Ashley A Weaver

List of Publications by Year
in descending order

105	1,703	304743	377865
papers	citations	22 h-index	34 g-index

105	105	105	1900
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evaluation of Skull Cortical Thickness Changes With Age and Sex From Computed Tomography Scans. Journal of Bone and Mineral Research, 2016, 31, 299-307.	2.8	140
2	Morphometric analysis of variation in the ribs with age and sex. Journal of Anatomy, 2014, 225, 246-261.	1.5	86
3	Automated Segmentation of Tissues Using CT and MRI: A Systematic Review. Academic Radiology, 2019, 26, 1695-1706.	2.5	82
4	CT Based Three-Dimensional Measurement of Orbit and Eye Anthropometry. , 2010, 51, 4892.		75
5	Modeling Brain Injury Response for Rotational Velocities of Varying Directions and Magnitudes. Annals of Biomedical Engineering, 2012, 40, 2005-2018.	2.5	61
6	Age- and Sex-Specific Thorax Finite Element Model Development and Simulation. Traffic Injury Prevention, 2015, 16, S57-S65.	1.4	48
7	Morphometric analysis of variation in the sternum with sex and age. Journal of Morphology, 2014, 275, 1284-1299.	1.2	46
8	Evaluation of Different Projectiles in Matched Experimental Eye Impact Simulations. Journal of Biomechanical Engineering, 2011, 133, 031002.	1.3	45
9	Estimation of skull table thickness with clinical CT and validation with microCT. Journal of Anatomy, 2015, 226, 73-80.	1.5	44
10	Evaluation of morphological changes in the adult skull with age and sex. Journal of Anatomy, 2016, 229, 838-846.	1.5	42
11	Effect of Exercise Modality During Weight Loss on Bone Health in Older Adults With Obesity and Cardiovascular Disease or Metabolic Syndrome: A Randomized Controlled Trial. Journal of Bone and Mineral Research, 2018, 33, 2140-2149.	2.8	41
12	Has the Incidence of Thoracolumbar Spine Injuries Increased in the United States From 1998 to 2011?. Clinical Orthopaedics and Related Research, 2015, 473, 297-304.	1.5	38
13	An innovative approach to predict the development of adult respiratory distress syndrome in patients with blunt trauma. Journal of Trauma and Acute Care Surgery, 2012, 73, 1229-1235.	2.1	36
14	An Injury Severity-, Time Sensitivity-, and Predictability-Based Advanced Automatic Crash Notification Algorithm Improves Motor Vehicle Crash Occupant Triage. Journal of the American College of Surgeons, 2016, 222, 1211-1219.e6.	0.5	36
15	Opportunistic Screening for Osteoporosis Using Computed Tomography: State of the Art and Argument for Paradigm Shift. Current Rheumatology Reports, 2018, 20, 74.	4.7	35
16	Biomechanical modeling of eye trauma for different orbit anthropometries. Journal of Biomechanics, 2011, 44, 1296-1303.	2.1	34
17	Estimated Injury Risk for Specific Injuries and Body Regions in Frontal Motor Vehicle Crashes. Traffic Injury Prevention, 2015, 16, S108-S116.	1.4	34
18	Machine Learning for Automatic Paraspinous Muscle Area and Attenuation Measures on Low-Dose Chest CT Scans. Academic Radiology, 2019, 26, 1686-1694.	2.5	34

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19	Classic Measures of Hip Dysplasia Do Not Correlate with Three-Dimensional Computer Tomographic Measures and Indices. HIP International, 2011, 21, 549-558.	1.7	33
20	Lumbar Bone Mineral Density Phantomless Computed Tomography Measurements and Correlation with Age and Fracture Incidence. Traffic Injury Prevention, 2015, 16, S153-S160.	1.4	31
21	Post-Irradiation Treatment with a Superoxide Dismutase Mimic, MnTnHex-2-PyP5+, Mitigates Radiation Injury in the Lungs of Non-Human Primates after Whole-Thorax Exposure to Ionizing Radiation. Antioxidants, 2018, 7, 40.	5.1	30
22	Automated Muscle Measurement on Chest CT Predicts All-Cause Mortality in Older Adults From the National Lung Screening Trial. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2021, 76, 277-285.	3.6	29
23	Development and Validation of an Older Occupant Finite Element Model of a Mid-Sized Male for Investigation of Age-related Injury Risk. Stapp Car Crash Journal, 2015, 59, 359-83.	1.1	24
24	Application of Radial Basis Function Methods in the Development of a 95th Percentile Male Seated FEA Model. Stapp Car Crash Journal, 2014, 58, 361-84.	1.1	22
25	Effect of a hypocaloric, nutritionally complete, higher-protein meal plan on bone density and quality in older adults with obesity: a randomized trial. American Journal of Clinical Nutrition, 2019, 109, 478-486.	4.7	21
26	Age thresholds for increased mortality of predominant crash induced thoracic injuries. Annals of Advances in Automotive Medicine, 2010, 54, 41-50.	0.6	21
27	Early dose-dependent cortical thinning of the femoral neck in anal cancer patients treated with pelvic radiation therapy. Bone, 2017, 94, 84-89.	2.9	19
28	Modeling Human Volunteers in Multidirectional, Uni-axial Sled Tests Using a Finite Element Human Body Model. Annals of Biomedical Engineering, 2019, 47, 487-511.	2.5	18
29	A cortical thickness and radiation dose mapping approach identifies early thinning of ribs after stereotactic body radiation therapy. Radiotherapy and Oncology, 2016, 119, 449-453.	0.6	17
30	Lumbar vertebrae fracture injury risk in finite element reconstruction of CIREN and NASS frontal motor vehicle crashes. Traffic Injury Prevention, 2016, 17, 109-115.	1.4	17
31	Lumbopelvic Muscle Changes Following Long-Duration Spaceflight. Frontiers in Physiology, 2019, 10, 627.	2.8	16
32	Functional outcomes of motor vehicle crash head injuries in pediatric and adult occupants. Traffic Injury Prevention, 2016, 17, 27-33.	1.4	15
33	Biomechanical Evaluations of Ocular Injury Risk for Blast Loading. Journal of Biomechanical Engineering, 2017, 139, .	1.3	15
34	New Methodology for an Expert-Designed Map From International Classification of Diseases (ICD) to Abbreviated Injury Scale (AIS) 3+ Severity Injury. Traffic Injury Prevention, 2015, 16, S197-S200.	1.4	14
35	Injury risk prediction from computational simulations of ocular blast loading. Biomechanics and Modeling in Mechanobiology, 2017, 16, 463-477.	2.8	14
36	Mortality Risk in Pediatric Motor Vehicle Crash Occupants: Accounting for Developmental Stage and Challenging Abbreviated Injury Scale Metrics. Traffic Injury Prevention, 2015, 16, S201-S208.	1.4	13

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37	Driver Injury Risk Variability in Finite Element Reconstructions of Crash Injury Research and Engineering Network (CIREN) Frontal Motor Vehicle Crashes. Traffic Injury Prevention, 2015, 16, S124-S131.	1.4	13
38	Multicenter analysis of CIREN occupant lumbar bone mineral density and correlation with age and fracture incidence. Traffic Injury Prevention, 2016, 17, 34-41.	1.4	13
39	Neck Muscle Changes Following Long-Duration Spaceflight. Frontiers in Physiology, 2019, 10, 1115.	2.8	13
40	Associations between upper extremity injury patterns in side impact motor vehicle collisions with occupant and crash characteristics. Accident Analysis and Prevention, 2019, 122, 1-7.	5.7	13
41	Evaluation of developmental metrics for utilization in a pediatric advanced automatic crash notification algorithm. Traffic Injury Prevention, 2016, 17, 65-72.	1.4	12
42	Application of Radial Basis Function Methods in the Development of a 95th Percentile Male Seated FEA Model. , 0, , .		12
43	Mortality-based Quantification of Injury Severity for Frequently Occurring Motor Vehicle Crash Injuries. Annals of Advances in Automotive Medicine, 2013, 57, 235-46.	0.6	12
44	Investigation of pulmonary contusion extent and its correlation to crash, occupant, and injury characteristics in motor vehicle crashes. Accident Analysis and Prevention, 2013, 50, 223-233.	5.7	11
45	Development of a Time Sensitivity Score for Frequently Occurring Motor Vehicle Crash Injuries. Journal of the American College of Surgeons, 2015, 220, 305-312.e3.	0.5	11
46	Investigation of the Safety Effects of Knee Bolster Air Bag Deployment in Similar Real-World Crash Comparisons. Traffic Injury Prevention, 2013, 14, 168-180.	1.4	10
47	Predicting patients that require care at a trauma center: Analysis of injuries and other factors. Injury, 2015, 46, 558-563.	1.7	10
48	Image segmentation and registration algorithm to collect thoracic skeleton semilandmarks for characterization of age and sex-based thoracic morphology variation. Computers in Biology and Medicine, 2015, 67, 41-48.	7.0	10
49	Functional outcomes of motor vehicle crash thoracic injuries in pediatric and adult occupants. Traffic Injury Prevention, 2018, 19, 280-286.	1.4	10
50	Disability risk in pediatric motor vehicle crash occupants. Journal of Trauma and Acute Care Surgery, 2017, 82, 933-938.	2.1	9
51	Comparing rib cortical thickness measurements from computed tomography (CT) and Micro-CT. Computers in Biology and Medicine, 2019, 111, 103330.	7.0	9
52	Risedronate to Prevent Bone Loss After Sleeve Gastrectomy: Study Design and Feasibility Report of a Pilot Randomized Controlled Trial. JBMR Plus, 2020, 4, e10407.	2.7	9
53	The therian sternum at the lateral somitic frontier: Evolution of a composite structure. Journal of Zoology, 2021, 315, 19-28.	1.7	9
54	Numerical investigation of driver lower extremity injuries in finite element frontal crash reconstruction. Traffic Injury Prevention, 2018, 19, S21-S28.	1.4	8

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55	Prediction of lumbar vertebral body compressive strength of overweight and obese older adults using morphed subject-specific finite-element models to evaluate the effects of weight loss. Aging Clinical and Experimental Research, 2019, 31, 491-501.	2.9	8
56	Estimated crash injury risk and crash characteristics for motorsport drivers. Accident Analysis and Prevention, 2020, 136, 105397.	5.7	8
57	Trunk Skeletal Muscle Changes on CT with Long-Duration Spaceflight. Annals of Biomedical Engineering, 2021, 49, 1257-1266.	2.5	8
58	Correlating the extent of pulmonary contusion to vehicle crash parameters in near-side impacts. Annals of Advances in Automotive Medicine, 2011, 55, 217-30.	0.6	8
59	Computational modeling and analysis of thoracolumbar spine fractures in frontal crash reconstruction. Traffic Injury Prevention, 2018, 19, S32-S39.	1.4	7
60	Age-based differences in the disability of extremity injuries in pediatric and adult occupants. Traffic Injury Prevention, 2019, 20, S63-S68.	1.4	7
61	Finite element reconstruction of a vehicle-to-pedestrian impact. Traffic Injury Prevention, 2020, 21, S145-S147.	1.4	7
62	Effect of Dietary Protein Intake on Bone Mineral Density and Fracture Incidence in Older Adults in the Health, Aging, and Body Composition Study. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2021, 76, 2213-2222.	3.6	7
63	Automotive Field Data in Injury Biomechanics. , 2015, , 33-49.		7
64	Lumbar Spine Response of Computational Finite Element Models in Multidirectional Spaceflight Landing Conditions. Journal of Biomechanical Engineering, 2020, 142, .	1.3	7
65	Injury risk curves in far-side lateral motor vehicle crashes by AIS level, body region and injury code. Traffic Injury Prevention, 2020, 21, S112-S117.	1.4	7
66	A Semi-Automated Approach to Real World Motor Vehicle Crash Reconstruction Using a Generic Simplified Vehicle Buck Model. SAE International Journal of Transportation Safety, 2016, 4, 267-277.	0.4	6
67	Characterization of the occult nature of injury for frequently occurring motor vehicle crash injuries. Accident Analysis and Prevention, 2017, 98, 149-156.	5.7	6
68	Predicting Pediatric Patients Who Require Care at a Trauma Center: Analysis of Injuries and Other Factors. Journal of the American College of Surgeons, 2018, 226, 70-79.e8.	0.5	6
69	Head injury metric response in finite element ATDs and a human body model in multidirectional loading regimes. Traffic Injury Prevention, 2019, 20, S96-S102.	1.4	6
70	Risedronate use to attenuate bone loss following sleeve gastrectomy: Results from a pilot randomized controlled trial. Clinical Obesity, 2021, 11, e12487.	2.0	6
71	Computational Simulations of Ocular Blast Loading and Prediction of Eye Injury Risk. , 2012, , .		5
72	Investigating the effects of side airbag deployment in real-world crashes using crash comparison techniques. Annals of Advances in Automotive Medicine, 2011, 55, 81-90.	0.6	5

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73	Biomechanical analysis of pulmonary contusion in motor vehicle crash victims: a crash injury research and engineering network (ciren) study - biomed 2009. Biomedical Sciences Instrumentation, 2009, 45, 364-9.	0.2	5
74	Regional Level Crash Induced Injury Metrics Implemented within THUMS v4.01. , 0, , .		4
75	Cardiothoracic Morphology Measures in Heart Failure Patients to Inform Device Designs. Cardiovascular Engineering and Technology, 2019, 10, 543-552.	1.6	4
76	Accuracy of algorithms to predict injury severity in older adults for trauma triage. Traffic Injury Prevention, 2019, 20, S81-S87.	1.4	4
77	A method to measure acetabular metrics from three dimensional computed tomography pelvis reconstructions - biomed 2009. Biomedical Sciences Instrumentation, 2009, 45, 155-60.	0.2	4
78	Image segmentation and registration algorithm to collect homologous landmarks for age-related thoracic morphometric analysis - biomed 2011. Biomedical Sciences Instrumentation, 2011, 47, 70-5.	0.2	4
79	Simulated Astronaut Kinematics and Injury Risk for Piloted Lunar Landings and Launches While Standing. Annals of Biomedical Engineering, 2022, 50, 1857-1871.	2.5	4
80	Functional outcomes of thoracic injuries in pediatric and adult occupants. Traffic Injury Prevention, 2018, 19, S195-S198.	1.4	3
81	Sarcopenia and osteosarcopenia in seriously injured motor vehicle crash occupants. Traffic Injury Prevention, 2019, 20, S195-S197.	1.4	3
82	Multidirection Validation of a Finite Element 50th Percentile Male Hybrid III Anthropomorphic Test Device for Spaceflight Applications. Journal of Biomechanical Engineering, 2019, 141, .	1.3	3
83	Development of an occult metric for common motor vehicle crash injuries - biomed 2013. Biomedical Sciences Instrumentation, 2013, 49, 274-80.	0.2	3
84	Validation of a Finite Element 50th Percentile THOR Anthropomorphic Test Device in Multiple Sled Test Configurations. Stapp Car Crash Journal, 2018, 62, 415-442.	1.1	3
85	Comparison of injury mortality risk in motor vehicle crash versus other etiologies. Accident Analysis and Prevention, 2014, 67, 137-147.	5.7	2
86	Expert Perspectives on Time Sensitivity and a Related Metric for Children Involved in Motor Vehicle Crashes. Academic Pediatrics, 2017, 17, 243-250.	2.0	2
87	Characterization of the occult nature of frequently occurring pediatric motor vehicle crash injuries. Accident Analysis and Prevention, 2018, 113, 12-18.	5.7	2
88	Incorporating Nutrition, Vests, Education, and Strength Training (INVEST) in Bone Health: Trial Design and Methods. Contemporary Clinical Trials, 2021, 104, 106326.	1.8	2
89	Validation of a Finite Element 50th Percentile THOR Anthropomorphic Test Device in Multiple Sled Test Configurations. , 0, , .		2
90	Change in Lumbar Muscle Size and Composition on MRI with Long-Duration Spaceflight. Annals of Biomedical Engineering, 2022, 50, 816-824.	2.5	2

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91	Age-based differences in the disability of spine injuries in pediatric and adult motor vehicle crash occupants. Traffic Injury Prevention, 2022, 23, 358-363.	1.4	2
92	Pelvic and Lower Gastrointestinal Tract Anatomical Characterization of the Average Male. Surgical Innovation, 2019, 26, 180-191.	0.9	1
93	The relationship of body mass index, belt placement, and abdominopelvic injuries in motor vehicle crashes: A Crash Injury Research and Engineering Network (CIREN) study. Traffic Injury Prevention, 2021, 22, S146-S148.	1.4	1
94	Development of a concise injury severity prediction model for pediatric patients involved in a motor vehicle collision. Traffic Injury Prevention, 2021, 22, S74-S81.	1.4	1
95	Development and implementation of a time- and computationally-efficient methodology for reconstructing real-world crashes using finite element modeling to improve crash injury research investigations. Computer Methods in Biomechanics and Biomedical Engineering, 2022, 25, 1332-1349.	1.6	1
96	Volumetric Analysis Of Pulmonary Contusion In Motor Vehicle Crash Victims. , 2010, , .		0
97	Investigation Of the Impact Of Bony Prominences On Pulmonary Contusion Injury Pattern. , 2010, , .		0
98	Quantification of Sternal Morphology Across Ages and Genders Using Image Segmentation and Registration Techniques. , 2012, , .		0
99	AUTOMATED MEASUREMENT OF MUSCLE DENSITY ON COMPUTED TOMOGRAPHY (CT) PREDICTS ALL-CAUSE MORTALITY IN OLDER ADULTS. Innovation in Aging, 2019, 3, S883-S883.	0.1	0
100	Bone, muscle, and sarcopenia. , 2021, , 847-873.		0
101	Patient Age Is Inversely Associated with Injury Counts Caused by Motor Vehicle Crashes. Journal of Surgical Orthopaedic Advances, 2020, 29, 36-38.	0.1	0
102	Exercise Modality Affects Older Adult CT-Derived Muscle and Bone Loss During Caloric Restriction. Innovation in Aging, 2021, 5, 79-80.	0.1	0
103	Advanced automatic crash notification algorithm for children. Academic Pediatrics, 2022, , .	2.0	0
104	Protocol for a pilot randomised controlled trial of zoledronic acid to prevent bone loss following sleeve gastrectomy surgery. BMJ Open, 2021, 11, e057483.	1.9	0
105	Quantifying Cardiothoracic Variation with Posture and Respiration to Inform Cardiac Device Design. Cardiovascular Engineering and Technology, 0, , .	1.6	0