Radovan Zdero

List of Publications by Year
in descending order

55 papers	894 citations	643344 15 h-index	563245 28 g-index
55 all docs	55 docs citations	55 times ranked	948 citing authors

#	Article	IF	Citations
1	Tensile and compressive damage assessment of a novel sandwich composite structure made of Kevlar/flax/epoxy hybrid laminates. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2022, 236, 1842-1853.	0.7	1
2	Biomechanical design of a new percutaneous locked plate for comminuted proximal tibia fractures. Medical Engineering and Physics, 2022, 104, 103801.	0.8	3
3	Biomechanical design using in-vitro finite element modeling of distal femur fracture plates made from semi-rigid materials versus traditional metals for post-operative toe-touch weight-bearing. Medical Engineering and Physics, 2021, 87, 95-103.	0.8	11
4	Biomechanical optimization of the far cortical locking technique for early healing of distal femur fractures. Medical Engineering and Physics, 2021, 89, 63-72.	0.8	11
5	Biomechanical analysis of fixation methods for acetabular fractures: A review. Medical Engineering and Physics, 2021, 89, 51-62.	0.8	4
6	Tensile fatigue response of a novel carbon/flax/epoxy hybrid composite under strain-controlled and stress-controlled amplitude. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2021, 235, 2588-2599.	0.7	3
7	Effect of head size and rotation on taper corrosion in a hip simulator. Bone & Joint Open, 2021, 2, 1004-1016.	1.1	7
8	Evaluating the mechanical response of novel synthetic femurs for representing osteoporotic bone. Journal of Biomechanics, 2020, 111, 110018.	0.9	8
9	Biomechanical Response under Stress-Controlled Tension-Tension Fatigue of a Novel Carbon Fiber/Epoxy Intramedullary Nail for Femur Fractures. Medical Engineering and Physics, 2020, 80, 26-32.	0.8	3
10	Biomechanical properties and thermal characteristics of frozen versus thawed whole bone. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2020, 234, 874-883.	1.0	7
11	Mechanical characterization of a new Kevlar/Flax/epoxy hybrid composite in a sandwich structure. Polymer Testing, 2020, 90, 106680.	2.3	39
12	Biomechanical analysis of transverse acetabular fracture fixation in the elderly via the posterior versus the anterior approach with and without a total hip arthroplasty. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2020, 234, 966-974.	1.0	7
13	Biomechanical impact testing of synthetic versus human cadaveric tibias for predicting injury risk during pedestrian-vehicle collisions. Traffic Injury Prevention, 2020, 21, 163-168.	0.6	4
14	Biomechanical Consequences of Nail Insertion Point and Anterior Cortical Perforation for Antegrade Femoral Nailing. BioMed Research International, 2020, 2020, 1-10.	0.9	4
15	In-situ damage assessment of a novel carbon/flax/epoxy hybrid composite under tensile and compressive loading. Journal of Composite Materials, 2019, 53, 2701-2714.	1.2	11
16	Mechanical characterization of the static and fatigue compressive properties of a new glass/flax/epoxy composite material using digital image correlation, thermographic stress analysis, and conventional mechanical testing. Materials Science and Engineering C, 2019, 99, 940-950.	3.8	24
17	Impact properties of a new hybrid composite material made from woven carbon fibres plus flax fibres in an epoxy matrix. Composite Structures, 2019, 208, 346-356.	3.1	69
18	Biomechanical Testing of a 3-Hole Versus a 4-Hole Sliding Hip Screw in the Presence of a Retrograde Intramedullary Nail for Ipsilateral Intertrochanteric and Femur Shaft Fractures. Journal of Orthopaedic Trauma, 2018, 32, 419-424.	0.7	10

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19	Stress analysis of a carbon fiber-reinforced epoxy plate with a hole undergoing tension: A comparison of finite element analysis, strain gages, and infrared thermography. Journal of Composite Materials, 2018, 52, 2679-2689.	1.2	5
20	Experimental Validation of the Radiographic Union Score for Tibial Fractures (RUST) Using Micro-Computed Tomography Scanning and Biomechanical Testing in an in-Vivo Rat Model. Journal of Bone and Joint Surgery - Series A, 2018, 100, 1871-1878.	1.4	32
21	Biomechanical Analysis Using FEA and Experiments of Metal Plate and Bone Strut Repair of a Femur Midshaft Segmental Defect. BioMed Research International, 2018, 2018, 1-11.	0.9	27
22	Mechanical, morphological, and water absorption properties of a new hybrid composite material made from 4 harness satin woven carbon fibres and flax fibres in an epoxy matrix. Composites Part A: Applied Science and Manufacturing, 2018, 115, 46-56.	3.8	40
23	Clavicular Refracture at the Site of Angular Malunion in Young Athletes. Journal of Orthopaedic Trauma, 2017, 31, e130-e132.	0.7	10
24	Biomechanical analysis using FEA and experiments of a standard plate method versus three cable methods for fixing acetabular fractures with simultaneous THA. Medical Engineering and Physics, 2017, 46, 71-78.	0.8	13
25	Tensile and compressive damaged response in Flax fibre reinforced epoxy composites. Composites Part A: Applied Science and Manufacturing, 2017, 92, 118-133.	3.8	98
26	Biomechanical optimization of the angle and position for surgical implantation of a straight short stem hip implant. Medical Engineering and Physics, 2017, 39, 23-30.	0.8	6
27	Fujifilm Measurements of Interfacial Contact Area and Stress in Articulating Joints. , 2017, , 251-266.		1
28	Biomechanical Testing of the Intact and Surgically Treated Pelvis. , 2017, , 149-165.		1
29	Measuring the Contraction Force, Velocity, and Length of Skeletal Muscle. , 2017, , 363-378.		4
30	Pin-on-Disk Wear Testing of Biomaterials Used for Total Joint Replacements. , 2017, , 299-311.		4
31	Surface Strain Gage Testing of Whole Bones and Implants. , 2017, , 33-48.		3
32	Thermographic Stress Analysis of Whole Bones and Implants. , 2017, , 49-64.		2
33	Biomechanical Measurement Error Can Be Caused by Fujifilm Thickness: A Theoretical, Experimental, and Computational Analysis. BioMed Research International, 2017, 2017, 1-11.	0.9	2
34	Pullout Force Testing of Cortical and Cancellous Screws in Whole Bone. , 2017, , 117-132.		2
35	Force and Torque Measurements of Surgical Drilling Into Whole Bone. , 2017, , 85-100.		5
36	Insertion Torque Testing of Cortical and Cancellous Screws in Whole Bone. , 2017, , 101-116.		3

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37	What Is Orthopaedic Biomechanics?. , 2017, , xxi-xxvi.		5
38	Quasi-static Stiffness and Strength Testing of Whole Bones and Implants. , 2017, , 19-32.		4
39	Fretting Corrosion Testing of Total Hip Replacements with Modular Heads and Stems. , 2017, , 285-298.		2
40	Biomechanical analysis of the cephalomedullary nail versus the trochanteric stabilizing plate for unstable intertrochanteric femur fractures. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2016, 230, 1133-1140.	1.0	9
41	The biomechanical effect of anteversion and modular neck offset on stress shielding for short-stem versus conventional long-stem hip implants. Medical Engineering and Physics, 2016, 38, 232-240.	0.8	31
42	Mechanical Stress Promotes Cisplatin-Induced Hepatocellular Carcinoma Cell Death. BioMed Research International, 2015, 2015, 1-14.	0.9	11
43	Osteogenesis and cytotoxicity of a new Carbon Fiber/Flax/Epoxy composite material for bone fracture plate applications. Materials Science and Engineering C, 2015, 46, 435-442.	3.8	39
44	The Biomechanical Effect of Loading Speed on Metal-on-UHMWPE Contact Mechanics. Open Biomedical Engineering Journal, 2014, 8, 28-34.	0.7	7
45	Biomechanical Measurements of Stiffness and Strength for Five Types of Whole Human and Artificial Humeri. Journal of Biomechanical Engineering, 2014, 136, 051006.	0.6	13
46	The effect of patient position during trauma surgery on fat embolism syndrome: An experimental study. Indian Journal of Orthopaedics, 2014, 48, 203-210.	0.5	0
47	Biomechanical measurements of stopping and stripping torques during screw insertion in five types of human and artificial humeri. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2014, 228, 446-455.	1.0	18
48	Biomechanical Analysis of a New Carbon Fiber/Flax/Epoxy Bone Fracture Plate Shows Less Stress Shielding Compared to a Standard Clinical Metal Plate. Journal of Biomechanical Engineering, 2014, 136, 091002.	0.6	58
49	Biomechanical analysis using infrared thermography of a traditional metal plate versus a carbon fibre/epoxy plate for Vancouver B1 femur fractures. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2014, 228, 107-113.	1.0	14
50	Biomechanical measurements of cortical screw purchase in five types of human and artificial humeri. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 30, 159-167.	1.5	16
51	Biomechanical fatigue analysis of an advanced new carbon fiber/flax/epoxy plate for bone fracture repair using conventional fatigue tests and thermography. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 35, 27-38.	1.5	60
52	A biomechanical comparison of four different cementless press-fit stems used in revision surgery for total knee replacements. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2012, 226, 848-857.	1.0	4
53	Hybrid Composite-Metal Hip Resurfacing Implant for Active Patient. , 2009, , 567-572.		0
54	Cyclic Loading of Periprosthetic Fracture Fixation Constructs. Journal of Trauma, 2008, 64, 1308-1312.	2.3	62

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55	Cortical Screw Pullout Strength and Effective Shear Stress in Synthetic Third Generation Composite Femurs. Journal of Biomechanical Engineering, 2007, 129, 289-293.	0.6	57