

# João Folgado

## List of Publications by Year in descending order

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55  
papers

997  
citations

430442

18  
h-index

476904

29  
g-index

57  
all docs

57  
docs citations

57  
times ranked

1023  
citing authors

#	ARTICLE	IF	CITATIONS
1	Computational hip joint simulator for wear and heat generation. Journal of Biomechanics, 2007, 40, 2358-2366.	0.9	80
2	A contact model with ingrowth control for bone remodelling around cementless stems. Journal of Biomechanics, 2002, 35, 167-176.	0.9	74
3	On the optimal shape of hip implants. Journal of Biomechanics, 2012, 45, 239-246.	0.9	66
4	A multibody biomechanical model of the upper limb including the shoulder girdle. Multibody System Dynamics, 2012, 28, 83-108.	1.7	58
5	In silico Mechano-Chemical Model of Bone Healing for the Regeneration of Critical Defects: The Effect of BMP-2. PLoS ONE, 2015, 10, e0127722.	1.1	47
6	Shape Optimization of a Cementless Hip Stem for a Minimum of Interface Stress and Displacement. Computer Methods in Biomechanics and Biomedical Engineering, 2004, 7, 51-61.	0.9	35
7	Influence of femoral stem geometry, material and extent of porous coating on bone ingrowth and atrophy in cementless total hip arthroplasty: an iterative finite element model. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 135-145.	0.9	32
8	Bone adaptation impact of stemless shoulder implants: a computational analysis. Journal of Shoulder and Elbow Surgery, 2019, 28, 1886-1896.	1.2	32
9	Critical analysis of musculoskeletal modelling complexity in multibody biomechanical models of the upper limb. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 749-759.	0.9	31
10	Structural analysis of the intervertebral discs adjacent to an interbody fusion using multibody dynamics and finite element cosimulation. Multibody System Dynamics, 2011, 25, 245-270.	1.7	30
11	Fully automatic segmentation of femurs with medullary canal definition in high and in low resolution CT scans. Medical Engineering and Physics, 2016, 38, 1474-1480.	0.8	30
12	Bone remodelling analysis of the humerus after a shoulder arthroplasty. Medical Engineering and Physics, 2012, 34, 1132-1138.	0.8	26
13	The Influence of the Pelvic Bone on the Computational Results of the Acetabular Component of a Total Hip Prosthesis. Journal of Biomechanical Engineering, 2010, 132, 054503.	0.6	24
14	Three-dimensional shape optimization of hip prostheses using a multicriteria formulation. Structural and Multidisciplinary Optimization, 2007, 34, 261-275.	1.7	23
15	Multibody biomechanical models of the upper limb. Procedia IUTAM, 2011, 2, 4-17.	1.2	22
16	Computational model of mesenchymal migration in 3D under chemotaxis. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 59-74.	0.9	22
17	A window moving inverse dynamics optimization for biomechanics of motion. Multibody System Dynamics, 2016, 38, 157-171.	1.7	21
18	Full-thickness tears of the supraspinatus tendon: A three-dimensional finite element analysis. Journal of Biomechanics, 2016, 49, 3962-3970.	0.9	19

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19	Stress analysis in a bone fracture fixed with topology-optimised plates. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 693-699.	1.4	19
20	Multibody System of the Upper Limb Including a Reverse Shoulder Prosthesis. <i>Journal of Biomechanical Engineering</i> , 2013, 135, 111005.	0.6	18
21	Multilayered learning architecture applied to humanoid locomotion. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009, 12, 135-137.	0.9	17
22	Primary stability analysis of stemless shoulder implants. <i>Medical Engineering and Physics</i> , 2020, 81, 22-29.	0.8	17
23	Computational analysis of bone remodeling during an anterior cervical fusion. <i>Journal of Biomechanics</i> , 2010, 43, 2875-2880.	0.9	16
24	A new shoulder model with a biologically inspired glenohumeral joint. <i>Medical Engineering and Physics</i> , 2016, 38, 969-977.	0.8	16
25	Computational analysis of polyethylene wear in anatomical and reverse shoulder prostheses. <i>Medical and Biological Engineering and Computing</i> , 2015, 53, 111-122.	1.6	15
26	Computational design and fabrication of a novel bioresorbable cage for tibial tuberosity advancement application. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 65, 344-355.	1.5	15
27	Bone remodelling of the humerus after a resurfacing and a stemless shoulder arthroplasty. <i>Clinical Biomechanics</i> , 2018, 59, 78-84.	0.5	15
28	Evaluation of osteoporotic bone quality by a computational model for bone remodeling. <i>Computers and Structures</i> , 2004, 82, 1381-1388.	2.4	14
29	Is the callus shape an optimal response to a mechanobiological stimulus?. <i>Medical Engineering and Physics</i> , 2014, 36, 1508-1514.	0.8	13
30	Bone remodelling of the scapula after a total shoulder arthroplasty. <i>Biomechanics and Modeling in Mechanobiology</i> , 2014, 13, 827-838.	1.4	13
31	Influence of the Musculotendon Dynamics on the Muscle Force-Sharing Problem of the Shoulder – A Fully Inverse Dynamics Approach. <i>Journal of Biomechanical Engineering</i> , 2018, 140, .	0.6	13
32	Surrogate-based visualization and sensitivity analysis of coronary stent performance: A study on the influence of geometric design. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2018, 34, e3125.	1.0	13
33	Biomechanical analysis of the anterior cervical fusion. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012, 15, 1337-1346.	0.9	12
34	A Finite Element Model to Simulate Femoral Fractures in Calves: Testing Different Polymers for Intramedullary Interlocking Nails. <i>Veterinary Surgery</i> , 2012, 41, 838-844.	0.5	11
35	Bone remodelling analysis of a bovine femur for a veterinary implant design. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009, 12, 683-690.	0.9	9
36	Wear analysis in anatomical and reversed shoulder prostheses. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011, 14, 883-892.	0.9	8

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37	Subject-specific bone remodelling of the scapula. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014, 17, 1129-1143.	0.9	8
38	Automated femoral landmark extraction for optimal prosthesis placement in total hip arthroplasty. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2017, 33, e2844.	1.0	8
39	Surrogate-based multi-objective design optimization of a coronary stent: Altering geometry toward improved biomechanical performance. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2021, 37, e3453.	1.0	6
40	Biomechanical analysis of the tibial tray design in TKA: comparison between modular and offset tibial trays. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2014, 22, 590-598.	2.3	5
41	Computational reverse shoulder prosthesis model: Experimental data and verification. <i>Journal of Biomechanics</i> , 2015, 48, 3242-3251.	0.9	5
42	Proximal and mid-thigh fascia lata graft constructs used for arthroscopic superior capsule reconstruction show equivalent biomechanical properties: an <i>in vitro</i> human cadaver study. <i>JSES International</i> , 2021, 5, 439-446.	0.7	5
43	Influence of the PFNA screw position on the risk of cut-out in an unstable intertrochanteric fracture: a computational analysis. <i>Medical Engineering and Physics</i> , 2021, 97, 70-76.	0.8	5
44	Development of a Spinal Fusion Cage by Multiscale Modelling: Application to the Human Cervical Spine. <i>Procedia Engineering</i> , 2015, 110, 183-190.	1.2	4
45	Metaphyseal sleeves in revision total knee arthroplasties: Computational analysis of bone remodeling. <i>Knee</i> , 2022, 37, 10-19.	0.8	4
46	Shape optimization of uncemented hip prostheses. <i>Virtual and Physical Prototyping</i> , 2006, 1, 147-158.	5.3	3
47	Comparison of 3 supraspinatus tendon repair techniques – a 3D computational finite element analysis. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2020, 23, 1387-1394.	0.9	3
48	Contact patterns in the ankle joint after lateral ligamentous injury during internal rotation: A computational study. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2021, 235, 82-88.	1.0	3
49	Why are tapes better than wires in knotless rotator cuff repairs? An evaluation of force, pressure and contact area in a tendon bone unit mechanical model. <i>Journal of Experimental Orthopaedics</i> , 2021, 8, 9.	0.8	3
50	Multibody modelling of the foot for the biomechanical analysis of the ankle joint during running: A narrative review. <i>Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics</i> , 2022, 236, 338-353.	0.5	3
51	Shoulder Positioning during Superior Capsular Reconstruction: Computational Analysis of Graft Integrity and Shoulder Stability. <i>Biology</i> , 2021, 10, 1263.	1.3	3
52	Femoral stem shape optimization for prosthesis stability. <i>Journal of Biomechanics</i> , 2006, 39, S516.	0.9	0
53	A simple controller to overcome the lack of correlation between forward and inverse dynamic analysis of human motion tasks. <i>Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics</i> , 2016, 230, 350-367.	0.5	0
54	A Biomechanical Approach for Bone Regeneration Inside Scaffolds Embedded with BMP-2. <i>Computational Methods in Applied Sciences (Springer)</i> , 2019, , 67-86.	0.1	0

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55	Dynamics of the Upper Limb with a Detailed Model for the Shoulder. , 2012, , 413-420.		0