Stuart M Mcgill

List of Publications by Year
in descending order

54 papers	3,727 citations	172457 29 h-index	161849 54 g-index
54 all docs	54 docs citations	54 times ranked	2411 citing authors

#	Article	IF	Citations
1	Coordination of muscle activity to assure stability of the lumbar spine. Journal of Electromyography and Kinesiology, 2003, 13, 353-359.	1.7	428
2	Electromyographic activity of the abdominal and low back musculature during the generation of isometric and dynamic axial trunk torque: Implications for lumbar mechanics. Journal of Orthopaedic Research, 1991, 9, 91-103.	2.3	401
3	The biomechanics of low back injury: Implications on current practice in industry and the clinic. Journal of Biomechanics, 1997, 30, 465-475.	2.1	361
4	Abdominal Muscle Response During Curl-ups on Both Stable and Labile Surfaces. Physical Therapy, 2000, 80, 564-569.	2.4	268
5	Quantification of Lumbar Stability by Using 2 Different Abdominal Activation Strategies. Archives of Physical Medicine and Rehabilitation, 2007, 88, 54-62.	0.9	196
6	Lumbar spine stability can be augmented with an abdominal belt and/or increased intra-abdominal pressure. European Spine Journal, 1999, 8, 388-395.	2.2	163
7	Exercises for Spine Stabilization: Motion/Motor Patterns, Stability Progressions, and Clinical Technique. Archives of Physical Medicine and Rehabilitation, 2009, 90, 118-126.	0.9	154
8	The Back Squat. Strength and Conditioning Journal, 2014, 36, 4-27.	1.4	147
9	Frequency response of spine extensors during rapid isometric contractions: effects of muscle length and tension. Journal of Electromyography and Kinesiology, 1998, 8, 227-232.	1.7	128
10	Lumbar Postureâ€"Should It, and Can It, Be Modified? A Study of Passive Tissue Stiffness and Lumbar Position During Activities of Daily Living. Physical Therapy, 2003, 83, 907-917.	2.4	120
11	Previous history of LBP with work loss is related to lingering deficits in biomechanical, physiological, personal, psychosocial and motor control characteristics. Ergonomics, 2003, 46, 731-746.	2.1	102
12	A simple polynomial that predicts low-back compression during complex 3-D tasks. Ergonomics, 1996, 39, 1107-1118.	2.1	101
13	Relationship Between Muscle Force and Stiffness in the Whole Mammalian Muscle: A Simulation Study. Journal of Biomechanical Engineering, 1995, 117, 339-342.	1.3	79
14	Predicting Performance and Injury Resilience From Movement Quality and Fitness Scores in a Basketball Team Over 2 Years. Journal of Strength and Conditioning Research, 2012, 26, 1731-1739.	2.1	71
15	Low back loads while walking and carrying: comparing the load carried in one hand or in both hands. Ergonomics, 2013, 56, 293-302.	2.1	68
16	Kettlebell Swing, Snatch, and Bottoms-Up Carry: Back and Hip Muscle Activation, Motion, and Low Back Loads. Journal of Strength and Conditioning Research, 2012, 26, 16-27.	2.1	66
17	Comparison of Different Strongman Events: Trunk Muscle Activation and Lumbar Spine Motion, Load, and Stiffness. Journal of Strength and Conditioning Research, 2009, 23, 1148-1161.	2.1	61
18	Frozen storage increases the ultimate compressive load of porcine vertebrae. Journal of Orthopaedic Research, 1995, 13, 809-812.	2.3	54

#	Article	IF	Citations
19	Evidence of a Double Peak in Muscle Activation to Enhance Strike Speed and Force: An Example With Elite Mixed Martial Arts Fighters. Journal of Strength and Conditioning Research, 2010, 24, 348-357.	2.1	48
20	Analysis of Pushing Exercises. Journal of Strength and Conditioning Research, 2014, 28, 105-116.	2.1	48
21	Pushing and pulling: personal mechanics influence spine loads. Ergonomics, 2006, 49, 895-908.	2.1	46
22	Corrective sitting strategies: An examination of muscle activity and spine loading. Journal of Electromyography and Kinesiology, 2014, 24, 114-119.	1.7	45
23	Linking latest knowledge of injury mechanisms and spine function to the prevention of low back disorders. Journal of Electromyography and Kinesiology, 2004, 14, 43-47.	1.7	44
24	Physical fitness improvements and occupational low-back loading â€“ an exercise intervention study with firefighters. Ergonomics, 2014, 57, 744-763.	2.1	43
25	ABDOMINAL BELTS IN INDUSTRY: A POSITION PAPER ON THEIR ASSETS, LIABILITIES AND USE. AIHA Journal, 1993, 54, 752-754.	0.4	40
26	Clinical tools to quantify torso flexion endurance: Normative data from student and firefighter populations. Occupational Ergonomics, 2010, 9, 55-61.	0.3	36
27	Closure of the annulus fibrosus of the intervertebral disc using a novel suture application deviceâ€”in vivo porcine and ex vivo biomechanical evaluation. Spine Journal, 2016, 16, 889-895.	1.3	36
28	Annulus Fibrosus Can Strip Hyaline Cartilage End Plate from Subchondral Bone: A Study of the Intervertebral Disk in Tension. Global Spine Journal, 2015, 5, 360-365.	2.3	34
29	Exercise-Based Performance Enhancement and Injury Prevention for Firefighters. Journal of Strength and Conditioning Research, 2015, 29, 2441-2459.	2.1	33
30	Assessment of an EMG-based method for continuous estimates of low back compression during asymmetrical occupational tasks. Ergonomics, 1999, 42, 868-879.	2.1	32
31	Isokinetic Leg Strength Profile of Elite Male Basketball Players. Journal of Strength and Conditioning Research, 2009, 23, 1332-1337.	2.1	31
32	The Back Squat. Strength and Conditioning Journal, 2015, 37, 13-60.	1.4	27
33	Using a pneumatic support to correct sitting posture for prolonged periods: A study using airline seats. Ergonomics, 2009, 52, 1162-1168.	2.1	22
34	Evolving ergonomics?. Ergonomics, 2009, 52, 80-86.	2.1	22
35	An appraisal of the Functional Movement Screenâ„¢ grading criteria â€“ Is the composite score sensitive to risky movement behavior?. Physical Therapy in Sport, 2015, 16, 324-330.	1.9	22
36	Ballistic Abdominal Exercises: Muscle Activation Patterns During Three Activities Along the Stability/Mobility Continuum. Journal of Strength and Conditioning Research, 2009, 23, 898-905.	2.1	19

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37	Examining the effects of altering hip orientation on gluteus medius and tensor fascae latae interplay during common non-weight-bearing hip rehabilitation exercises. Clinical Biomechanics, 2014, 29, 971-976.	1.2	18
38	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
39	The predictive value of general movement tasks in assessing occupational task performance. Work, 2015, 52, 11-18.	1.1	12
40	Spine loading during laboratory-simulated fireground operations â€" inter-individual variation and method of load quantification. Ergonomics, 2019, 62, 1426-1438.	2.1	10
41	Muscle activity and spine load during pulling exercises: Influence of stable and labile contact surfaces and technique coaching. Journal of Electromyography and Kinesiology, 2014, 24, 652-665.	1.7	9
42	Increased core stability is associated with reduced knee valgus during single-leg landing tasks: Investigating lumbar spine and hip joint rotational stiffness. Journal of Biomechanics, 2021, 116, 110240.	2.1	9
43	The effect of short-term isometric training on core/torso stiffness. Journal of Sports Sciences, 2017, 35, 1724-1733.	2.0	8
44	The effect of core training on distal limb performance during ballistic strike manoeuvres. Journal of Sports Sciences, 2017, 35, 1768-1780.	2.0	8
45	Evaluation of an injectable hydrogel and polymethyl methacrylate in restoring mechanics to compressively fractured spine motion segments. Spine Journal, 2016, 16, 1404-1412.	1.3	7
46	Effect of Modulated TENS on Muscle Activation, Oxygenation, and Pain: Searching for a Physiological Mechanism. Journal of Musculoskeletal Pain, 2005, 13, 19-30.	0.3	6
47	A proposed method to detect kinematic differences between and within individuals. Journal of Electromyography and Kinesiology, 2015, 25, 479-487.	1.7	6
48	Personal and psychosocial variables in workers with a previous history of LBP: 16-month follow-up. Ergonomics, 2005, 48, 200-206.	2.1	4
49	A Six-Week Trial of Hula Hooping Using a Weighted Hoop. Journal of Strength and Conditioning Research, 2015, 29, 1279-1284.	2.1	4
50	Evidence on the Ability of a Pneumatic Decompression Belt to Restore Spinal Height Following an Acute Bout of Exercise. Journal of Manipulative and Physiological Therapeutics, 2016, 39, 304-310.	0.9	4
51	Choice predicts the feedback negativity. Psychophysiology, 2017, 54, 1800-1811.	2.4	4
52	Invited Commentary on Intrarater and Interrater Reliability of Select Clinical Tests in Patients Referred for Diagnostic Facet Joint Blocks in the Cervical Spine. Archives of Physical Medicine and Rehabilitation, 2013, 94, 1635-1637.	0.9	2
53	A videofluoroscopy-based tracking algorithm for quantifying the time course of human intervertebral displacements. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 794-802.	1.6	2
54	Digital tracking algorithm reveals the influence of structural irregularities on joint movements in the human cervical spine. Clinical Biomechanics, 2018, 56, 11-17.	1.2	2