Jacek Cholewicki

List of Publications by Year in descending order

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92 papers 9,364 citations

43 h-index

71004

58552 86 g-index

94 all docs 94
docs citations

94 times ranked 5205 citing authors

#	Article	IF	CITATIONS
1	The effects of osteopathic manipulative treatment on pain and disability in patients with chronic neck pain: A singleâ€blinded randomized controlled trial. PM and R, 2022, 14, 1417-1429.	0.9	9
2	How Individuals With Low Back Pain Conceptualize Their Condition: A Collaborative Modeling Approach. Journal of Pain, 2022, 23, 1060-1070.	0.7	2
3	Regularized nonlinear regression for simultaneously selecting and estimating key model parameters: Application to head-neck position tracking. Engineering Applications of Artificial Intelligence, 2022, 113, 104974.	4.3	2
4	Stability threshold during seated balancing is sensitive to low back pain and safe to assess. Journal of Biomechanics, 2021, 125, 110541.	0.9	4
5	Quantifying trunk neuromuscular control using seated balancing and stability threshold. Journal of Biomechanics, 2020, 112, 110038.	0.9	4
6	Cohort profile: why do people keep hurting their back?. BMC Research Notes, 2020, 13, 538.	0.6	8
7	Trunk stiffness decreases and trunk damping increases with experimental low back pain. Journal of Biomechanics, 2020, 112, 110053.	0.9	6
8	Feasibility of Incorporating Test-Retest Reliability and Model Diversity in Identification of Key Neuromuscular Pathways During Head Position Tracking. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 275-282.	2.7	5
9	Building a Collaborative Model of Sacroiliac Joint Dysfunction and Pelvic Girdle Pain to Understand the Diverse Perspectives of Experts. PM and R, 2019, 11, S11-S23.	0.9	8
10	Time to Reflect on the Role of Motor Control in Low Back Pain. Journal of Orthopaedic and Sports Physical Therapy, 2019, 49, 367-369.	1.7	23
11	Can Biomechanics Research Lead to More Effective Treatment of Low Back Pain? A Point-Counterpoint Debate. Journal of Orthopaedic and Sports Physical Therapy, 2019, 49, 425-436.	1.7	28
12	Model Simulations Challenge Reductionist Research Approaches to Studying Chronic Low Back Pain. Journal of Orthopaedic and Sports Physical Therapy, 2019, 49, 477-481.	1.7	18
13	Are Stability and Instability Relevant Concepts for Back Pain?. Journal of Orthopaedic and Sports Physical Therapy, 2019, 49, 415-424.	1.7	35
14	Development of a collaborative model of low back pain: report from the 2017 NASS consensus meeting. Spine Journal, 2019, 19, 1029-1040.	0.6	23
15	Selecting Sensitive Parameter Subsets in Dynamical Models With Application to Biomechanical System Identification. Journal of Biomechanical Engineering, 2018, 140, .	0.6	6
16	Friday, September 28, 2018 8:00 AM–9:00 AM interdisciplinary spine forum: abstract presentations. Spine Journal, 2018, 18, S71.	0.6	0
17	Degenerative Spondylolisthesis Is Related to Multiparity and Hysterectomies in Older Women. Spine, 2017, 42, 1643-1647.	1.0	12
18	Can lumbosacral orthoses cause trunk muscle weakness? A systematic review of literature. Spine Journal, 2017, 17, 589-602.	0.6	36

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19	Reliability of assessing postural control during seated balancing using a physical human-robot interaction. Journal of Biomechanics, 2017, 64, 198-205.	0.9	9
20	Robotic solutions to facilitate studying human motor control. , 2017, , .		2
21	Time-Domain Optimal Experimental Design in Human Seated Postural Control Testing. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, 0545011-545017.	0.9	7
22	Quantitative measures of sagittal plane head–neck control: A test–retest reliability study. Journal of Biomechanics, 2015, 48, 549-554.	0.9	11
23	Biomechanical Analysis of Augmented Plate Fixation for the Treatment of Vertical Shear Femoral Neck Fractures. Journal of Orthopaedic Trauma, 2015, 29, 144-150.	0.7	77
24	A Randomized Clinical Trial Comparing Extensible and Inextensible Lumbosacral Orthoses and Standard Care Alone in the Management of Lower Back Pain. Spine, 2014, 39, 1733-1742.	1.0	34
25	Reliability of assessing trunk motor control using position and force tracking and stabilization tasks. Journal of Biomechanics, 2014, 47, 44-49.	0.9	15
26	Determination of body segment masses and centers of mass using a force plate method. Medical Engineering and Physics, 2014, 36, 805-806.	0.8	2
27	Robust Optimal Experimental Design for Study of the Human Head-Neck Tracking Response. , 2012, , .		3
28	Spine stability: Lessons from balancing a stick. Clinical Biomechanics, 2011, 26, 325-330.	0.5	47
29	A comparison of a maximum exertion method and a model-based, sub-maximum exertion method for normalizing trunk EMG. Journal of Electromyography and Kinesiology, 2011, 21, 767-773.	0.7	22
30	Expanding our view of the spine system. European Spine Journal, 2010, 19, 331-332.	1.0	16
31	MSU Classification for herniated lumbar discs on MRI: toward developing objective criteria for surgical selection. European Spine Journal, 2010, 19, 1087-1093.	1.0	130
32	The effects of a three-week use of lumbosacral orthoses on trunk muscle activity and on the muscular response to trunk perturbations. BMC Musculoskeletal Disorders, 2010, 11, 154.	0.8	29
33	Optimal Control of the Spine System. Journal of Biomechanical Engineering, 2010, 132, 051004.	0.6	15
34	Comparison of trunk stiffness provided by different design characteristics of lumbosacral orthoses. Clinical Biomechanics, 2010, 25, 110-114.	0.5	36
35	Comparison of Trunk Proprioception Between Patients With Low Back Pain and Healthy Controls. Archives of Physical Medicine and Rehabilitation, 2010, 91, 1327-1331.	0.5	123
36	Optimal Neuromuscular Control of Spine Systems. , 2009, , .		O

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37	Trunk muscle response to various protocols of lumbar traction. Manual Therapy, 2009, 14, 562-566.	1.6	16
38	Changes in the mechanical properties of the trunk in low back pain may be associated with recurrence. Journal of Biomechanics, 2009, 42, 61-66.	0.9	199
39	Effects of reflex delays on postural control during unstable seated balance. Journal of Biomechanics, 2009, 42, 164-170.	0.9	67
40	The Effects of Stochastic Resonance Stimulation on Spine Proprioception and Postural Control in Chronic Low Back Pain Patients. Spine, 2009, 34, 316-321.	1.0	32
41	Trunk antagonist co-activation is associated with impaired neuromuscular performance. Experimental Brain Research, 2008, 188, 457-463.	0.7	31
42	Spine stability: The six blind men and the elephant. Clinical Biomechanics, 2007, 22, 266-274.	0.5	220
43	Deficits in Neuromuscular Control of the Trunk Predict Knee Injury Risk. American Journal of Sports Medicine, 2007, 35, 1123-1130.	1.9	723
44	Lumbosacral orthoses reduce trunk muscle activity in a postural control task. Journal of Biomechanics, 2007, 40, 1731-1736.	0.9	48
45	The effect of background muscle activity on computerized detection of sEMG onset and offset. Journal of Biomechanics, 2007, 40, 3521-3526.	0.9	29
46	The Effects of Core Proprioception on Knee Injury. American Journal of Sports Medicine, 2007, 35, 368-373.	1.9	326
47	Muscle activation imbalance and low-back injury in varsity athletes. Journal of Electromyography and Kinesiology, 2006, 16, 264-272.	0.7	52
48	The effects of trunk stiffness on postural control during unstable seated balance. Experimental Brain Research, 2006, 174, 694-700.	0.7	110
49	Chronic low back pain. Current Pain and Headache Reports, 2006, 10, 431-436.	1.3	20
50	The Effects of a 3-Week Use of Lumbosacral Orthoses on Proprioception in the Lumbar Spine. Journal of Orthopaedic and Sports Physical Therapy, 2006, 36, 225-231.	1.7	39
51	Delayed Trunk Muscle Reflex Responses Increase the Risk of Low Back Injuries. Spine, 2005, 30, 2614-2620.	1.0	287
52	The effects of lumbosacral orthoses on spine stability: What changes in EMG can be expected?. Journal of Orthopaedic Research, 2004, 22, 1150-1155.	1.2	30
53	The effects of visual input on postural control of the lumbar spine in unstable sitting. Human Movement Science, 2003, 22, 237-252.	0.6	63
54	The effect of increased peripheral suture purchase on the strength of flexor tendon repairs. Journal of Hand Surgery, 2003, 28, 464-469.	0.7	63

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55	Trunk muscle activation in low-back pain patients, an analysis of the literature. Journal of Electromyography and Kinesiology, 2003, 13, 333-351.	0.7	511
56	Coordination of muscle activity to assure stability of the lumbar spine. Journal of Electromyography and Kinesiology, 2003, 13, 353-359.	0.7	428
57	Trunk Muscle Recruitment Patterns in Patients With Low Back Pain Enhance the Stability of the Lumbar Spine. Spine, 2003, 28, 834-841.	1.0	307
58	Comparison of Motion Restriction and Trunk Stiffness Provided by Three Thoracolumbosacral Orthoses (TLSOs). Journal of Spinal Disorders and Techniques, 2003, 16, 461-468.	1.8	26
59	Trunk muscle recruitment patterns in patients with low back pain enhance the stability of the lumbar spine. Spine, 2003, 28, 834-41.	1.0	110
60	Neuromuscular Function in Athletes Following Recovery From a Recent Acute Low Back Injury. Journal of Orthopaedic and Sports Physical Therapy, 2002, 32, 568-575.	1.7	85
61	Effects of the abdominal belt on muscle-generated spinal stability and L4/L5 joint compression force. Ergonomics, 2002, 45, 501-513.	1.1	29
62	Relative contribution of trunk muscles to the stability of the lumbar spine during isometric exertions. Clinical Biomechanics, 2002, 17, 99-105.	0.5	260
63	Can increased intra-abdominal pressure in humans be decoupled from trunk muscle co-contraction during steady state isometric exertions?. European Journal of Applied Physiology, 2002, 87, 127-133.	1.2	57
64	Effect of suture locking and suture caliber on fatigue strength of flexor tendon repairs. Journal of Hand Surgery, 2001, 26, 340-346.	0.7	129
65	Impaired Postural Control of the Lumbar Spine Is Associated With Delayed Muscle Response Times in Patients With Chronic Idiopathic Low Back Pain. Spine, 2001, 26, 724-730.	1.0	487
66	Mechanical Properties of the Human Cervical Spine as Shown by Three-Dimensional Load–Displacement Curves. Spine, 2001, 26, 2692-2700.	1.0	423
67	Canal and Intervertebral Foramen Encroachments of a Burst Fracture. Spine, 2001, 26, 1231-1237.	1.0	16
68	A History of Low Back Injury is a Risk Factor for Recurrent Back Injuries in Varsity Athletes. American Journal of Sports Medicine, 2001, 29, 795-800.	1.9	111
69	Biomechanical Basis for Stability: An Explanation to Enhance Clinical Utility. Journal of Orthopaedic and Sports Physical Therapy, 2001, 31, 96-100.	1.7	81
70	Disc Degeneration. Spine, 2000, 25, 2171-2175.	1.0	45
71	A Study of Stiffness Protocol as Exemplified by Testing of a Burst Fracture Model in Sagittal Plane. Spine, 2000, 25, 2748-2754.	1.0	19
72	Muscle Response Pattern to Sudden Trunk Loading in Healthy Individuals and in Patients with Chronic Low Back Pain. Spine, 2000, 25, 947-954.	1.0	444

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73	Equivalence of single and incremental subfailure stretches of rabbit anterior cruciate ligament. Journal of Orthopaedic Research, 2000, 18, 841-848.	1.2	11
74	Effects of external trunk loads on lumbar spine stability. Journal of Biomechanics, 2000, 33, 1377-1385.	0.9	220
75	Superiority of incremental trauma approach in experimental burst fracture studies. Clinical Biomechanics, 2000, 15, 73-78.	0.5	32
76	The role of multiple strands and locking sutures on gap formation of flexor tendon repairs during cyclical loading. Journal of Hand Surgery, 2000, 25, 714-720.	0.7	128
77	Intra-abdominal pressure mechanism for stabilizing the lumbar spine. Journal of Biomechanics, 1999, 32, 13-17.	0.9	239
78	Subfailure injury affects the relaxation behavior of rabbit ACL. Clinical Biomechanics, 1999, 14, 24-31.	0.5	32
79	The Effect of Anabolic Steroids and Corticosteroids on Healing of Muscle Contusion Injury. American Journal of Sports Medicine, 1999, 27, 2-9.	1.9	134
80	Head kinematics during in vitro whiplash simulation. Accident Analysis and Prevention, 1998, 30, 469-479.	3.0	43
81	Critical load of the human cervical spine: an in vitro experimental study. Clinical Biomechanics, 1998, 13, 11-17.	0.5	198
82	Mechanism of whiplash injury. Clinical Biomechanics, 1998, 13, 239-249.	0.5	125
83	Authors?? Response. Journal of Spinal Disorders, 1998, 11, 455.	1.1	0
84	Simulation of Whiplash Trauma Using Whole Cervical Spine Specimens. Spine, 1998, 23, 17-24.	1.0	130
85	Whiplash Produces an S-Shaped Curvature of the Neck With Hyperextension at Lower Levels. Spine, 1997, 22, 2489-2494.	1.0	209
86	Stabilizing Function of Trunk Flexor-Extensor Muscles Around a Neutral Spine Posture. Spine, 1997, 22, 2207-2212.	1.0	522
87	Effects of Posture and Structure on Three-Dimensional Coupled Rotations in the Lumbar Spine. Spine, 1996, 21, 2421-2428.	1.0	81
88	A simple polynomial that predicts low-back compression during complex 3-D tasks. Ergonomics, 1996, 39, 1107-1118.	1.1	101
89	Comparison of muscle forces and joint load from an optimization and EMG assisted lumbar spine model: Towards development of a hybrid approach. Journal of Biomechanics, 1995, 28, 321-331.	0.9	219
90	Relationship Between Muscle Force and Stiffness in the Whole Mammalian Muscle: A Simulation Study. Journal of Biomechanical Engineering, 1995, 117, 339-342.	0.6	79

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91	EMG assisted optimization: A hybrid approach for estimating muscle forces in an indeterminate biomechanical model. Journal of Biomechanics, 1994, 27, 1287-1289.	0.9	130
92	The Mechanical Role of Lumbar Ligaments in Lifting: A Review Article. Journal of Orthopaedic Medicine, 1993, 15, 39-48.	0.0	1