

# Andrew S Merryweather

## List of Publications by Year in descending order

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Version: 2024-02-01

83  
papers

939  
citations

516710

16  
h-index

501196

28  
g-index

83  
all docs

83  
docs citations

83  
times ranked

909  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Strain Index (SI) and Threshold Limit Value (TLV) for Hand Activity Level (HAL): risk of carpal tunnelsyndrome (CTS) in a prospective cohort. <i>Ergonomics</i> , 2012, 55, 396-414.	2.1	90
2	The NIOSH Lifting Equation and Low-Back Pain, Part 1. <i>Human Factors</i> , 2014, 56, 6-28.	3.5	69
3	The inclusion of hyoid muscles improve moment generating capacity and dynamic simulations in musculoskeletal models of the head and neck. <i>PLoS ONE</i> , 2018, 13, e0199912.	2.5	49
4	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. <i>BMC Musculoskeletal Disorders</i> , 2019, 20, 243.	1.9	49
5	An improved OpenSim gait model with multiple degrees of freedom knee joint and knee ligaments. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015, 18, 1217-1224.	1.6	43
6	Relationships between job organisational factors, biomechanical and psychosocial exposures. <i>Ergonomics</i> , 2016, 59, 179-194.	2.1	43
7	A revised back compressive force estimation model for ergonomic evaluation of lifting tasks. <i>Work</i> , 2009, 34, 263-272.	1.1	39
8	The Strain Index and <scp>TLV</scp> for <scp>HAL</scp>: Risk of lateral epicondylitis in a prospective cohort. <i>American Journal of Industrial Medicine</i> , 2014, 57, 286-302.	2.1	38
9	The WISTAH hand study: A prospective cohort study of distal upper extremity musculoskeletal disorders. <i>BMC Musculoskeletal Disorders</i> , 2012, 13, 90.	1.9	36
10	Association Between Cardiovascular Disease Risk Factors and Rotator Cuff Tendinopathy. <i>Journal of Occupational and Environmental Medicine</i> , 2017, 59, 154-160.	1.7	32
11	Gait alterations on irregular surface in people with Parkinson's disease. <i>Clinical Biomechanics</i> , 2018, 57, 93-98.	1.2	27
12	Comprehensive quantitative investigation of arm swing during walking at various speed and surface slope conditions. <i>Human Movement Science</i> , 2016, 49, 104-115.	1.4	26
13	Study protocol title: a prospective cohort study of low back pain. <i>BMC Musculoskeletal Disorders</i> , 2013, 14, 84.	1.9	25
14	Gait Characteristics Associated with Trip-Induced Falls on Level and Sloped Irregular Surfaces. <i>Minerals (Basel, Switzerland)</i> , 2011, 1, 109-121.	2.0	23
15	The NIOSH Lifting Equation and Low-Back Pain, Part 2. <i>Human Factors</i> , 2014, 56, 44-57.	3.5	23
16	Median Nerve Symptoms, Signs, and Electrodiagnostic Abnormalities Among Working Adults. <i>Journal of the American Academy of Orthopaedic Surgeons</i> , The, 2018, 26, 576-584.	2.5	18
17	Evaluation of knee joint forces during kneeling work with different kneepads. <i>Applied Ergonomics</i> , 2017, 58, 308-313.	3.1	17
18	Association Between Lifting and Use of Medication for Low Back Pain. <i>Journal of Occupational and Environmental Medicine</i> , 2014, 56, 867-877.	1.7	16

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19	Vacuum level effects on gait characteristics for unilateral transtibial amputees with elevated vacuum suspension. <i>Clinical Biomechanics</i> , 2017, 43, 95-101.	1.2	15
20	Sensitivity analysis of muscle properties and impact parameters on head injury risk in American football. <i>Journal of Biomechanics</i> , 2020, 100, 109411.	2.1	14
21	Association Between Cardiovascular Risk Factors and Carpal Tunnel Syndrome in Pooled Occupational Cohorts. <i>Journal of Occupational and Environmental Medicine</i> , 2016, 58, 87-93.	1.7	13
22	Association between wrist ratio and carpal tunnel syndrome: Effect modification by body mass index. <i>Muscle and Nerve</i> , 2017, 56, 1047-1053.	2.2	13
23	The Effect of Lifting Speed on Cumulative and Peak Biomechanical Loading for Symmetric Lifting Tasks. <i>Safety and Health at Work</i> , 2013, 4, 105-110.	0.6	12
24	Associations between Distal Upper Extremity Job Physical Factors and Psychosocial Measures in a Pooled Study. <i>BioMed Research International</i> , 2015, 2015, 1-9.	1.9	10
25	The influence of deformation height on estimating the center of pressure during level and cross-slope walking on sand. <i>Gait and Posture</i> , 2015, 42, 110-115.	1.4	10
26	Psychosocial Factors Related to Lateral and Medial Epicondylitis. <i>Journal of Occupational and Environmental Medicine</i> , 2016, 58, 588-593.	1.7	10
27	Impact of Work Organizational Factors on Carpal Tunnel Syndrome and Epicondylitis. <i>Journal of Occupational and Environmental Medicine</i> , 2016, 58, 760-764.	1.7	10
28	Dual-task interference during gait on irregular terrain in people with Parkinson's disease. <i>Gait and Posture</i> , 2018, 63, 17-22.	1.4	10
29	Measuring Entropy Change in a Human Physiological System. <i>Journal of Thermodynamics</i> , 2016, 2016, 1-8.	0.8	8
30	Association between Epicondylitis and Cardiovascular Risk Factors in Pooled Occupational Cohorts. <i>BMC Musculoskeletal Disorders</i> , 2017, 18, 227.	1.9	8
31	The Safety of Hospital Beds. <i>Global Qualitative Nursing Research</i> , 2015, 2, 233339361557532.	1.4	7
32	Risk assessments using the Strain Index and the TLV for HAL, Part I: Task and multi-task job exposure classifications. <i>Journal of Occupational and Environmental Hygiene</i> , 2017, 14, 1011-1019.	1.0	7
33	Effects of bed height on the biomechanics of hospital bed entry and egress. <i>Work</i> , 2015, 52, 707-713.	1.1	6
34	Kinematics of the Pelvis, Torso, and Lower Limb During Obstacle Negotiation While Under Temporal Constraints. <i>Anatomical Record</i> , 2017, 300, 732-738.	1.4	6
35	Dynamic Model Learning and Manipulation Planning for Objects in Hospitals Using a Patient Assistant Mobile (PAM) Robot. , 2018, , .		6
36	Psychosocial Factors and Low Back Pain Outcomes in a Pooled Analysis of Low Back Pain Studies. <i>Journal of Occupational and Environmental Medicine</i> , 2020, 62, 810-815.	1.7	6

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37	Prediction of Peak Back Compressive Forces as a Function of Lifting Speed and Compressive Forces at Lift Origin and Destination - A Pilot Study. <i>Safety and Health at Work</i> , 2011, 2, 236-242.	0.6	5
38	Relationship Between Opioid Use and Pain Severity Ratings in Workers With Low Back Pain. <i>Journal of Occupational and Environmental Medicine</i> , 2019, 61, 836-840.	1.7	5
39	Augmenting Virtual Reality Terrain Display with Smart Shoe Physical Rendering: A Pilot Study. <i>IEEE Transactions on Haptics</i> , 2021, 14, 174-187.	2.7	5
40	Development of a Novel Computational Model for Evaluating Fall Risk in Patient Room Design. <i>Herd</i> , 2021, 14, 350-367.	1.5	5
41	Cervical Muscle Activation Due to an Applied Force in Response to Different Types of Acoustic Warnings. <i>Annals of Biomedical Engineering</i> , 2021, 49, 2260-2272.	2.5	5
42	Joint loading, muscle co-contraction, ligament force and peak knee contact forces when walking on railroad ballast. <i>International Journal of Human Factors Modelling and Simulation</i> , 2014, 4, 87.	0.2	4
43	Evaluation of a force plate system for measuring center of pressure in railroad ballast. <i>Gait and Posture</i> , 2016, 46, 179-183.	1.4	4
44	Risk assessments using the Strain Index and the TLV for HAL, Part II: Multi-task jobs and prevalence of CTS. <i>Journal of Occupational and Environmental Hygiene</i> , 2018, 15, 157-166.	1.0	4
45	Role of Biomechanical Factors in Resolution of Carpal Tunnel Syndrome Among a Population of Workers. <i>Journal of Occupational and Environmental Medicine</i> , 2019, 61, 340-346.	1.7	4
46	Hospital bed height influences biomechanics during bed egress: A comparative controlled study of patients with Parkinson disease. <i>Journal of Biomechanics</i> , 2021, 115, 110116.	2.1	4
47	Validation of the Revised Strain Index for Predicting Risk of Incident Carpal Tunnel Syndrome in a Prospective Cohort. <i>Ergonomics</i> , 2021, 64, 1369-1378.	2.1	4
48	Trends in incidence and correlation between medical costs and lost workdays for work-related amputations in the State of California from 2007 to 2018. <i>Health Science Reports</i> , 2021, 4, e319.	1.5	4
49	Designing a Patient Room as a Fall Protection Strategy: The Perspectives of Healthcare Design Experts. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 8769.	2.6	4
50	Effects of orthotic insole on gait patterns in children with mild leg length discrepancy. <i>Gait and Posture</i> , 2022, 93, 191-197.	1.4	4
51	Analysis of the Influence of Hospital Bed Height on Kinematic Parameters Associated with Patient Falls During Egress. <i>Procedia Manufacturing</i> , 2015, 3, 280-287.	1.9	3
52	Vacuum level effects on knee contact force for unilateral transtibial amputees with elevated vacuum suspension. <i>Journal of Biomechanics</i> , 2017, 57, 110-116.	2.1	3
53	Auditory Warnings Invoking Startle Response Cause Faster and More Intense Neck Muscle Contractions Prior to Head Impacts. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2019, 63, 802-806.	0.3	3
54	A model predictive approach for online mobile manipulation of non-holonomic objects using learned dynamics. <i>International Journal of Robotics Research</i> , 2021, 40, 815-831.	8.5	3

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55	The role of neck muscle co-contraction and postural changes in head kinematics after safe head impacts: Investigation of head/neck injury reduction. <i>Journal of Biomechanics</i> , 2021, 128, 110732.	2.1	3
56	Experience is not Required. , 2020, , .		3
57	Training Persons with Parkinson Disease using an Advanced CAVE Virtual Reality System. <i>FASEB Journal</i> , 2019, 33, 335.4.	0.5	3
58	Gait Improvement in Patients with Knee Osteoarthritis after Proximal Fibular Osteotomy. <i>BioMed Research International</i> , 2022, 2022, 1-8.	1.9	3
59	Distributions of Job Physical Exposure Data in a Pooled Study of Low Back Pain Prospective Cohorts. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2018, 62, 920-924.	0.3	2
60	Characterization of load reduction while lifting drywall using an unpowered drywall lifting device. <i>Work</i> , 2018, 60, 661-671.	1.1	2
61	Influence of Frequency Bands in EEG Signal to Predict User Intent. , 2019, , .		2
62	Ground reaction force adaptation during cross-slope walking on railroad ballast. <i>Gait and Posture</i> , 2020, 75, 66-71.	1.4	2
63	The Natural Sit-to-Stand-Walk of the Frail. , 2019, , .		2
64	Classifying hazardous movements and loads during manual materials handling using accelerometers and instrumented insoles. <i>Applied Ergonomics</i> , 2022, 101, 103693.	3.1	2
65	Potential to fall of bipeds using foot kinematics. , 2013, 2013, 4746-50.		1
66	Manual material handling guidelines for the shoulder: Biomechanical support for the Liberty Mutual TablesÅas developed by Snook and Ciriello. <i>International Journal of Industrial Ergonomics</i> , 2014, 44, 275-280.	2.6	1
67	The effect of toe marker placement error on joint kinematics and muscle forces using OpenSim gait simulation. <i>Bio-Medical Materials and Engineering</i> , 2015, 26, S685-S691.	0.6	1
68	Associations between job physical and psychosocial factors in a pooled study. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2015, 59, 1229-1233.	0.3	1
69	Biomechanical Characterization of the Hand Touch Corrective Behavior in the Frail Elderly During Bed Egress. <i>Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare</i> , 2018, 7, 237-239.	0.3	1
70	The Role of Elbow Tender Point Examination in the Diagnosis of Lateral Epicondylitis. <i>Journal of Occupational and Environmental Medicine</i> , 2019, 61, 126-131.	1.7	1
71	Optimizing Hospital Room Layout to Reduce the Risk of Patient Falls. , 2021, , .		1
72	E-Tetra Kayak: Adaptive Sport Kayak for Recreational Therapy for Persons With Spinal Cord Injuries. , 2013, , .		1

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73	The Technology of Merging Single Force Plate Gait Trails to Simulate Full Gait Cycle in Environmental Health Research. <i>Advanced Materials Research</i> , 2012, 518-523, 639-646.	0.3	0
74	1C1-3 The Effect of Carrying a Military Backpack on a Transverse Slope and Sand Surface on Lower Limb Kinetics. <i>Ningen Kogaku = the Japanese Journal of Ergonomics</i> , 2015, 51, S398-S403.	0.1	0
75	Evaluating Different Measures of Low Back Pain Among U.S. Manual Materials Handling Workers: Comparisons of Demographic, Psychosocial, and Job Physical Exposure. <i>Human Factors</i> , 2020, , 001872082097110.	3.5	0
76	Creating a Safer Patient Room Environment: The Contribution of Patient Bed Height. <i>Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare</i> , 2021, 10, 180-184.	0.3	0
77	Green Machine: Electric Yard and Garden Helper. , 2013, , .		0
78	Obstacle Height and Divided Attention Affects Obstacle Crossing in People with Parkinson Disease. <i>FASEB Journal</i> , 2015, 29, 705.1.	0.5	0
79	Survey of One-handed Lifting in Manufacturing Industry: A Cross-sectional Study of the BackWorks Study Cohort. <i>Proceedings of the Human Factors and Ergonomics Society</i> , 2020, 64, 942-946.	0.3	0
80	Cervical Muscle Activation Characteristics and Head Kinematics in Males and Females Following Acoustic Warnings and Impulsive Head Forces. <i>Annals of Biomedical Engineering</i> , 2021, 49, 3438.	2.5	0
81	The Effect of Tibial Insertion Site in Single-Bundle ACL Reconstruction during Gait Based on Motion Capture and Musculoskeletal Model. <i>Journal of Healthcare Engineering</i> , 2022, 2022, 1-7.	1.9	0
82	Board 87 : Integrating Product-Safety Curriculum to Enhance Design and Reinforce Engineering Ethics. , 0, , .		0
83	Intrinsic factors contributing to elevated intra-abdominal pressure. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 0, , 1-11.	1.6	0