Behzad Babaei

List of Publications by Year
in descending order

21 papers	532 citations	759233 12 h-index	752698 20 g-index
21 all docs	21 docs citations	21 times ranked	540 citing authors

#	Article	IF	Citations
1	Free vibration analysis of an electro-elastic GPLRC cylindrical shell surrounded by viscoelastic foundation using modified length-couple stress parameter. Mechanics Based Design of Structures and Machines, 2021, 49, 738-762.	4.7	101
2	Efficient and optimized identification of generalized Maxwell viscoelastic relaxation spectra. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 55, 32-41.	3.1	62
3	Role of Mg₂Si particles on mechanical, wear, and corrosion behaviors of friction stir welding of AA6061-T6 and Al-Mg₂Si composite. Journal of Composite Materials, 2020, 54, 4035-4057.	2.4	50
4	Microstructural properties and mechanics vary between bundles of the human anterior cruciate ligament during stress-relaxation. Journal of Biomechanics, 2016, 49, 87-93.	2.1	36
5	Remodeling by fibroblasts alters the rate-dependent mechanical properties of collagen. Acta Biomaterialia, 2016, 37, 28-37.	8.3	35
6	FWNNet: Presentation of a New Classifier of Brain Tumor Diagnosis Based on Fuzzy Logic and the Wavelet-Based Neural Network Using Machine-Learning Methods. Computational Intelligence and Neuroscience, 2021, 2021, 1-13.	1.7	32
7	A discrete spectral analysis for determining quasi-linear viscoelastic properties of biological materials. Journal of the Royal Society Interface, 2015, 12, 20150707.	3.4	29
8	Friction spot extrusion welding-brazing of copper to aluminum alloy. Materials Letters, 2021, 285, 129160.	2.6	26
9	The ballistic resistance of multi-layered targets impacted by rigid projectiles. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 530, 208-217.	5.6	23
10	Discrete quasi-linear viscoelastic damping analysis of connective tissues, and the biomechanics of stretching. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 69, 193-202.	3.1	23
11	Magnetic Resonance Elastography Reconstruction for Anisotropic Tissues. Medical Image Analysis, 2021, 74, 102212.	11.6	22
12	Energy dissipation in quasi-linear viscoelastic tissues, cells, and extracellular matrix. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 84, 198-207.	3.1	15
13	The effect of dental restoration geometry and material properties on biomechanical behaviour of a treated molar tooth: A 3D finite element analysis. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 125, 104892.	3.1	13
14	The fibrous cellular microenvironment, and how cells make sense of a tangled web. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 5772-5774.	7.1	12
15	Characterization of the mechanical properties of resected porcine organ tissue using optical fiber photoelastic polarimetry. Biomedical Optics Express, 2017, 8, 4663.	2.9	11
16	Influence of thermal and thermomechanical stimuli on a molar tooth treated with resin-based restorative dental composites. Dental Materials, 2022, 38, 811-823.	3.5	10
17	The role of stirring time on the metallurgical and mechanical properties during modified friction stir clinching of AA6061-T6 and AA7075-T6 sheets. Results in Physics, 2020, 19, 103364.	4.1	9
18	Effect of Nd:YAG Pulsed-Laser Welding Parameters on Melting Rate of GTD-111 Superalloy Joint. Journal of Materials Engineering and Performance, 2021, 30, 9108-9117.	2.5	9

#	Article	IF	Citations
19	A multi-objective optimization of stent geometries. Journal of Biomechanics, 2021, 125, 110575.	2.1	8
20	The influence of dental restoration depth, internal cavity angle, and material properties on biomechanical resistance of a treated molar tooth. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 133, 105305.	3.1	6
21	Fracture Behavior of GTD-111 Superalloy during In Situ Tensile Scanning Electron Microscopy. Journal of Materials Engineering and Performance, 0, , .	2.5	0