Spyros D Masouros

List of Publications by Year in descending order

71 papers	1,519 citations	394286 19 h-index	330025 37 g-index
76 all docs	76 docs citations	76 times ranked	1516 citing authors

#	Article	IF	Citations
1	Biomechanical evaluation of a tool-less external fixator. BMJ Military Health, 2023, 169, e55-e58.	0.4	0
2	Injury modelling for strategic planning in protecting the national infrastructure from terrorist explosive events. BMJ Military Health, 2023, 169, 565-569.	0.4	0
3	Penetration of Energized Metal Fragments to Porcine Thoracic Tissues. Journal of Biomechanical Engineering, 2022, 144, .	0.6	7
4	Protective Clothing Reduces Lower Limb Injury Severity Against Propelled Sand Debris in a Laboratory Setting. Human Factors and Mechanical Engineering for Defense and Safety, 2022, 6, .	2.4	1
5	Multiscale Validation of Multiple Human Body Model Functional Spinal Units. Journal of Biomechanical Engineering, 2021, 143, .	0.6	0
6	The Injury Mechanism of Traumatic Amputation. Frontiers in Bioengineering and Biotechnology, 2021, 9, 665248.	2.0	5
7	An Experimentally Validated Finite Element Model of the Lower Limb to Investigate the Efficacy of Blast Mitigation Systems. Frontiers in Bioengineering and Biotechnology, 2021, 9, 665656.	2.0	5
8	Pelvic Protection Limiting Lower Limb Flail Reduces Mortality. Journal of Biomechanical Engineering, 2021, 143, .	0.6	1
9	Quantifying deformations and strains in human intervertebral discs using Digital Volume Correlation combined with MRI (DVC-MRI). Journal of Biomechanics, 2020, 102, 109604.	0.9	21
10	Lateral pressure equalisation as a principle for designing support surfaces to prevent deep tissue pressure ulcers. PLoS ONE, 2020, 15, e0227064.	1.1	8
11	The risk of fracture to the tibia from a fragment simulating projectile. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 102, 103525.	1.5	12
12	Mapping the Risk of Fracture of the Tibia From Penetrating Fragments. Frontiers in Bioengineering and Biotechnology, 2020, 8, 544214.	2.0	6
13	Gelatine Backing Affects the Performance of Single-Layer Ballistic-Resistant Materials Against Blast Fragments. Frontiers in Bioengineering and Biotechnology, 2020, 8, 744.	2.0	7
14	A New Understanding of the Mechanism of Injury to the Pelvis and Lower Limbs in Blast. Frontiers in Bioengineering and Biotechnology, 2020, 8, 960.	2.0	8
15	Pelvic injury patterns in blast: Morbidity and mortality. Journal of Trauma and Acute Care Surgery, 2020, 88, 832-838.	1.1	12
16	Mechanotransduction in osteogenesis. Bone and Joint Research, 2020, 9, 1-14.	1.3	63
17	Fracture union rates across a century of war: a systematic review of the literature. BMJ Military Health, 2020, 166, 271-276.	0.4	3
18	The Effect of Degeneration on Internal Strains and the Mechanism of Failure in Human Intervertebral Discs Analyzed Using Digital Volume Correlation (DVC) and Ultra-High Field MRI. Frontiers in Bioengineering and Biotechnology, 2020, 8, 610907.	2.0	14

#	Article	IF	Citations
19	Title is missing!. , 2020, 15, e0227064.		0
20	Title is missing!. , 2020, 15, e0227064.		0
21	Title is missing!. , 2020, 15, e0227064.		0
22	Title is missing!. , 2020, 15, e0227064.		0
23	Predicting meniscal tear stability across knee-joint flexion using finite-element analysis. Knee Surgery, Sports Traumatology, Arthroscopy, 2019, 27, 206-214.	2.3	22
24	Material properties of human lumbar intervertebral discs across strain rates. Spine Journal, 2019, 19, 2013-2024.	0.6	22
25	Morphology and composition play distinct and complementary roles in the tolerance of plantar skin to mechanical load. Science Advances, 2019, 5, eaay0244.	4.7	37
26	107. Internal deformations in human intervertebral discs under axial compression: a 9.4T MRI study. Spine Journal, 2019, 19, S51-S52.	0.6	1
27	Injury risk of interphalangeal and metacarpophalangeal joints under impact loading. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 97, 306-311.	1.5	8
28	Restricting Lower Limb Flail is Key to Preventing Fatal Pelvic Blast Injury. Annals of Biomedical Engineering, 2019, 47, 2232-2240.	1.3	11
29	Mechanical Function of the Nucleus Pulposus of the Intervertebral Disc Under High Rates of Loading. Spine, 2019, 44, 1035-1041.	1.0	23
30	Lower Limb Posture Affects the Mechanism of Injury in Under-Body Blast. Annals of Biomedical Engineering, 2019, 47, 306-316.	1.3	10
31	Analysis of isolated transverse process fractures sustained during blast-related events. Journal of Trauma and Acute Care Surgery, 2018, 85, S129-S133.	1.1	5
32	Characterization of Lower Extremity Blast Injury. Military Medicine, 2018, 183, e448-e453.	0.4	14
33	Initial Adaption of the Injury Risk of the Human Leg Under High Rate Axial Loading for Use with a Hybrid III. Human Factors and Mechanical Engineering for Defense and Safety, 2018, 2, 1.	2.4	1
34	Fragment penetrating injury to long bones. AIP Conference Proceedings, 2018, , .	0.3	7
35	Injury Risk of the Human Leg Under High Rate Axial Loading. Human Factors and Mechanical Engineering for Defense and Safety, 2018, 2, 1.	2.4	7
36	Material properties of bovine intervertebral discs across strain rates. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 824-830.	1.5	22

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37	Biomechanics of the human intervertebral disc: A review of testing techniques and results. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 69, 420-434.	1.5	234
38	Material properties of the heel fat pad across strain rates. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 398-407.	1.5	29
39	Spinal Injury. Impact, 2017, 2017, 78-80.	0.0	1
40	The Lower Extremities. , 2017, , 389-410.		0
41	The Lower Extremities. , 2017, , 389-410.		0
42	The Dynamic Behaviour of the Floor of a Surrogate Vehicle Under Explosive Blast Loading. Journal of Materials Science Research, 2016, 5, 65.	0.1	5
43	Identifying Spinal Injury Patterns in Underbody Blast to Develop Mechanistic Hypotheses. Spine, 2016, 41, E268-E275.	1.0	16
44	Computational Methods in Continuum Mechanics. , 2016, , 199-217.		0
45	A validated numerical model of a lower limb surrogate to investigate injuries caused by under-vehicle explosions. Journal of Biomechanics, 2016, 49, 710-717.	0.9	14
46	Behaviour of Materials. , 2016, , 33-55.		0
47	Testing and Development of Mitigation Systems for Tertiary Blast. , 2016, , 249-253.		0
48	Surrogates of Human Injury. , 2016, , 189-198.		0
49	The Dynamic Behaviour of the Floor of a Surrogate Vehicle Under Explosive Blast Loading. Journal of Materials Science Research, 2016, 5, 59.	0.1	2
50	The High-Strain Rate Loading of Structural Biological Materials. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2015, 46, 4559-4566.	1.1	4
51	Strain-rate sensitivity of the lateral collateral ligament of the knee. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 41, 261-270.	1.5	39
52	Blast Injury in the Spine: Dynamic Response Index Is Not an Appropriate Model for Predicting Injury. Clinical Orthopaedics and Related Research, 2015, 473, 2929-2935.	0.7	20
53	From the battlefield to the laboratory: the use of clinical data analysis in developing models of lower limb blast injury. Journal of the Royal Army Medical Corps, 2014, 160, 117-120.	0.8	1
54	Design of a Traumatic Injury Simulator for Assessing Lower Limb Response to High Loading Rates. Annals of Biomedical Engineering, 2013, 41, 1957-1967.	1.3	19

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55	Briefing: Blast effects on biological systems. Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics, 2013, 166, 113-118.	0.4	2
56	Outcomes of IED Foot and Ankle Blast Injuries. Journal of Bone and Joint Surgery - Series A, 2013, 95, e25.	1.4	47
57	Prospects for studying how high-intensity compression waves cause damage in human blast injuries. , 2012, , .		2
58	The comparative behaviour of two combat boots under impact. Injury Prevention, 2012, 18, 109-112.	1.2	8
59	Blast-related fracture patterns: a forensic biomechanical approach. Journal of the Royal Society Interface, 2011, 8, 689-698.	1.5	85
60	Evaluating the effect of vehicle modification in reducing injuries from landmine blasts. An analysis of 2212 incidents and its application for humanitarian purposes. Accident Analysis and Prevention, 2011, 43, 1878-1886.	3.0	18
61	In-vehicle extremity injuries from improvised explosive devices: current and future foci. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 160-170.	1.8	88
62	Accurate placement of a pelvic binder improves reduction of unstable fractures of the pelvic ring. Journal of Bone and Joint Surgery: British Volume, 2011, 93-B, 1524-1528.	3.4	80
63	Mathematics and online learning experiences: a gateway site for engineering students. European Journal of Engineering Education, 2010, 35, 59-78.	1.5	6
64	(i) Biomechanics of the knee joint. Orthopaedics and Trauma, 2010, 24, 84-91.	0.2	74
65	A biomechanical basis for tears of the human acetabular labrum. British Journal of Sports Medicine, 2009, 43, 574-578.	3.1	35
66	Comparison of 1- and 2-Knot, 4-Strand, Double-Modified Kessler Tendon Repairs in a Porcine Model. Journal of Hand Surgery, 2009, 34, 705-709.	0.7	23
67	The Compressive Behavior of the Human Glenoid Labrum May Explain the Common Patterns of SLAP Lesions. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2009, 25, 504-509.	1.3	11
68	Biomechanics of the meniscus-meniscal ligament construct of the knee. Knee Surgery, Sports Traumatology, Arthroscopy, 2008, 16, 1121-1132.	2.3	138
69	Biomechanics of the menisci of the knee. Orthopaedics and Trauma, 2008, 22, 193-201.	0.3	109
70	Mechanical testing of intra-articular tissues. Relating experiments to physiological function. Orthopaedics and Trauma, 2008, 22, 341-348.	0.3	10
71	Tensile properties of the human glenoid labrum. Journal of Anatomy, 2007, 212, 071121040157001-???.	0.9	21