J Zhang

List of Publications by Year
in descending order

30 papers	707 citations	567281 15 h-index	580821 25 g-index
30 all docs	30 docs citations	30 times ranked	708 citing authors

#	Article	IF	Citations
1	Patient-specific finite element estimated femur strength as a predictor of the risk of hip fracture: the effect of methodological determinants. Osteoporosis International, 2016, 27, 2815-2822.	3.1	80
2	Lower limb estimation from sparse landmarks using an articulated shape model. Journal of Biomechanics, 2016, 49, 3875-3881.	2.1	60
3	An anatomical region-based statistical shape model of the human femur. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2014, 2, 176-185.	1.9	58
4	Predictive statistical models of baseline variations in 3-D femoral cortex morphology. Medical Engineering and Physics, 2016, 38, 450-457.	1.7	50
5	Statistical shape modelling versus linear scaling: Effects on predictions of hip joint centre location and muscle moment arms in people with hip osteoarthritis. Journal of Biomechanics, 2019, 85, 164-172.	2.1	47
6	The MAP Client: User-Friendly Musculoskeletal Modelling Workflows. Lecture Notes in Computer Science, 2014, , 182-192.	1.3	44
7	Men and women have similarly shaped carpometacarpal joint bones. Journal of Biomechanics, 2015, 48, 3420-3426.	2.1	38
8	Accuracy of femur reconstruction from sparse geometric data using a statistical shape model. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 566-576.	1.6	37
9	Multiscale musculoskeletal modelling, data–model fusion and electromyography-informed modelling. Interface Focus, 2016, 6, 20150084.	3.0	34
10	Influence of collars on the primary stability of cementless femoral stems: A finite element study using a diverse patient cohort. Journal of Orthopaedic Research, 2018, 36, 1185-1195.	2.3	34
11	Toward modeling locomotion using electromyography–informed 3D models: application to cerebral palsy. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2017, 9, e1368.	6.6	31
12	The morphology of the human mandible: A computational modelling study. Biomechanics and Modeling in Mechanobiology, 2020, 19, 1187-1202.	2.8	29
13	Minimal medical imaging can accurately reconstruct geometric bone models for musculoskeletal models. PLoS ONE, 2019, 14, e0205628.	2.5	23
14	Automated creation and tuning of personalised muscle paths for OpenSim musculoskeletal models of the knee joint. Biomechanics and Modeling in Mechanobiology, 2021, 20, 521-533.	2.8	19
15	Early morphologic changes in trapeziometacarpal joint bones with osteoarthritis. Osteoarthritis and Cartilage, 2018, 26, 1338-1344.	1.3	17
16	Virtual trial to evaluate the robustness of cementless femoral stems to patient and surgical variation. Journal of Biomechanics, 2019, 82, 346-356.	2.1	17
17	Trapeziometacarpal joint contact varies between men and women during three isometric functional tasks. Medical Engineering and Physics, 2017, 50, 43-49.	1.7	15
18	Point-cloud registration using adaptive radial basis functions. Computer Methods in Biomechanics and Biomedical Engineering, 2018, 21, 498-502.	1.6	15

#	Article	IF	Citations
19	Evaluating the primary stability of standard vs lateralised cementless femoral stems â€" A finite element study using a diverse patient cohort. Clinical Biomechanics, 2018, 59, 101-109.	1.2	10
20	Musculoskeletal Modelling and the Physiome Project. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2018, , 123-174.	0.6	10
21	Towards rapid prediction of personalised muscle mechanics: integration with diffusion tensor imaging. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2020, 8, 492-500.	1.9	6
22	Influence of femoral external shape on internal architecture and fracture risk. Biomechanics and Modeling in Mechanobiology, 2020, 19, 1251-1261.	2.8	6
23	Development of an in situ procedure to evaluate the reticulo-rumen morphology of sheep selected for divergent methane emissions. Animal, 2019, 13, 542-548.	3.3	5
24	Using partial least squares regression as a predictive tool in describing equine third metacarpal bone shape. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 1609-1612.	1.6	4
25	Rapid muscle volume prediction using anthropometric measurements and population-derived statistical models. Biomechanics and Modeling in Mechanobiology, 2020, 19, 1239-1249.	2.8	4
26	Automatic Meshing of Femur Cortical Surfaces from Clinical CT Images. Lecture Notes in Computer Science, 2012, , 40-48.	1.3	3
27	Rapid Prediction of Personalised Muscle Mechanics: Integration with Diffusion Tensor Imaging. Lecture Notes in Computer Science, 2017, , 71-77.	1.3	3
28	On the Use of Population-Based Statistical Models in Biomechanics. , 2019, , 229-237.		3
29	Relationship between lower lumbar spine shape and patient bone metabolic activity as characterised by 18F NaF bio-markers. Computers in Biology and Medicine, 2020, 116, 103529.	7.0	3
30	Automatic segmentation of the thumb trapeziometacarpal joint using parametric statistical shape modelling and random forest regression voting. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2019, 7, 297-301.	1.9	2