

# Radovan Zdero

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

55  
papers

604  
citations

13  
h-index

23  
g-index

55  
ext. papers

717  
ext. citations

3  
avg, IF

4.23  
L-index

#	Paper	IF	Citations
55	Biomechanical Design of a New Percutaneous Locked Plate for Comminuted Proximal Tibia Fractures. <i>Medical Engineering and Physics</i> , <b>2022</b> , 103801	2.4	0
54	Effect of head size and rotation on taper corrosion in a hip simulator. <i>Bone &amp; Joint Open</i> , <b>2021</b> , 2, 1004-1016	1.6	2
53	Biomechanical optimization of the far cortical locking technique for early healing of distal femur fractures. <i>Medical Engineering and Physics</i> , <b>2021</b> , 89, 63-72	2.4	3
52	Biomechanical analysis of fixation methods for acetabular fractures: A review. <i>Medical Engineering and Physics</i> , <b>2021</b> , 89, 51-62	2.4	1
51	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. <i>Medical Engineering and Physics</i> , <b>2021</b> , 87, 95-103	2.4	5
50	Tensile fatigue response of a novel carbon/flax/epoxy hybrid composite under strain-controlled and stress-controlled amplitude. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , <b>2021</b> , 235, 2588-2599	1.3	0
49	Biomechanical Response under Stress-Controlled Tension-Tension Fatigue of a Novel Carbon Fiber/Epoxy Intramedullary Nail for Femur Fractures. <i>Medical Engineering and Physics</i> , <b>2020</b> , 80, 26-32	2.4	1
48	Biomechanical properties and thermal characteristics of frozen versus thawed whole bone. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2020</b> , 234, 874-883	1.7	0
47	Mechanical characterization of a new Kevlar/Flax/epoxy hybrid composite in a sandwich structure. <i>Polymer Testing</i> , <b>2020</b> , 90, 106680	4.5	24
46	Biomechanical analysis of transverse acetabular fracture fixation in the elderly via the posterior versus the anterior approach with and without a total hip arthroplasty. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2020</b> , 234, 966-974	1.7	3
45	Biomechanical Consequences of Nail Insertion Point and Anterior Cortical Perforation for Antegrade Femoral Nailing. <i>BioMed Research International</i> , <b>2020</b> , 2020, 5878607	3	0
44	Biomechanical impact testing of synthetic versus human cadaveric tibias for predicting injury risk during pedestrian-vehicle collisions. <i>Traffic Injury Prevention</i> , <b>2020</b> , 21, 163-168	1.8	2
43	Evaluating the mechanical response of novel synthetic femurs for representing osteoporotic bone. <i>Journal of Biomechanics</i> , <b>2020</b> , 111, 110018	2.9	2
42	In-situ damage assessment of a novel carbon/flax/epoxy hybrid composite under tensile and compressive loading. <i>Journal of Composite Materials</i> , <b>2019</b> , 53, 2701-2714	2.7	8
41	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. <i>Materials Science and Engineering C</i> , <b>2019</b> , 99, 940-950	8.3	8
40	Impact properties of a new hybrid composite material made from woven carbon fibres plus flax fibres in an epoxy matrix. <i>Composite Structures</i> , <b>2019</b> , 208, 346-356	5.3	46
39	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. <i>Journal of Orthopaedic Trauma</i> , <b>2018</b> , 32, 419-424	3.1	8

38	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. <i>Journal of Composite Materials</i> , <b>2018</b> , 52, 2679-2689	2.7	4
37	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. <i>Journal of Bone and Joint Surgery - Series A</i> , <b>2018</b> , 100, 1871-1878	5.6	15
36	Biomechanical Analysis Using FEA and Experiments of Metal Plate and Bone Strut Repair of a Femur Midshaft Segmental Defect. <i>BioMed Research International</i> , <b>2018</b> , 2018, 4650308	3	15
35	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. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2018</b> , 115, 46-56	8.4	29
34	Clavicular Refracture at the Site of Angular Malunion in Young Athletes. <i>Journal of Orthopaedic Trauma</i> , <b>2017</b> , 31, e130-e132	3.1	6
33	Biomechanical Measurement Error Can Be Caused by Fujifilm Thickness: A Theoretical, Experimental, and Computational Analysis. <i>BioMed Research International</i> , <b>2017</b> , 2017, 4310314	3	0
32	Pullout Force Testing of Cortical and Cancellous Screws in Whole Bone <b>2017</b> , 117-132		1
31	Force and Torque Measurements of Surgical Drilling Into Whole Bone <b>2017</b> , 85-100		4
30	Insertion Torque Testing of Cortical and Cancellous Screws in Whole Bone <b>2017</b> , 101-116		1
29	What Is Orthopaedic Biomechanics? <b>2017</b> , xxi-xxvi		2
28	Quasi-static Stiffness and Strength Testing of Whole Bones and Implants <b>2017</b> , 19-32		1
27	Fretting Corrosion Testing of Total Hip Replacements with Modular Heads and Stems <b>2017</b> , 285-298		
26	Biomechanical analysis using FEA and experiments of a standard plate method versus three cable methods for fixing acetabular fractures with simultaneous THA. <i>Medical Engineering and Physics</i> , <b>2017</b> , 46, 71-78	2.4	6
25	Tensile and compressive damaged response in Flax fibre reinforced epoxy composites. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2017</b> , 92, 118-133	8.4	77
24	Biomechanical optimization of the angle and position for surgical implantation of a straight short stem hip implant. <i>Medical Engineering and Physics</i> , <b>2017</b> , 39, 23-30	2.4	3
23	Fujifilm Measurements of Interfacial Contact Area and Stress in Articulating Joints <b>2017</b> , 251-266		
22	Biomechanical Testing of the Intact and Surgically Treated Pelvis <b>2017</b> , 149-165		1
21	Measuring the Contraction Force, Velocity, and Length of Skeletal Muscle <b>2017</b> , 363-378		2

20	Pin-on-Disk Wear Testing of Biomaterials Used for Total Joint Replacements <b>2017</b> , 299-311		4
19	Surface Strain Gage Testing of Whole Bones and Implants <b>2017</b> , 33-48		1
18	Thermographic Stress Analysis of Whole Bones and Implants <b>2017</b> , 49-64		
17	Biomechanical analysis of the cephalomedullary nail versus the trochanteric stabilizing plate for unstable intertrochanteric femur fractures. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2016</b> , 230, 1133-1140	1.7	6
16	The biomechanical effect of anteversion and modular neck offset on stress shielding for short-stem versus conventional long-stem hip implants. <i>Medical Engineering and Physics</i> , <b>2016</b> , 38, 232-40	2.4	20
15	Osteogenesis and cytotoxicity of a new Carbon Fiber/Flax/Epoxy composite material for bone fracture plate applications. <i>Materials Science and Engineering C</i> , <b>2015</b> , 46, 435-42	8.3	28
14	Mechanical stress promotes cisplatin-induced hepatocellular carcinoma cell death. <i>BioMed Research International</i> , <b>2015</b> , 2015, 430569	3	10
13	Biomechanical fatigue analysis of an advanced new carbon fiber/flax/epoxy plate for bone fracture repair using conventional fatigue tests and thermography. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2014</b> , 35, 27-38	4.1	49
12	The Biomechanical Effect of Loading Speed on Metal-on-UHMWPE Contact Mechanics. <i>Open Biomedical Engineering Journal</i> , <b>2014</b> , 8, 28-34	0.9	5
11	Biomechanical measurements of stiffness and strength for five types of whole human and artificial humeri. <i>Journal of Biomechanical Engineering</i> , <b>2014</b> , 136, 051006	2.1	9
10	The effect of patient position during trauma surgery on fat embolism syndrome: An experimental study. <i>Indian Journal of Orthopaedics</i> , <b>2014</b> , 48, 203-10	1.3	
9	Biomechanical measurements of stopping and stripping torques during screw insertion in five types of human and artificial humeri. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2014</b> , 228, 446-455	1.7	12
8	Biomechanical analysis of a new carbon fiber/flax/epoxy bone fracture plate shows less stress shielding compared to a standard clinical metal plate. <i>Journal of Biomechanical Engineering</i> , <b>2014</b> , 136, 091002	2.1	48
7	Biomechanical analysis using infrared thermography of a traditional metal plate versus a carbon fibre/epoxy plate for Vancouver B1 femur fractures. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2014</b> , 228, 107-13	1.7	11
6	Biomechanical measurements of cortical screw purchase in five types of human and artificial humeri. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2014</b> , 30, 159-67	4.1	14
5	A biomechanical comparison of four different cementless press-fit stems used in revision surgery for total knee replacements. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2012</b> , 226, 848-57	1.7	2
4	Hybrid Composite-Metal Hip Resurfacing Implant for Active Patient <b>2009</b> , 567-572		
3	Cyclic loading of periprosthetic fracture fixation constructs. <i>Journal of Trauma</i> , <b>2008</b> , 64, 1308-12		57

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|---|--|-----|----|
| 2 | Cortical screw pullout strength and effective shear stress in synthetic third generation composite femurs. <i>Journal of Biomechanical Engineering</i> , <b>2007</b> , 129, 289-93   | 2.1 | 48 |
| 1 | Tensile and compressive damage assessment of a novel sandwich composite structure made of Kevlar/flax/epoxy hybrid laminates. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 146442072210856 | 1.3 |    |