

# Mohammad Nikkhoo

## List of Publications by Year in descending order

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Version: 2024-02-01

43  
papers

300  
citations

1039406

9  
h-index

1058022

14  
g-index

46  
all docs

46  
docs citations

46  
times ranked

263  
citing authors

#	ARTICLE	IF	CITATIONS
1	Development and validation of a geometrically personalized finite element model of the lower ligamentous cervical spine for clinical applications. <i>Computers in Biology and Medicine</i> , 2019, 109, 22-32.	3.9	33
2	A meta-model analysis of a finite element simulation for defining poroelastic properties of intervertebral discs. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2013, 227, 672-682.	1.0	23
3	Development of a novel geometrically-parametric patient-specific finite element model to investigate the effects of the lumbar lordosis angle on fusion surgery. <i>Journal of Biomechanics</i> , 2020, 102, 109722.	0.9	21
4	Fatigue changes neck muscle control and deteriorates postural stability during arm movement perturbations in patients with chronic neck pain. <i>Spine Journal</i> , 2020, 20, 530-537.	0.6	20
5	Biomechanical response of intact, degenerated and repaired intervertebral discs under impact loading – Ex-vivo and In-Silico investigation. <i>Journal of Biomechanics</i> , 2018, 70, 26-32.	0.9	19
6	Frailty Level Classification of the Community Elderly Using Microsoft Kinect-Based Skeleton Pose: A Machine Learning Approach. <i>Sensors</i> , 2021, 21, 4017.	2.1	17
7	Comparative biomechanical analysis of rigid vs. flexible fixation devices for the lumbar spine: A geometrically patient-specific poroelastic finite element study. <i>Computer Methods and Programs in Biomedicine</i> , 2021, 212, 106481.	2.6	12
8	A regenerative approach towards recovering the mechanical properties of degenerated intervertebral discs: Genipin and platelet-rich plasma therapies. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2017, 231, 127-137.	1.0	11
9	Biomechanical role of posterior cruciate ligament in total knee arthroplasty: A finite element analysis. <i>Computer Methods and Programs in Biomedicine</i> , 2020, 183, 105109.	2.6	11
10	Effect of Degeneration on Fluid-Solid Interaction within Intervertebral Disk Under Cyclic Loading – A Meta-Model Analysis of Finite Element Simulations. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 4.	2.0	10
11	DYNAMIC RESPONSES OF INTERVERTEBRAL DISC DURING STATIC CREEP AND DYNAMIC CYCLIC LOADING: A PARAMETRIC POROELASTIC FINITE ELEMENT ANALYSIS. <i>Biomedical Engineering - Applications, Basis and Communications</i> , 2013, 25, 1350013.	0.3	9
12	Postural stability and trunk muscle responses to the static and perturbed balance tasks in individuals with and without symptomatic degenerative lumbar disease. <i>Gait and Posture</i> , 2018, 64, 159-164.	0.6	9
13	Rheological and Dynamic Integrity of Simulated Degenerated Disc and Consequences After Cross-linker Augmentation. <i>Spine</i> , 2013, 38, E1446-E1453.	1.0	8
14	A comparative finite element simulation of locking compression plate materials for tibial fracture treatment. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2021, 24, 1064-1072.	0.9	7
15	Biomechanical Investigation Between Rigid and Semirigid Posterolateral Fixation During Daily Activities: Geometrically Parametric Poroelastic Finite Element Analyses. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 646079.	2.0	7
16	A finite element study on intra-operative corrective forces and evaluation of screw density in scoliosis surgeries. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2018, 232, 1245-1254.	1.0	6
17	The Biomechanical Response of the Lower Cervical Spine Post Laminectomy: Geometrically-Parametric Patient-Specific Finite Element Analyses. <i>Journal of Medical and Biological Engineering</i> , 2021, 41, 59-70.	1.0	6
18	Reliability and Validity of a Mobile Device for Assessing Head Control Ability. <i>Journal of Medical and Biological Engineering</i> , 2021, 41, 45-52.	1.0	6

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19	Comparative biomechanical analyses of lower cervical spine post anterior fusion versus intervertebral disc arthroplasty: A geometrically patient-specific poroelastic finite element investigation. <i>Journal of Orthopaedic Translation</i> , 2022, 36, 33-43.	1.9	6
20	A model for flexi-bar to evaluate intervertebral disc and muscle forces in exercises. <i>Medical Engineering and Physics</i> , 2016, 38, 1076-1082.	0.8	5
21	Biomechanical modeling of spinal ligaments: finite element analysis of L4-L5 spinal segment. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2021, 24, 1807-1818.	0.9	5
22	Finite Element Analysis of the Effect of Dental Implants on Jaw Bone under Mechanical and Thermal Loading Conditions. <i>Mathematical Problems in Engineering</i> , 2021, 2021, 1-17.	0.6	5
23	A Poroelastic Finite Element Model to Describe the Time-Dependent Response of Lumbar Intervertebral Disc. <i>Journal of Medical Imaging and Health Informatics</i> , 2011, 1, 246-251.	0.2	4
24	Material Property Identification of Artificial Degenerated Intervertebral Disc Models – Comparison of Inverse Poroelastic Finite Element Analysis with Biphasic Closed Form Solution. <i>Journal of Mechanics</i> , 2013, 29, 589-597.	0.7	4
25	An in silico parametric model of vertebrae trabecular bone based on density and microstructural parameters to assess risk of fracture in osteoporosis. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2014, 228, 1281-1295.	1.0	4
26	Recovering the mechanical properties of denatured intervertebral discs through Platelet-Rich Plasma therapy. , 2015, 2015, 933-6.		4
27	A finite element study of fatigue load effects on total hip joint prosthesis. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2021, 24, 1-7.	0.9	4
28	The effect of orthopedic screw profiles on the healing time of femoral neck fracture. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2022, 25, 97-110.	0.9	4
29	The Effect of Mandibular Flexure on Stress Distribution in the All-on-4 Treated Edentulous Mandible: A Comparative Finite-Element Study Based on Mechanostat Theory. <i>Journal of Long-Term Effects of Medical Implants</i> , 2019, 29, 79-86.	0.2	4
30	Time-dependent response of intact intervertebral disc – In Vitro and In-Silico study on the effect of loading mode and rate. <i>Engineering Solid Mechanics</i> , 2015, 3, 51-58.	0.6	3
31	Numerical and analytical simulation of multilayer cellular scaffolds. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2020, 42, 1.	0.8	3
32	DISC RHEOLOGY CHANGES IN DEGENERATED DISC MODEL BY TRYPSIN AND GLYCATION. <i>Journal of Biomechanics</i> , 2012, 45, S619.	0.9	2
33	Investigation of Low Back Pain Using System Modeling. <i>Advanced Science Letters</i> , 2013, 19, 1260-1264.	0.2	2
34	On low back pain: Identification of structural changes in system parameters for fatigue loaded intervertebral disc using PCA. , 2012, , .		1
35	ASSESSMENT OF EXOGENOUS CROSSLINKING THERAPY FOR BIOCHEMICAL AND MECHANICAL INDUCED DEGENERATION. <i>Journal of Biomechanics</i> , 2012, 45, S617.	0.9	1
36	Using different unit-cell geometries to generate bone tissue scaffolds by additive manufacturing technology. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2022, , 095441192210997.	1.0	1

#	ARTICLE	IF	CITATIONS
37	The role of orthopedic screws threads properties on the success of femoral fracture fixation. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 9419-9430.	1.1	1
38	Mechanical comparison of cold-worked versus cold-worked hot-forged dynamic hip screw system. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2022, 236, 10742-10750.	1.1	1
39	An axisymmetric poroelastic model for description of the short-term and long-term creep behavior of L4-L5 intervertebral disc. , 2011, , .		0
40	A Mechanical model for flexible exercise bars to study the influence of the initial position of the bar on lumbar discs and muscles forces. , 2015, 2015, 3917-20.		0
41	Biphasic Rheology of Different Artificial Degenerated Intervertebral Discs. IFMBE Proceedings, 2019, , 671-674.	0.2	0
42	The role of the fiber ply configurations on the biomechanics of the hip prosthesis. International Journal of Modeling, Simulation, and Scientific Computing, 0, , .	0.9	0
43	Computer Aided Tissue Engineering from Modeling to Manufacturing. Advances in Bioinformatics and Biomedical Engineering Book Series, 2010, , 75-88.	0.2	0