Reza Razaghi

List of Publications by Year
in descending order

49 papers	769 citations	567281 15 h-index	580821 25 g-index
49 all docs	49 docs citations	49 times ranked	495 citing authors

#	Article	IF	Citations
1	Finite element modeling of the complex anisotropic mechanical behavior of the human sclera and pia mater. Computer Methods and Programs in Biomedicine, 2022, 215, 106618.	4.7	12
2	Ocular biomechanics during improvised explosive device blast: A computational study using eye-specific models. Injury, 2022, 53, 1401-1415.	1.7	8
3	Modeling the biomechanics of the conventional aqueous outflow pathway microstructure in the human eye. Computer Methods and Programs in Biomedicine, 2022, 221, 106922.	4.7	7
4	Biomechanics of human trabecular meshwork in healthy and glaucoma eyes via dynamic Schlemm's canal pressurization. Computer Methods and Programs in Biomedicine, 2022, 221, 106921.	4.7	14
5	A patient-specific fluid–structure interaction model of the cerebrovascular damage in relation to traumatic brain injury. Trauma, 2021, 23, 33-43.	0.5	4
6	Biomechanics of the keratoconic cornea: Theory, segmentation, pressure distribution, and coupled FE-optimization algorithm. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 113, 104155.	3.1	22
7	Ocular biomechanics due to ground blast reinforcement. Computer Methods and Programs in Biomedicine, 2021, 211, 106425.	4.7	11
8	A patient-specific finite element model of the smoker's lung during breathing. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2021, 235, 879-886.	2.5	1
9	A comparative numerical study to compute ocular injury in boxing. Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 2020, 234, 125-135.	0.7	0
10	Finite element modeling of the eyeglass-related traumatic ocular injuries due to high explosive detonation. Engineering Failure Analysis, 2020, 117, 104835.	4.0	10
11	Finite element modeling of the periodontal ligament under a realistic kinetic loading of the jaw system. Saudi Dental Journal, 2020, 32, 349-356.	1.6	13
12	Comparative numerical study on the child head injury under different child safety seat angles. Theoretical and Applied Mechanics Letters, 2019, 9, 260-263.	2.8	2
13	A patient-specific numerical modeling of the spontaneous coronary artery dissection in relation to atherosclerosis. Computer Methods and Programs in Biomedicine, 2019, 182, 105060.	4.7	7
14	A computational dynamic finite element simulation of the thoracic vertebrae under blunt loading: spinal cord injury. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	1.6	8
15	Mechanical measurement of the human cerebellum under compressive loading. Journal of Medical Engineering and Technology, 2019, 43, 55-58.	1.4	5
16	Risk of rupture of the cerebral aneurysm in relation to traumatic brain injury using a patient-specific fluid-structure interaction model. Computer Methods and Programs in Biomedicine, 2019, 176, 9-16.	4.7	30
17	Biomechanics of the Healthy and Keratoconic Corneas: A Combination of the Clinical Data, Finite Element Analysis, and Artificial Neural Network. Current Pharmaceutical Design, 2019, 24, 4474-4483.	1.9	17
18	A combination of the finite element analysis and experimental indentation via the cornea. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 90, 146-154.	3.1	15

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19	Patient-specific Finite Element Model of Coronary Artery Stenting. Current Pharmaceutical Design, 2019, 24, 4492-4502.	1.9	4
20	Collision of the glass shards with the eye: A computational fluid-structure interaction model. Journal of Chemical Neuroanatomy, 2018, 90, 80-86.	2.1	14
21	A comparative study to determine the optimal intravitreal injection angle to the eye: A computational fluid-structure interaction model. Technology and Health Care, 2018, 26, 483-498.	1.2	11
22	A comparative study on the mechanical performance of the protective headgear materials to minimize the injury to the boxers' head. International Journal of Industrial Ergonomics, 2018, 66, 169-176.	2.6	10
23	Interaction of the blood components and plaque in a stenotic coronary artery. Artery Research, 2018, 24, 47.	0.6	7
24	A 3-dimensional finite element model of a newly designed adjustable high-heeled shoe. International Journal of Industrial Ergonomics, 2018, 68, 304-310.	2.6	5
25	The role of smoking on the mechanical properties of the human lung. Technology and Health Care, 2018, 26, 963-972.	1.2	5
26	A nonlinear dynamic finite-element analyses of the basketball-related eye injuries. Sports Engineering, 2018, 21, 359-365.	1.1	7
27	Dynamic finite element simulation of dental prostheses during chewing using muscle equivalent force and trajectory approaches. Journal of Medical Engineering and Technology, 2017, 41, 314-324.	1.4	10
28	Viscoelastic mechanical measurement of the healthy and atherosclerotic human coronary arteries using DIC technique. Artery Research, 2017, 18, 14.	0.6	17
29	Computing the influences of different Intraocular Pressures on the human eye components using computational fluid-structure interaction model. Technology and Health Care, 2017, 25, 285-297.	1.2	15
30	A combination of experimental measurement, constitutive damage model, and diffusion tensor imaging to characterize the mechanical properties of the human brain. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 1350-1363.	1.6	11
31	Mechanical Properties of the Human Sclera Under Various Strain Rates: Elastic, Hyperelastic, and Viscoelastic Models. Journal of Biomaterials and Tissue Engineering, 2017, 7, 686-695.	0.1	14
32	Quantifying the injury of the human eye components due to tennis ball impact using a computational fluidâ€"structure interaction model. Sports Engineering, 2016, 19, 105-115.	1.1	20
33	DYNAMIC SIMULATION AND FINITE ELEMENT ANALYSIS OF THE MAXILLARY BONE INJURY AROUND DENTAL IMPLANT DURING CHEWING DIFFERENT FOOD. Biomedical Engineering - Applications, Basis and Communications, 2016, 28, 1650014.	0.6	9
34	Dynamic finite element simulation of the gunshot injury to the human forehead protected by polyvinyl alcohol sponge. Journal of Materials Science: Materials in Medicine, 2016, 27, 74.	3.6	13
35	Computing the stresses and deformations of the human eye components due to a high explosive detonation using fluidâ€"structure interaction model. Injury, 2016, 47, 1042-1050.	1.7	39
36	Measurement of the mechanical properties of soccer balls using digital image correlation method. Sport Sciences for Health, 2016, 12, 69-76.	1.3	5

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37	A computational fluid–structure interaction model of the blood flow in the healthy and varicose saphenous vein. Vascular, 2016, 24, 254-263.	0.9	16
38	Dynamic Finite Element Simulation of the Human Head Under Impact Loading to Compare the Application of Polyvinyl Alcohol Sponge and Expanded Polystyrene Foam as Helmet Materials. Journal of Advanced Physics, 2016, 5, 214-219.	0.4	1
39	INVESTIGATING THE EFFECT OF SLOSHING ON THE ENERGY ABSORPTION OF TANK WAGONS CRASH. Transactions of the Canadian Society for Mechanical Engineering, 2015, 39, 187-200.	0.8	5
40	Measurement of the mechanical properties of the handball, volleyball, and basketball using DIC method: a combination of experimental, constitutive, and viscoelastic models. Sport Sciences for Health, 2015, 11, 295-303.	1.3	8
41	A COMBINATION OF EXPERIMENTAL AND NUMERICAL ANALYSES TO MEASURE THE COMPRESSIVE MECHANICAL PROPERTIES OF TENNIS BALL. Biomedical Engineering - Applications, Basis and Communications, 2015, 27, 1550039.	0.6	10
42	An experimental-nonlinear finite element study of a balloon expandable stent inside a realistic stenotic human coronary artery to investigate plaque and arterial wall injury. Biomedizinische Technik, 2015, 60, 593-602.	0.8	10
43	A computational fluid-structure interaction model for plaque vulnerability assessment in atherosclerotic human coronary arteries. Journal of Applied Physics, 2014, 115, .	2.5	69
44	Dynamic simulation and finite element analysis of the human mandible injury protected by polyvinyl alcohol sponge. Materials Science and Engineering C, 2014, 42, 608-614.	7.3	38
45	Plaque and arterial vulnerability investigation in a three-layer atherosclerotic human coronary artery using computational fluid-structure interaction method. Journal of Applied Physics, 2014, 116, .	2.5	42
46	A comparative study on the elastic modulus of polyvinyl alcohol sponge using different stress-strain definitions. Biomedizinische Technik, 2014, 59, 439-46.	0.8	25
47	A finite element study of balloon expandable stent for plaque and arterial wall vulnerability assessment. Journal of Applied Physics, 2014, 116, 044701.	2.5	46
48	A nonlinear finite element simulation of balloon expandable stent for assessment of plaque vulnerability inside a stenotic artery. Medical and Biological Engineering and Computing, 2014, 52, 589-599.	2.8	53
49	An experimental-finite element analysis on the kinetic energy absorption capacity of polyvinyl alcohol sponge. Materials Science and Engineering C, 2014, 39, 253-258.	7.3	44