William S Marras

List of Publications by Year
in descending order

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216 papers	8,799 citations	43973 48 h-index	49773 87 g-index
227 all docs	227 docs citations	227 times ranked	3815 citing authors

#	Article	IF	Citations
1	The Role of Dynamic Three-Dimensional Trunk Motion in Occupationally-Related Low Back Disorders. Spine, 1993, 18, 617-628.	1.0	681
2	A strategy for human factors/ergonomics: developing the discipline and profession. Ergonomics, 2012, 55, 377-395.	1.1	607
3	Biomechanical risk factors for occupationally related low back disorders. Ergonomics, 1995, 38, 377-410.	1.1	519
4	Costâ€"Benefit of Muscle Cocontraction in Protecting Against Spinal Instability. Spine, 2000, 25, 1398-1404.	1.0	220
5	Occupational risk factors associated with soft tissue disorders of the shoulder: a review of recent investigations in the literature. Ergonomics, 1993, 36, 697-717.	1.1	205
6	The Influence of Psychosocial Stress, Gender, and Personality on Mechanical Loading of the Lumbar Spine. Spine, 2000, 25, 3045-3054.	1.0	196
7	Wrist motions in industry. Ergonomics, 1993, 36, 341-351.	1.1	185
8	A Stochastic Model of Trunk Muscle Coactivation During Trunk Bending. Spine, 1993, 18, 1396-1409.	1.0	184
9	A Three-Dimensional Motion Model of Loads on the Lumbar Spine: I. Model Structure. Human Factors, 1991, 33, 123-137.	2.1	182
10	Spine Loading Characteristics of Patients With Low Back Pain Compared With Asymptomatic Individuals. Spine, 2001, 26, 2566-2574.	1.0	177
11	A Three-Dimensional Motion Model of Loads on the Lumbar Spine: II. Model Validation. Human Factors, 1991, 33, 139-149.	2.1	152
12	Tolerance of the lumbar spine to shear: A review and recommended exposure limits. Clinical Biomechanics, 2012, 27, 973-978.	0.5	146
13	The development of an EMG-assisted model to assess spine loading during whole-body free-dynamic lifting. Journal of Electromyography and Kinesiology, 1997, 7, 259-268.	0.7	142
14	The Classification of Anatomic- and Symptom-based Low Back Disorders Using Motion Measure Models. Spine, 1995, 20, 2531-2546.	1.0	140
15	The Impact of Mental Processing and Pacing on Spine Loading. Spine, 2002, 27, 2645-2653.	1.0	123
16	National occupational research agenda (NORA) future directions in occupational musculoskeletal disorder health research. Applied Ergonomics, 2009, 40, 15-22.	1.7	123
17	Spine loading during asymmetric lifting using one versus two hands. Ergonomics, 1998, 41, 817-834.	1.1	114
18	The Quantification of Low Back Disorder Using Motion Measures. Spine, 1999, 24, 2091.	1.0	109

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19	Spine loading in patients with low back pain during asymmetric lifting exertions. Spine Journal, 2004, 4, 64-75.	0.6	104
20	Biomechanical evaluation of exoskeleton use on loading of the lumbar spine. Applied Ergonomics, 2018, 68, 101-108.	1.7	92
21	The Effects of Preview and Task Symmetry on Trunk Muscle Response to Sudden Loading. Human Factors, 1989, 31, 101-115.	2.1	88
22	Towards an objective assessment of the ?maximal voluntary contraction? component in routine muscle strength measurements. European Journal of Applied Physiology and Occupational Physiology, 1980, 45, 1-9.	1.2	83
23	Torso Flexion Loads and the Fatigue Failure of Human Lumbosacral Motion Segments. Spine, 2005, 30, 2265-2273.	1.0	82
24	An Assessment of Complex Spinal Loads During Dynamic Lifting Tasks. Spine, 1998, 23, 706-716.	1.0	81
25	Spine loading at different lumbar levels during pushing and pulling. Ergonomics, 2009, 52, 60-70.	1.1	80
26	Accuracy map of an optical motion capture system with 42 or 21 cameras in a large measurement volume. Journal of Biomechanics, 2017, 58, 237-240.	0.9	76
27	Rapid Communication Industrial wrist motions and incidence of hand/wrist cumulative trauma disorders. Ergonomics, 1994, 37, 1449-1459.	1.1	75
28	Evaluation of spinal loading during lowering and lifting. Clinical Biomechanics, 1998, 13, 141-152.	0.5	74
29	The Role of Complex, Simultaneous Trunk Motions in the Risk of Occupation-Related Low Back Disorders. Spine, 1998, 23, 1035-1042.	1.0	74
30	Low Back Pain Recurrence in Occupational Environments. Spine, 2007, 32, 2387-2397.	1.0	72
31	Differences in motor recruitment and resulting kinematics between low back pain patients and asymptomatic participants during lifting exertions. Clinical Biomechanics, 2004, 19, 992-999.	0.5	71
32	Changes in Trunk Dynamics and Spine Loading During Repeated Trunk Exertions. Spine, 1997, 22, 2564-2570.	1.0	70
33	Industrial electromyography (EMG). International Journal of Industrial Ergonomics, 1990, 6, 89-93.	1.5	69
34	A neural network-based system for classification of industrial jobs with respect to risk of low back disorders due to workplace design. Applied Ergonomics, 1997, 28, 49-58.	1.7	68
35	Quantitative Dynamic Measures of Physical Exposure Predict Low Back Functional Impairment. Spine, 2010, 35, 914-923.	1.0	68
36	Trunk Strength during Asymmetric Trunk Motion. Human Factors, 1989, 31, 667-677.	2.1	65

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37	Spine Loading as a Function of Gender. Spine, 2002, 27, 2514-2520.	1.0	60
38	Gender influences on spine loads during complex lifting. Spine Journal, 2003, 3, 93-99.	0.6	60
39	Relation between spinal load factors and the high-risk probability of occupational low-back disorder. Ergonomics, 1999, 42, 1187-1199.	1.1	58
40	Longitudinal Quantitative Measures of the Natural Course of Low Back Pain Recovery. Spine, 2000, 25, 1950-1956.	1.0	58
41	Trunk kinematics of one-handed lifting, and the effects of asymmetry and load weight. Ergonomics, 1996, 39, 322-334.	1.1	56
42	A method for measuring external spinal loads during unconstrained free-dynamic lifting. Journal of Biomechanics, 1997, 30, 975-978.	0.9	56
43	Effects of postural and visual stressors on myofascial trigger point development and motor unit rotation during computer work. Journal of Electromyography and Kinesiology, 2011, 21, 41-48.	0.7	55
44	Assessment of the Relationship between Box Weight and Trunk Kinematics: Does a Reduction in Box Weight Necessarily Correspond to a Decrease in Spinal Loading?. Human Factors, 2000, 42, 195-208.	2.1	54
45	The effect of ergonomic interventions in healthcare facilities on musculoskeletal disorders. American Journal of Industrial Medicine, 2005, 48, 338-347.	1.0	54
46	Evaluating the low back biomechanics of three different office workstations: Seated, standing, and perching. Applied Ergonomics, 2016, 56, 170-178.	1.7	54
47	Loading along the lumbar spine as influence by speed, control, load magnitude, and handle height during pushing. Clinical Biomechanics, 2009, 24, 155-163.	0.5	51
48	Simulift: A Simulation Model of Human Trunk Motion. Spine, 1989, 14, 5-11.	1.0	49
49	Prevalence of low back pain, seeking medical care, and lost time due to low back pain among manual material handling workers in the United States. BMC Musculoskeletal Disorders, 2019, 20, 243.	0.8	49
50	Impact of two postural assist exoskeletons on biomechanical loading of the lumbar spine. Applied Ergonomics, 2019, 75, 1-7.	1.7	49
51	Grip Force and Muscle Activity Differences Due to Glove Type. AIHA Journal: A Journal for the Science of Occupational and Environmental Health and Safety, 2002, 63, 269-274.	0.4	48
52	Shoulder Muscle Fatigue During Repetitive Tasks as Measured by Electromyography and Near-Infrared Spectroscopy. Human Factors, 2013, 55, 1077-1087.	2.1	48
53	Neuromuscular Trunk Performance and Spinal Loading During a Fatiguing Isometric Trunk Extension with Varying Torque Requirements. Journal of Spinal Disorders, 1997, 10, 145???156.	1.1	47
54	Impairment Magnification During Dynamic Trunk Motions. Spine, 2000, 25, 587-595.	1.0	45

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55	Evaluation of Maximal and Submaximal Static Muscle Exertions. Human Factors, 1981, 23, 643-653.	2.1	44
56	A quantitative description of typing biomechanics. Journal of Occupational Rehabilitation, 1996, 6, 33-55.	1.2	44
57	Effects of Handle Angle and Work Orientation on Hammering: I. Wrist Motion and Hammering Performance. Human Factors, 1989, 31, 397-411.	2.1	43
58	Measuring trunk motions in industry: variability due to task factors, individual differences, and the amount of data collected. Ergonomics, 2000, 43, 691-701.	1.1	43
59	Finger motion, wrist motion and tendon travel as a function of keyboard angles. Clinical Biomechanics, 2000, 15, 489-498.	0.5	43
60	The Complex Spine. Human Factors, 2012, 54, 881-889.	2.1	43
61	An EMG-assisted model calibration technique that does not require MVCs. Journal of Electromyography and Kinesiology, 2013, 23, 608-613.	0.7	43
62	Lifting in stooped and kneeling postures: Effects on lifting capacity, metabolic costs, and electromyography of eight trunk muscles. International Journal of Industrial Ergonomics, 1988, 3, 65-76.	1.5	42
63	The biochemical response to biomechanical tissue loading on the low back during physical work exposure. Clinical Biomechanics, 2011, 26, 431-437.	0.5	41
64	Reduction of spinal loading through the use of handles. Ergonomics, 1998, 41, 1155-1168.	1.1	39
65	Effects of posture on dynamic back loading during a cable lifting task. Ergonomics, 2002, 45, 380-398.	1.1	39
66	A Comparison of Fatigue Failure Responses of Old Versus Middle-Aged Lumbar Motion Segments in Simulated Flexed Lifting. Spine, 2007, 32, 1832-1839.	1.0	39
67	Estimation of the Dynamic Spinal Forces Using a Recurrent Fuzzy Neural Network. IEEE Transactions on Systems, Man, and Cybernetics, 2007, 37, 100-109.	5.5	39
68	Objective classification of vehicle seat discomfort. Ergonomics, 2014, 57, 536-544.	1.1	39
69	Quantitative biomechanical workplace exposure measures: Distribution centers. Journal of Electromyography and Kinesiology, 2010, 20, 813-822.	0.7	38
70	Developing Physical Exposure-Based Back Injury Risk Models Applicable to Manual Handling Jobs in Distribution Centers. Journal of Occupational and Environmental Hygiene, 2012, 9, 450-459.	0.4	38
71	Biomechanical aspects of work-related musculoskeletal disorders. Theoretical Issues in Ergonomics Science, 2001, 2, 153-217.	1.0	37
72	Workplace design guidelines for asymptomatic vs. low-back-injured workers. Applied Ergonomics, 2005, 36, 85-95.	1.7	36

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73	MR Elastographyâ€“derived Stiffness: A Biomarker for Intervertebral Disc Degeneration. Radiology, 2017, 285, 167-175.	3.6	36
74	A review of methods to assess coactivation in the spine. Journal of Electromyography and Kinesiology, 2017, 32, 51-60.	0.7	36
75	Functional Impairment as a Predictor of Spine Loading. Spine, 2005, 30, 729-737.	1.0	35
76	Effect of torso flexion on the lumbar torso extensor muscle sagittal plane moment arms. Spine Journal, 2003, 3, 363-369.	0.6	34
77	Effects of Handle Angle and Work Orientation on Hammering: II. Muscle Fatigue and Subjective Ratings of Body Discomfort. Human Factors, 1989, 31, 413-420.	2.1	33
78	Instrumentation for measuring dynamic spinal load moment exposures in the workplace. Journal of Electromyography and Kinesiology, 2010, 20, 1-9.	0.7	33
79	An exploratory study of loading and morphometric factors associated with specific failure modes in fatigue testing of lumbar motion segments. Clinical Biomechanics, 2006, 21, 228-234.	0.5	32
80	Neural and biomechanical tradeoffs associated with human-exoskeleton interactions. Applied Ergonomics, 2021, 96, 103494.	1.7	31
81	Partitioning the contributing role of biomechanical, psychosocial, and individual risk factors in the development of spine loads. Spine Journal, 2003, 3, 331-338.	0.6	30
82	Dynamic biomechanical modelling of symmetric and asymmetric lifting tasks in restricted postures. Ergonomics, 1994, 37, 1289-1310.	1.1	29
83	A biologically-assisted curved muscle model of the lumbar spine: Model structure. Clinical Biomechanics, 2016, 37, 53-59.	0.5	29
84	Spine loading and probability of low back disorder risk as a function of box location on a pallet. Human Factors and Ergonomics in Manufacturing, 1997, 7, 323-336.	1.4	28
85	Identification of Key Variables Using Fuzzy Average With Fuzzy Cluster Distribution. IEEE Transactions on Fuzzy Systems, 2007, 15, 673-685.	6.5	27
86	Trunk Force Development during Static and Dynamic Lifts. Human Factors, 1987, 29, 19-29.	2.1	26
87	Dynamic capabilities of the wrist joint in industrial workers. International Journal of Industrial Ergonomics, 1993, 11, 207-224.	1.5	26
88	The effects of a temporal warning signal on the biomechanical preparations for sudden loading. Journal of Electromyography and Kinesiology, 1995, 5, 45-56.	0.7	25
89	Musculoskeletal disorder risk during automotive assembly: current vs. seated. Applied Ergonomics, 2012, 43, 671-678.	1.7	24
90	Cumulative Spine Loading and Clinically Meaningful Declines in Low-Back Function. Human Factors, 2014, 56, 29-43.	2.1	24

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91	The influence of lift frequency, lift duration and work experience on discomfort reporting. Ergonomics, 2007, 50, 396-409.	1.1	23
92	Localized Oxygen Use of Healthy and Low Back Pain Individuals During Controlled Trunk Movements. Journal of Spinal Disorders, 2001, 14, 150-158.	1.1	22
93	A neuro-fuzzy model for estimating electromyographical activity of trunk muscles due to manual lifting. Ergonomics, 2003, 46, 285-309.	1.1	22
94	A biologically-assisted curved muscle model of the lumbar spine: Model validation. Clinical Biomechanics, 2016, 37, 153-159.	0.5	22
95	A biomechanical and physiological study of office seat and tablet device interaction. Applied Ergonomics, 2017, 62, 83-93.	1.7	22
96	Biomechanical musculoskeletal models of the cervical spine: A systematic literature review. Clinical Biomechanics, 2020, 71, 115-124.	0.5	22
97	Effect of Electromyogram-Force Relationships and Method of Gain Estimation on the Predictions of an Electromyogram-Driven Model of Spinal Loading. Spine, 1998, 23, 423-429.	1.0	21
98	Regression Models for Predicting Peak and Continuous Three-Dimensional Spinal Loads during Symmetric and Asymmetric Lifting Tasks. Human Factors, 1999, 41, 373-388.	2.1	21
99	Baggage handling in an airplane cargo hold: An ergonomic intervention study. International Journal of Industrial Ergonomics, 2006, 36, 301-312.	1.5	21
100	Spinal loading during manual materials handling in a kneeling posture. Journal of Electromyography and Kinesiology, 2007, 17, 25-34.	0.7	21
101	Significance of biomechanical and physiological variables during the determination of maximum acceptable weight of lift. Ergonomics, 1999, 42, 1216-1232.	1.1	20
102	Biomechanical, psychosocial and individual risk factors predicting low back functional impairment among furniture distribution employees. Clinical Biomechanics, 2012, 27, 117-123.	0.5	20
103	BiomechanicallyÂdetermined hand force limits protecting the low back during occupational pushing and pulling tasks. Ergonomics, 2018, 61, 853-865.	1.1	20
104	An investigation of perceived exertion via whole body exertion and direct muscle force indicators during the determination of the maximum acceptable weight of lift. Ergonomics, 2000, 43, 143-159.	1.1	19
105	The influence of individual low back health status on workplace trunk kinematics and risk of low back disorder. Ergonomics, 2004, 47, 1226-1237.	1.1	18
106	Changes in spine loading patterns throughout the workday as a function of experience, lift frequency, and personality. Spine Journal, 2006, 6, 296-305.	0.6	18
107	Quantification of a Meaningful Change in Low Back Functional Impairment. Spine, 2009, 34, 2060-2065.	1.0	17
108	Spine loading during the application and removal of lifting slings: the effects of patient weight, bed height and work method. Ergonomics, 2017, 60, 636-648.	1.1	17

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109	Investigating reduced bag weight as an effective risk mediator for mason tenders. Applied Ergonomics, 2010, 41, 822-831.	1.7	16
110	An Evaluation of Tool Design and Method of Use of Railroad Leverage Tools on Back Stress and Tool Performance. Human Factors, 1986, 28, 303-315.	2.1	15
111	Diurnal Variation in Trunk Kinematics During a Typical Work Shift. Journal of Spinal Disorders, 1995, 8, 20???25.	1.1	15
112	An ergonomic comparison of industrial spray paint guns. International Journal of Industrial Ergonomics, 1997, 19, 425-435.	1.5	15
113	Revised protocol for the kinematic assessment of impairment. Spine Journal, 2004, 4, 163-169.	0.6	15
114	The effects of work experience, lift frequency and exposure duration on low back muscle oxygenation. Clinical Biomechanics, 2007, 22, 21-27.	0.5	15
115	Development and testing of a moment-based coactivation index to assess complex dynamic tasks for the lumbar spine. Clinical Biomechanics, 2017, 46, 23-32.	0.5	15
116	The Contribution of Biomechanical-Biological Interactions of the Spine to Low Back Pain. Human Factors, 2016, 58, 965-975.	2.1	14
117	Curved muscles in biomechanical models of the spine: a systematic literature review. Ergonomics, 2017, 60, 577-588.	1.1	14
118	An Experimental Evaluation of Method and Tool Effects in Spike Maul Use. Human Factors, 1986, 28, 267-281.	2.1	13
119	Observations on the Relationship Between Key Strike Force and Typing Speed. AIHA Journal, 1996, 57, 1109-1114.	0.4	13
120	Immune Responses to Low Back Pain Risk Factors. Work, 2012, 41, 6016-6023.	0.6	13
121	A biomechanical evaluation of potential ergonomic solutions for use by firefighter and EMS providers when lifting heavy patients in their homes. Applied Ergonomics, 2020, 82, 102910.	1.7	13
122	A physiological and biomechanical investigation of three passive upper-extremity exoskeletons during simulated overhead work. Ergonomics, 2022, 65, 105-117.	1.1	13
123	The use of turnover rate as a passive surveillance indicator for potential low back disorders. Ergonomics, 1994, 37, 971-978.	1.1	12
124	Sagittal plane moment arms of the female lumbar region rectus abdominis in an upright neutral torso posture. Clinical Biomechanics, 2005, 20, 242-246.	0.5	12
125	Association between spinal loads and the psychophysical determination of maximum acceptable force during pushing tasks. Ergonomics, 2012, 55, 1104-1114.	1.1	12
126	Postoperative Stereotactic Body Radiotherapy for Spinal Metastasis and Predictors of Local Control. Neurosurgery, 2021, 88, 1021-1027.	0.6	12

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127	Temporal Patterns of Trunk Muscle Activity throughout a Dynamic, Asymmetric Lifting Motion. Human Factors, 1992, 34, 215-230.	2.1	11
128	Spine biomechanics, government regulation, and prevention of occupational low back pain. Spine Journal, 2001, 1, 163-165.	0.6	11
129	Does personality affect the risk of developing musculoskeletal discomfort?. Theoretical Issues in Ergonomics Science, 2006, 7, 149-167.	1.0	11
130	Use of a personalized hybrid biomechanical model to assess change in lumbar spine function with a TDR compared to an intact spine. European Spine Journal, 2012, 21, 641-652.	1.0	11
131	Prediction of magnetic resonance imaging-derived trunk muscle geometry with application to spine biomechanical modeling. Clinical Biomechanics, 2016, 37, 60-64.	0.5	11
132	A digital twin for simulating the vertebroplasty procedure and its impact on mechanical stability of vertebra in cancer patients. International Journal for Numerical Methods in Biomedical Engineering, 2022, 38, e3600.	1.0	11
133	Toward an artificial intelligence<scp>â€assisted</scp> framework for reconstructing the digital twin of vertebra and predicting its fracture response. International Journal for Numerical Methods in Biomedical Engineering, 2022, 38, e3601.	1.0	11
134	Quantification of Wrist Motions during Scanning. Human Factors, 1995, 37, 412-423.	2.1	10
135	Overview of Electromyography in Ergonomics. Proceedings of the Human Factors and Ergonomics Society, 2000, 44, 5-534-5-536.	0.2	10
136	Predicting recovery using continuous low back pain outcome measures. Spine Journal, 2001, 1, 57-65.	0.6	10
137	The case for cumulative trauma in low back disorders. Spine Journal, 2003, 3, 177-179.	0.6	10
138	Differences Among Outcome Measures in Occupational Low Back Pain. Journal of Occupational Rehabilitation, 2005, 15, 329-341.	1.2	10
139	Weight knowledge and weight magnitude: impact on lumbosacral loading. Ergonomics, 2015, 58, 227-234.	1.1	9
140	Validation of a personalized curved muscle model of the lumbar spine during complex dynamic exertions. Journal of Electromyography and Kinesiology, 2017, 33, 1-9.	0.7	9
141	Lumbar Motion Response to a Constant Load Velocity Lift. Human Factors, 1990, 32, 493-501.	2.1	8
142	The effect of complex dynamic lifting and lowering characteristics on trunk muscles recruitment. Journal of Occupational Rehabilitation, 1997, 7, 121-138.	1.2	8
143	Spine Kinematics Predict Symptom and Lost Time Recurrence: How Much Recovery is Enough?. Journal of Occupational Rehabilitation, 2013, 23, 329-335.	1.2	8
144	Effectiveness of a vacuum lifting system in reducing spinal load during airline baggage handling. Applied Ergonomics, 2018, 70, 247-252.	1.7	7

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145	An electromyography-assisted biomechanical cervical spine model: Model development and validation. Clinical Biomechanics, 2020, 80, 105169.	0.5	7
146	One versus two-handed lifting and lowering: lumbar spine loads and recommended one-handed limits protecting the lower back. Ergonomics, 2020, 63, 505-521.	1.1	7
147	Risks of hand tool injury in U.S. underground mining from 1978 through 1983 part I: coal mining. Journal of Safety Research, 1988, 19, 71-85.	1.7	6
148	Biomechanical Modeling. Reviews of Human Factors and Ergonomics, 2005, 1, 1-88.	0.5	6
149	Are Workers Who Leave a Job Exposed to Similar Physical Demands as Workers Who Develop Clinically Meaningful Declines in Low-Back Function?. Human Factors, 2014, 56, 58-72.	2.1	6
150	Wheelchair pushing and turning: lumbar spine and shoulder loads and recommended limits. Ergonomics, 2017, 60, 1754-1765.	1.1	6
151	Application of MR-derived cross-sectional guideline of cervical spine muscles to validate neck surface electromyography placement. Journal of Electromyography and Kinesiology, 2018, 43, 127-139.	0.7	6
152	Psychosocial Factors and Low Back Pain Outcomes in a Pooled Analysis of Low Back Pain Studies. Journal of Occupational and Environmental Medicine, 2020, 62, 810-815.	0.9	6
153	Risks of hand tool injury in U.S. underground mining from 1978 through 1983 part II: Metal-nonmetal mining. Journal of Safety Research, 1988, 19, 115-124.	1.7	5
154	Development of a lumbar EMG-based coactivation index for the assessment of complex dynamic tasks. Ergonomics, 2018, 61, 381-389.	1.1	5
155	An Exploratory Electromyography-Based Coactivation Index for the Cervical Spine. Human Factors, 2018, 60, 68-79.	2.1	5
156	A Hybrid Neuro-fuzzy Approach for Spinal Force Evaluation in Manual Materials Handling Tasks. Lecture Notes in Computer Science, 2005, , 1216-1225.	1.0	5
157	Relation between Biomechanical Spinal Load Factors and Risk of Occupational Low-Back Disorders. Proceedings of the Human Factors and Ergonomics Society, 1996, 40, 656-660.	0.2	4
158	Influence of Lift Moment in Determining MAWL. Human Factors, 1997, 39, 312-322.	2.1	4
159	Patient and practitioner experience with clinical lumbar motion monitor wearable technology. Health and Technology, 2019, 9, 289-295.	2.1	4
160	Spinal loading and lift style in confined vertical space. Applied Ergonomics, 2020, 84, 103021.	1.7	4
161	Biomechanics of the Spinal Motion Segment. , 2011, , 109-128.		4
162	The Effects of Human Interface Design on Wrist Biomechanics during Scanning. Proceedings of the Human Factors and Ergonomics Society, 1994, 38, 616-620.	0.2	3

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163	Low Back Functional Health Status of Patient Handlers. Journal of Occupational Rehabilitation, 2015, 25, 296-302.	1.2	3
164	Industrial Quantification of Occupationally-Related Low Back Disorder Risk Factors. Proceedings of the Human Factors Society Annual Meeting, 1992, 36, 757-760.	0.1	2
165	Three-Dimensional Functional Capacity of Normals and Low Back Pain Patients. Proceedings of the Human Factors and Ergonomics Society, 1996, 40, 737-741.	0.2	2
166	The Effects of Box Differences and Employee Job Experience on Trunk Kinematics & Low Back Injury Risk during Depalletizing Operations. Proceedings of the Human Factors and Ergonomics Society, 1996, 40, 651-655.	0.2	2
167	The Relationship between Occupational Musculoskeletal Discomfort and Workplace, Personal, and Trunk Kinematic Factors. Proceedings of the Human Factors and Ergonomics Society, 1998, 42, 896-900.	0.2	2
168	Validation of a Low-Back Disorder Risk Model in a Prospective Study of Ergonomic Interventions into Manual Materials Handling Jobs. Proceedings of the Human Factors and Ergonomics Society, 2000, 44, 5-5-5-8.	0.2	2
169	Utilization of a Hybrid Neuro-Fuzzy Engine to Predict Trunk Muscle Activity for Sagittal Lifting. Proceedings of the Human Factors and Ergonomics Society, 2008, 52, 1064-1067.	0.2	2
170	Mechanical Power-Drive Reduces the Stress on the Back. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 984-987.	0.2	2
171	Shoulder Muscle Oxygenation during Repetitive Tasks. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 1039-1041.	0.2	2
172	A nonlinear contact algorithm predicting facet joint contribution in the lumbar spine of a specific person. Theoretical Issues in Ergonomics Science, 2012, 13, 303-317.	1.0	2
173	Response to the commentary â€˜A question of our marketing or our preconceptionsâ€™. Ergonomics, 2012, 55, 1618-1620.	1.1	2
174	Distributions of Job Physical Exposure Data in a Pooled Study of Low Back Pain Prospective Cohorts. Proceedings of the Human Factors and Ergonomics Society, 2018, 62, 920-924.	0.2	2
175	Dynamic Joint Motions in Occupational Environments as Indicators of Potential Musculoskeletal Injury Risk. Journal of Applied Biomechanics, 2021, 37, 196-203.	0.3	2
176	Patient handling through moving of the beds and stretchers. International Journal of Industrial Ergonomics, 2022, 87, 103252.	1.5	2
177	Motion sickness decreases low back function and changes gene expression in military aircrew. Clinical Biomechanics, 2022, 96, 105671.	0.5	2
178	Spine Stereotactic Body Radiotherapy to Three or More Contiguous Vertebral Levels. Frontiers in Oncology, 0, 12, .	1.3	2
179	An Experimental Analysis of Railroad Spike Maul Methods. Human Factors, 1989, 31, 335-344.	2.1	1
180	Coactivity Effects upon Carpal Tunnel Contact Forces. Proceedings of the Human Factors and Ergonomics Society, 1993, 37, 705-709.	0.2	1

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181	Wrist Motions in Industry: Variance between Jobs and Subjects. Proceedings of the Human Factors and Ergonomics Society, 1993, 37, 649-653.	0.2	1
182	Three-Dimensional Spinal Loading during Complex Lifting Tasks. Proceedings of the Human Factors and Ergonomics Society, 1996, 40, 661-665.	0.2	1
183	Benefits of Trunk Muscle Co-Contraction in Protecting against Low-Back Injury during Manual Materials Lifting. Proceedings of the Human Factors and Ergonomics Society, 1999, 43, 663-666.	0.2	1
184	A Neuro-Fuzzy Model for Predicting EMG of Trunk Muscles Based on Lifting Task Variables. Proceedings of the Human Factors and Ergonomics Society, 2000, 44, 276-279.	0.2	1
185	A Critical Review of a Pivotal Scientific Contribution: Liles and Associates 24 Years Later. Human Factors, 2008, 50, 393-396.	2.1	1
186	A Simple Model of Changes in Lumbar Intervertebral Angles During Sagittal Torso Flexion. Proceedings of the Human Factors and Ergonomics Society, 2011, 55, 1029-1033.	0.2	1
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