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List of Publications by Year
in descending order

Version: 2024-02-01

91	1,751	279798	345221
papers	citations	23 h-index	36 g-index

91	91	91	920
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigation of traffic accidents involving seated pedestrians using a finite element simulation-based approach. Computer Methods in Biomechanics and Biomedical Engineering, 2023, 26, 484-497.	1.6	1
2	Review of compressed snow mechanics: Testing methods. Journal of Terramechanics, 2022, 100, 25-37.	3.1	12
3	Subject-specific rib finite element models with material data derived from coupon tests under bending loading. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 116, 104358.	3.1	6
4	The Influence of Gait Stance and Vehicle Type on Pedestrian Kinematics and Injury Risk. Journal of Biomechanical Engineering, 2021, 143, .	1.3	6
5	A detailed finite element model of a mid-sized male for the investigation of traffic pedestrian accidents. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2021, 235, 300-313.	1.8	8
6	An examination of the performance of damaged energy-absorbing end terminals. Accident Analysis and Prevention, 2020, 147, 105789.	5.7	5
7	Numerical investigation of occupant injury risks in car-to-end terminal crashes using dummy-based injury criteria and vehicle-based crash severity metrics. Accident Analysis and Prevention, 2020, 145, 105700.	5.7	9
8	Development and validation of a finite element model of a small female pedestrian. Computer Methods in Biomechanics and Biomedical Engineering, 2020, 23, 1336-1346.	1.6	10
9	Evaluation of finite element human body models for use in a standardized protocol for pedestrian safety assessment. Traffic Injury Prevention, 2019, 20, S32-S36.	1.4	11
10	Finite Element Model of a High-Stature Male Pedestrian for Simulating Car-to-Pedestrian Collisions. International Journal of Automotive Technology, 2019, 20, 445-453.	1.4	15
11	Validation of a booted finite element model of the WIAMan ATD lower limb in component and whole-body vertical loading impacts with an assessment of the boot influence model on response. Traffic Injury Prevention, 2018, 19, 549-554.	1.4	14
12	Finite element modeling of the human kidney for probabilistic occupant models: Statistical shape analysis and mesh morphing. Journal of Biomechanics, 2018, 74, 50-56.	2.1	13
13	A Finite Element Model of a Midsize Male for Simulating Pedestrian Accidents. Journal of Biomechanical Engineering, 2018, 140, .	1.3	24
14	A finite element model of an anthropomorphic test device lower limb to assess risk of injuries during vertical accelerative loading. Journal of Biomechanics, 2018, 81, 104-112.	2.1	11
15	A Review of Pediatric Lower Extremity Data for Pedestrian Numerical Modeling: Injury Epidemiology, Anatomy, Anthropometry, Structural, and Mechanical Properties. Applied Bionics and Biomechanics, 2018, 2018, 1-19.	1.1	7
16	Mechanical characterization and finite element implementation of the soft materials used in a novel anthropometric test device for simulating underbody blast loading. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 74, 358-364.	3.1	11
17	A finite element model of a six-year-old child for simulating pedestrian accidents. Accident Analysis and Prevention, 2017, 98, 206-213.	5.7	31
18	A transfer matrix method for free vibration analysis of Euler-Bernoulli beams with variable cross section. JVC/Journal of Vibration and Control, 2016, 22, 2591-2602.	2.6	59

#	Article	IF	Citations
19	Development and Validation of a GÃ¶ttingen Miniature Pig Brain Finite Element Model. , 2016, , .		1
20	Statistical shape analysis of the human spleen geometry for probabilistic occupant models. Journal of Biomechanics, 2016, 49, 1540-1546.	2.1	21
21	Short Communications From AAAM's 60th Annual Scientific Conference. Traffic Injury Prevention, 2016, 17, 175-218.	1.4	4
22	Development and Preliminary Validation of a 50th Percentile Pedestrian Finite Element Model. , 2015, , .		8
23	Finite Element Model of the THOR-NT Dummy under Vertical Impact Loading for Aerospace Injury Prediction: Model Evaluation and Sensitivity Analysis. Journal of the American Helicopter Society, 2015, 60, 1-10.	0.8	7
24	Development and evaluation of a finite element model of the THOR for occupant protection of spaceflight crewmembers. Accident Analysis and Prevention, 2015, 82, 244-256.	5.7	16
25	Modeling the biomechanical and injury response of human liver parenchyma under tensile loading. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 41, 280-291.	3.1	21
26	A Numerical Investigation on the Variation in Hip Injury Tolerance With Occupant Posture During Frontal Collisions. Traffic Injury Prevention, 2014, 15, 513-522.	1.4	28
27	Hole-Pattern Seals Performance Evaluation Using Computational Fluid Dynamics and Design of Experiment Techniques. Journal of Engineering for Gas Turbines and Power, 2014, 136, .	1.1	18
28	A statistical geometrical description of the human liver for probabilistic occupant models. Journal of Biomechanics, 2014, 47, 3681-3688.	2.1	17
29	Development, Calibration, and Validation of a Headâ€“Neck Complex of THOR Mod Kit Finite Element Model. Traffic Injury Prevention, 2014, 15, 844-854.	1.4	18
30	Effect of storage on tensile material properties of bovine liver. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 29, 339-349.	3.1	24
31	Preliminary Calibration and Validation of a Finite Element Model of THOR Mod Kit Dummy. , 2014, , .		2
32	Assessment of a dummy model in crash simulations using rating methods. International Journal of Automotive Technology, 2013, 14, 395-405.	1.4	22
33	A Finite Element Model of the Lower Limb for Simulating Automotive Impacts. Annals of Biomedical Engineering, 2013, 41, 513-526.	2.5	66
34	Material characterization of liver parenchyma using specimen-specific finite element models. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 26, 11-22.	3.1	37
35	Statistical shape analysis of clavicular cortical bone with applications to the development of mean and boundary shape models. Computer Methods and Programs in Biomedicine, 2013, 111, 613-628.	4.7	42
36	Performance-Based Classification of Occupant Posture to Reduce the Risk of Injury in a Collision. IEEE Transactions on Intelligent Transportation Systems, 2013, 14, 565-573.	8.0	22

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37	Hole-Pattern Seals Performance Optimization Using Computational Fluid Dynamics and Design of Experiment Techniques. , 2013, , .		2
38	On the Dynamic Properties of Pump Liquid Seals. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	1.5	29
39	Biomechanical and Injury Response of Human Foot and Ankle Under Complex Loading. Journal of Biomechanical Engineering, 2013, 135, 101008.	1.3	24
40	Effect of storage methods on indentation-based material properties of abdominal organs. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2013, 227, 293-301.	1.8	16
41	Numerical Modeling of Fluid-Induced Rotordynamic Forces in Seals With Large Aspect Ratios. Journal of Engineering for Gas Turbines and Power, 2013, 135, .	1.1	37
42	Finite Element Simulation of Pelvic Fractures in a UAB-CIREN Crash Case of an Automotive Side Impact. , 2013, , .		0
43	The Influence of the Specimen Shape and Loading Conditions on the Parameter Identification of a Viscoelastic Brain Model. Computational and Mathematical Methods in Medicine, 2013, 2013, 1-7.	1.3	4
44	Statistical modeling of human liver incorporating the variations in shape, size, and material properties. Stapp Car Crash Journal, 2013, 57, 285-311.	1.1	13
45	Minimization of Analytical Injury Metrics for Head Impact Injuries. Traffic Injury Prevention, 2012, 13, 278-285.	1.4	7
46	Numerical Modeling of Fluid-Induced Rotordynamic Forces in Seals With Large Aspect Ratio. , 2012, , .		2
47	A Finite Element Model of the Occupant Lower Extremity for Automotive Impact Applications. , 2012, , .		3
48	Effect of seat belt pretensioners on human abdomen and thorax. Journal of Trauma, 2012, 72, 1304-1315.	2.3	22
49	A Finite Element Model of the Foot and Ankle for Automotive Impact Applications. Annals of Biomedical Engineering, 2012, 40, 2519-2531.	2.5	89
50	A bootstrap approach for lower injury levels of the risk curves. Computer Methods and Programs in Biomedicine, 2012, 106, 274-286.	4.7	2
51	Freezing and decay effects on material properties of porcine kidney and liver. Biomedical Sciences Instrumentation, 2012, 48, 275-81.	0.2	3
52	Potential of Pedestrian Protection Systemsâ€"A Parameter Study Using Finite Element Models of Pedestrian Dummy and Generic Passenger Vehicles. Traffic Injury Prevention, 2011, 12, 398-411.	1.4	28
53	Human surrogates for injury biomechanics research. Clinical Anatomy, 2011, 24, 362-371.	2.7	66
54	Identification of occupant posture using a Bayesian classification methodology to reduce the risk of injury in a collision. Transportation Research Part C: Emerging Technologies, 2011, 19, 1078-1094.	7.6	38

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55	Fluid-Induced Forces in Pump Liquid Seals With Large Aspect Ratio. , 2011, , .		3
56	Dynamic Stability Analysis of Periodically Time-Varying Rotor System with a Transverse Crack. Engineering, 2011, 03, 719-725.	0.8	8
57	Rib fractures under anteriorâ€“posterior dynamic loads: Experimental and finite-element study. Journal of Biomechanics, 2010, 43, 228-234.	2.1	116
58	Influence of pre-collision occupant parameters on injury outcome in a frontal collision. Accident Analysis and Prevention, 2010, 42, 1398-1407.	5.7	68
59	Analysis of running child pedestrians impacted by a vehicle using rigid-body models and optimization techniques. Safety Science, 2010, 48, 259-267.	4.9	44
60	A numerical investigation of mid-femoral injury tolerance in axial compression and bending loading. International Journal of Crashworthiness, 2010, 15, 83-92.	1.9	26
61	Constrained Design Optimization of Rotor-Tilting Pad Bearing Systems. Journal of Engineering for Gas Turbines and Power, 2010, 132, .	1.1	29
62	Transmitted Power in a Structure Using the Effective Mass Parameters. , 2010, , .		0
63	Development and validation of pedestrian sedan bucks using finite-element simulations: a numerical investigation of the influence of vehicle automatic braking on the kinematics of the pedestrian involved in vehicle collisions. International Journal of Crashworthiness, 2010, 15, 491-503.	1.9	20
64	Identification of Material Properties of Human Brain under Large Shear Deformation: Analytical versus Finite Element Approach. IFMBE Proceedings, 2010, , 448-451.	0.3	0
65	Thoracic Response to Shoulder Belt Loading: Investigation of Chest Stiffness and Longitudinal Strain Pattern of Ribs. , 2009, , .		4
66	A New Approach to Multibody Model Development: Pedestrian Lower Extremity. Traffic Injury Prevention, 2009, 10, 386-397.	1.4	18
67	Automatic Design Optimization of Rotors Supported on Tilting Pad Bearings. , 2009, , .		0
68	Crash reconstruction of pedestrian accidents using optimization techniques. International Journal of Impact Engineering, 2009, 36, 210-219.	5.0	90
69	Experimental and computational investigation of human clavicle response in anterior-posterior bending loading - biomed 2009. Biomedical Sciences Instrumentation, 2009, 45, 6-11.	0.2	5
70	The tolerance of the femoral shaft in combined axial compression and bending loading. Stapp Car Crash Journal, 2009, 53, 251-90.	1.1	15
71	Computational Modeling and Experimental Investigation of Static Straight-Through Labyrinth Seals. , 2008, , .		7
72	Injury Tolerance and Moment Response of the Knee Joint to Combined Valgus Bending and Shear Loading. Journal of Biomechanical Engineering, 2008, 130, 031008.	1.3	35

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73	Balancing of Flexible Rotors Using Convex Optimization Techniques: Optimum Min-Max LMI Influence Coefficient Balancing. Journal of Vibration and Acoustics, Transactions of the ASME, 2008, 130, .	1.6	36
74	A study of the pedestrian impact kinematics using finite element dummy models: the corridors and dimensional analysis scaling of upper-body trajectories. International Journal of Crashworthiness, 2008, 13, 469-478.	1.9	35
75	Pedestrian Lower Extremity Response and Injury: A Small Sedan vs. A Large Sport Utility Vehicle. SAE International Journal of Passenger Cars - Mechanical Systems, 2008, 1, 985-1002.	0.4	11
76	The Strain Distribution and Force Transmission Path Through Pubic Rami During Lateral Pelvic Impacts. , 2008, , .		1
77	Kinematic analyses of instrumentation cubes in vehicle impact experiments. Biomedical Sciences Instrumentation, 2008, 44, 76-81.	0.2	0
78	Biomechanical injury response of leg subjected to combined axial compressive and bending loading. Biomedical Sciences Instrumentation, 2008, 44, 141-6.	0.2	4
79	A design optimization approach of vehicle hood for pedestrian protection. International Journal of Crashworthiness, 2007, 12, 581-589.	1.9	40
80	Investigating Pedestrian Kinematics with the Polar-II Finite Element Model. , 2007, , .		6
81	Correlation of strain and loads measured in the long bones with observed kinematics of the lower limb during vehicle-pedestrian impacts. Stapp Car Crash Journal, 2007, 51, 433-66.	1.1	9
82	A Generalized Minmax Influence Coefficient Method for Flexible Rotor Balancing. , 2005, , 1073.		2
83	A finite element model of the lower limb for simulating pedestrian impacts. Stapp Car Crash Journal, 2005, 49, 157-81.	1.1	37
84	Development and Validation of a Finite Element Model of the Lower Limb. , 2004, , 53.		8
85	A Finite Element Model of the Lower Limb for Simulating Pedestrian Impacts. , 0, , .		25
86	Material Identification using Successive Response Surface Methodology, with Application to a Human Femur Subjected to Three-Point Bending Loading. , 0, , .		7
87	A Simulation-Based Calibration and Sensitivity Analysis of a Finite Element Model of THOR Head-Neck Complex. , 0, , .		2
88	Development and Validation of an Occupant Lower Limb Finite Element Model. , 0, , .		14
89	Correlation of Strain and Loads Measured in the Long Bones With Observed Kinematics of the Lower Limb During Vehicle-Pedestrian Impacts. , 0, , .		6
90	The Tolerance of the Femoral Shaft in Combined Axial Compression and Bending Loading. , 0, , .		4

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91	Statistical Modeling of Human Liver Incorporating the Variations in Shape, Size, and Material Properties. , 0, , .		4