures. Computer Methods in Biomechanics and Biomedical Engineering, 2018, 21, 625-634.	1.6	1
79	Development and Test of a Short Message on Manual Materials Handling Hazards and Controls in Small and Micro Businesses. IISE Transactions on Occupational Ergonomics and Human Factors, 2018, 6, 11-20.	0.8	3
80	Acute Surgical Injury Alters the Tensile Properties of Thoracolumbar Fascia in a Porcine Model. Journal of Biomechanical Engineering, 2018, 140, .	1.3	7
81	Can the Functional Movement Screenâ,¢ be used to capture changes in spine and knee motion control following 12 weeks of training?. Physical Therapy in Sport, 2017, 23, 50-57.	1.9	16
82	Neck muscle activity during simulated in-flight static neck postures and helmet mounted equipment. Occupational Ergonomics, 2017, 13, 119-130.	0.3	9
83	Baseline knee adduction moment interacts with body mass index to predict loss of medial tibial cartilage volume over 2.5 years in knee Osteoarthritis. Journal of Orthopaedic Research, 2017, 35, 2476-2483.	2.3	37
84	The impact of office chair features on lumbar lordosis, intervertebral joint and sacral tilt angles: a radiographic assessment. Ergonomics, 2017, 60, 1393-1404.	2.1	19
85	The distribution of lumbar intervertebral angles in upright standing and extension is related to low back pain developed during standing. Clinical Biomechanics, 2017, 49, 85-90.	1.2	11
86	Precision based guidelines for sub-maximal normalisation task selection for trunk extensor EMG. Journal of Electromyography and Kinesiology, 2017, 37, 41-51.	1.7	11
87	A mechanistic damage model for ligaments. Journal of Biomechanics, 2017, 61, 11-17.	2.1	8
88	An ergonomic evaluation of city police officers: an analysis of perceived discomfort within patrol duties. International Journal of Occupational Safety and Ergonomics, 2017, 23, 175-184.	1.9	12
89	Quantifying the postural demands of patrol officers: a field study. International Journal of Occupational Safety and Ergonomics, 2017, 23, 185-197.	1.9	5
90	The effect of standing interventions on acute low-back postures and muscle activation patterns. Applied Ergonomics, 2017, 58, 281-286.	3.1	23

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91	Influence of an oblique path of staircase descent on toe placement and foot clearance. International Journal of Occupational Safety and Ergonomics, 2016, 22, 580-586.	1.9	3
92	The Impact of Posture on the Mechanical Properties of a Functional Spinal Unit During Cyclic Compressive Loading. Journal of Biomechanical Engineering, 2016, 138, .	1.3	6
93	The Effect of Local Hydration Environment on the Mechanical Properties and Unloaded Temporal Changes of Isolated Porcine Annular Samples. Journal of Biomechanical Engineering, 2016, 138, .	1.3	2
94	Influence of input device, work surface angle, and task on spine kinematics. Work, 2016, 55, 773-782.	1.1	3
95	Influence of Input Hardware and Work Surface Angle on Upper Limb Posture in a Hybrid Computer Workstation. Human Factors, 2016, 58, 107-119.	3.5	9
96	Standing on a declining surface reduces transient prolonged standing induced low back pain development. Applied Ergonomics, 2016, 56, 76-83.	3.1	26
97	Is intervertebral disc pressure linked to herniation?: An in-vitro study using a porcine model. Journal of Biomechanics, 2016, 49, 1824-1830.	2.1	12
98	A hip abduction exercise prior to prolonged standing increased movement while reducing cocontraction and low back pain perception in those initially reporting low back pain. Journal of Electromyography and Kinesiology, 2016, 31, 63-71.	1.7	10
99	A radiographic assessment of lumbar spine posture in four different upright standing positions. Clinical Biomechanics, 2016, 37, 131-136.	1.2	13
100	Asymmetry of lumbopelvic movement patterns during active hip abduction is a risk factor for low back pain development during standing. Human Movement Science, 2016, 50, 38-46.	1.4	21
101	Peak Stress in the Annulus Fibrosus Under Cyclic Biaxial Tensile Loading. Journal of Biomechanical Engineering, 2016, 138, 051006.	1.3	5
102	The influence of repeated chin bar impacts on the protective properties of full-face mountain biking helmets. Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 2016, 230, 213-224.	0.7	3
103	Effect of obesity on knee joint biomechanics during gait in young adults. Cogent Medicine, 2016, 3, 1173778.	0.7	13
104	Psychological Factors Are Related to Pain Intensity in Back-Healthy People Who Develop Clinically Relevant Pain During Prolonged Standing: A Preliminary Study. PM and R, 2016, 8, 1031-1038.	1.6	13
105	A comparison of trunk biomechanics, musculoskeletal discomfort and productivity during simulated sit-stand office work. Ergonomics, 2016, 59, 1275-1287.	2.1	55
106	Lumbar postures, seat interface pressures and discomfort responses to a novel thoracic support for police officers during prolonged simulated driving exposures. Applied Ergonomics, 2016, 52, 160-168.	3.1	23
107	FMS Scores Change With Performers' Knowledge of the Grading Criteria—Are General Whole-Body Movement Screens Capturing "Dysfunction�. Journal of Strength and Conditioning Research, 2015, 29, 3037-3044.	2.1	53
108	Validity of a Paradigm for Low Back Pain Symptom Development During Prolonged Standing. Clinical Journal of Pain, 2015, 31, 652-659.	1.9	25

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109	Exercise-Based Performance Enhancement and Injury Prevention for Firefighters. Journal of Strength and Conditioning Research, 2015, 29, 2441-2459.	2.1	33
110	The Influence of Load and Speed on Individuals' Movement Behavior. Journal of Strength and Conditioning Research, 2015, 29, 2417-2425.	2.1	15
111	The impact of compressive force magnitude on the <i>in vitro</i> neutral zone range and passive stiffness during a flexion–extension range of motion test. Cogent Engineering, 2015, 2, 1014253.	2.2	2
112	Is lumbar lordosis related to low back pain development during prolonged standing?. Manual Therapy, 2015, 20, 553-557.	1.6	88
113	Is Standing the Solution to Sedentary Office Work?. Ergonomics in Design, 2015, 23, 20-24.	0.7	35
114	Evaluating Abdominal and Lower-Back Muscle Activity While Performing Core Exercises on a Stability Ball and a Dynamic Office Chair. Human Factors, 2015, 57, 1149-1161.	3 . 5	13
115	Effects of sitting and standing on upper extremity physical exposures in materials handling tasks. Ergonomics, 2015, 58, 1637-1646.	2.1	13
116	Knee adduction moment relates to medial femoral and tibial cartilage morphology in clinical knee osteoarthritis. Journal of Biomechanics, 2015, 48, 3495-3501.	2.1	34
117	An appraisal of the Functional Movement Screenâ,,¢ grading criteria – Is the composite score sensitive to risky movement behavior?. Physical Therapy in Sport, 2015, 16, 324-330.	1.9	22
118	A proposed method to detect kinematic differences between and within individuals. Journal of Electromyography and Kinesiology, 2015, 25, 479-487.	1.7	6
119	Spine Posture and Discomfort During Prolonged Simulated Driving With Self-Selected Lumbar Support Prominence. Human Factors, 2015, 57, 976-987.	3.5	23
120	Characterizing the combined effects of force, repetition and posture on injury pathways and micro-structural damage in isolated functional spinal units from sub-acute-failure magnitudes of cyclic compressive loading. Clinical Biomechanics, 2015, 30, 953-959.	1.2	23
121	Early static standing is associated with prolonged standing induced low back pain. Human Movement Science, 2015, 44, 111-121.	1.4	56
122	Exploring interactions between force, repetition and posture on intervertebral disc height loss and bulging in isolated porcine cervical functional spinal units from sub-acute-failure magnitudes of cyclic compressive loading. Journal of Biomechanics, 2015, 48, 3701-3708.	2.1	18
123	A finite element evaluation of the moment arm hypothesis for altered vertebral shear failure force. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 545-555.	1.6	0
124	The predictive value of general movement tasks in assessing occupational task performance. Work, 2015, 52, 11-18.	1,1	12
125	Localized strain measurements of the intervertebral disc annulus during biaxial tensile testing. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 1737-1743.	1.6	5
126	The Effect of Wallet Thickness on Spine Posture, Seat Interface Pressure, and Perceived Discomfort During Sitting. IIE Transactions on Occupational Ergonomics and Human Factors, 2014, 2, 83-93.	0.4	4

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127	Semi-automatic Fisher-Tippett guided active contour for lumbar multifidus muscle segmentation. , 2014, 2014, 5530-3.		3
128	Markov-chain Monte Carlo-based image reconstruction for streak artefact reduction on contrast-enhanced computed tomography. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2014, 2, 67-75.	1.9	0
129	Knee Power Is an Important Parameter in Understanding Medial Knee Joint Load in Knee Osteoarthritis. Arthritis Care and Research, 2014, 66, 687-694.	3.4	15
130	The influence of precision requirements and cognitive challenges on upper extremity joint reaction forces, moments and muscle force estimates during prolonged repetitive lifting. Ergonomics, 2014, 57, 236-246.	2.1	7
131	FMSâ,,¢ scores and low-back loading during lifting – Whole-body movement screening as an ergonomic tool?. Applied Ergonomics, 2014, 45, 482-489.	3.1	26
132	Analysis of muscle activation patterns during transitions into and out of high knee flexion postures. Journal of Electromyography and Kinesiology, 2014, 24, 711-717.	1.7	10
133	The influence of a seated break on prolonged standing induced low back pain development. Ergonomics, 2014, 57, 555-562.	2.1	94
134	Physical fitness improvements and occupational low-back loading – an exercise intervention study with firefighters. Ergonomics, 2014, 57, 744-763.	2.1	43
135	Biomechanical and ergonomic assessment of urban transit operators. Work, 2014, 47, 33-44.	1.1	24
136	The impact of sit–stand office workstations on worker discomfort andÂproductivity: A review. Applied Ergonomics, 2014, 45, 799-806.	3.1	150
137	The effect of police cruiser restraint cage configuration on shoulder discomfort, muscular demands, upper limb postures, and task performance during simulated police patrol. Applied Ergonomics, 2014, 45, 1414-1421.	3.1	8
138	Three-dimensional peak and cumulative shoulder loads and postures during non-occupational tasks: A preliminary investigation. Work, 2014, 47, 73-86.	1.1	2
139	Unilateral ankle immobilization alters the kinematics and kinetics of lifting. Work, 2014, 47, 221-234.	1.1	19
140	Transient Low Back Pain Development During Standing Predicts Future Clinical Low Back Pain in Previously Asymptomatic Individuals. Spine, 2014, 39, E379-E383.	2.0	47
141	Existing muscle synergies and low back pain. , 2013, , 113-122.		O
142	The impact of shear force magnitude on cumulative injury load tolerance: a force weighting approach for low-back shear loads. Theoretical Issues in Ergonomics Science, 2013, 14, 402-416.	1.8	2
143	Gait adaptations to different paths of stair descent. Gait and Posture, 2013, 38, 691-695.	1.4	3
144	Postural influence on the neutral zone of the porcine cervical spine under anterior–posterior shear load. Medical Engineering and Physics, 2013, 35, 910-918.	1.7	8

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145	Possible mechanisms for the reduction of low back pain associated with standing on a sloped surface. Gait and Posture, 2013, 37, 313-318.	1.4	20
146	Towards establishing an occupational threshold for cumulative shear force in the vertebral joint — An in vitro evaluation of a risk factor for spondylolytic fractures using porcine specimens. Clinical Biomechanics, 2013, 28, 246-254.	1,2	5
147	Should We Be More on the Ball?. Human Factors, 2013, 55, 1064-1076.	3.5	13
148	Cumulative knee adductor load distinguishes between healthy and osteoarthritic knees–A proof of principle study. Gait and Posture, 2013, 37, 397-401.	1.4	48
149	Development of an equation for calculating vertebral shear failure tolerance without destructive mechanical testing using iterative linear regression. Medical Engineering and Physics, 2013, 35, 1212-1220.	1.7	1
150	Partial rupture of the Achilles tendon during a simulated fire ground task: Insights obtained from a case report for the prevention and reporting of musculoskeletal injury. Clinical Biomechanics, 2013, 28, 436-440.	1.2	5
151	A Stochastic Framework for Movement Strategy Identification and Analysis. IEEE Transactions on Human-Machine Systems, 2013, 43, 314-327.	3.5	12
152	Characterization of the protective capacity of flooring systems using force-deflection profiling. Medical Engineering and Physics, 2013, 35, 108-115.	1.7	19
153	Anthropometry-Corrected Exposure Modeling as a Method to Improve Trunk Posture Assessment with a Single Inclinometer. Journal of Occupational and Environmental Hygiene, 2013, 10, 143-154.	1.0	11
154	The Impact of Mobile Data Terminal Use on Posture and Low-Back Discomfort When Combined With Simulated Prolonged Driving in Police Cruisers. International Journal of Occupational Safety and Ergonomics, 2013, 19, 415-422.	1.9	17
155	Computerised system for measurement of muscle thickness based on ultrasonography. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 249-255.	1.6	5
156	Lower limb kinematic variability associated with minimal footwear during running. Footwear Science, 2013, 5, 171-177.	2.1	8
157	The effects of police duty belt and seat design changes on lumbar spine posture, driver contact pressure and discomfort. Ergonomics, 2013, 56, 126-136.	2.1	26
158	Police Officer Discomfort and Activity Characterization During a Day Shift and a Night Shift. Proceedings of the Human Factors and Ergonomics Society, 2013, 57, 1820-1824.	0.3	0
159	FMSâ,,¢ scores change with performers' knowledge of the grading criteria – Are general whole-body movement screens capturing "dysfunctionâ€?. Journal of Strength and Conditioning Research, 2013, Publish Ahead of Print, .	2.1	7
160	The effect of posture category salience on decision times and errors when using observation-based posture assessment methods. Ergonomics, 2012, 55, 1548-1558.	2.1	13
161	Validation of occupational estimates of cumulative low-back load. Occupational Ergonomics, 2012, 10, 113-124.	0.3	8
162	The Impact of Posture and Prolonged Cyclic Compressive Loading on Vertebral Joint Mechanics. Spine, 2012, 37, E1023-E1029.	2.0	25

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163	Using the Functional Movement Screenâ,,¢ to Evaluate the Effectiveness of Training. Journal of Strength and Conditioning Research, 2012, 26, 1620-1630.	2.1	102
164	Compressive force magnitude and intervertebral joint flexion/extension angle influence shear failure force magnitude in the porcine cervical spine. Journal of Biomechanics, 2012, 45, 484-490.	2.1	26
165	Is there a low-back cost to hip-centric exercise? Quantifying the lumbar spine joint compression and shear forces during movements used to overload the hips. Journal of Sports Sciences, 2012, 30, 859-870.	2.0	4
166	The influence of resistance bands on frontal plane knee mechanics during body-weight squat and vertical jump movements. Sports Biomechanics, 2012, 11, 391-401.	1.6	14
167	Altered muscle recruitment during extension from trunk flexion in low back pain developers. Clinical Biomechanics, 2012, 27, 994-998.	1.2	59
168	Biomechanical properties of the transverse carpal ligament under biaxial strain. Journal of Orthopaedic Research, 2012, 30, 757-763.	2.3	16
169	Influence of automobile seat lumbar support prominence on spine and pelvic postures: A radiological investigation. Applied Ergonomics, 2012, 43, 876-882.	3.1	43
170	Evaluation of the influence of mobile data terminal location on physical exposures during simulated police patrol activities. Applied Ergonomics, 2012, 43, 859-867.	3.1	15
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