James D Johnston

List of Publications by Year
in descending order

52 papers	949 citations	430874 18 h-index	501196 28 g-index
53 all docs	53 docs citations	53 times ranked	1251 citing authors

#	Article	IF	Citations
1	Children with Autism Spectrum Disorder Spent 30 Min Less Daily Time in Moderate-to-Vigorous Physical Activity than Typically Developing Peers: a Meta-Analysis of Cross-sectional Data. Review Journal of Autism and Developmental Disorders, 2023, 10, 144-157.	3.4	2
2	Dog-Assisted Physical Activity Intervention in Children with Autism Spectrum Disorder: A Feasibility and Efficacy Exploratory Study. Anthrozoos, 2022, 35, 601-612.	1.4	3
3	3D Bioprinted Scaffolds for Bone Tissue Engineering: State-Of-The-Art and Emerging Technologies. Frontiers in Bioengineering and Biotechnology, 2022, 10, 824156.	4.1	51
4	3D printing PCL/nHA bone scaffolds: exploring the influence of material synthesis techniques. Biomaterials Research, 2021, 25, 3.	6.9	80
5	Physical activity, exercise, and skeletal health. , 2021, , 531-543.		1
6	QCT-FE modeling of the proximal tibia: Effect of mapping strategy on convergence time and model accuracy. Medical Engineering and Physics, 2021, 88, 41-46.	1.7	3
7	A Mouse Model Suggests How an Industrialized Diet Alters Jaw Form. FASEB Journal, 2021, 35, .	0.5	0
8	Evaluation of La(XT), a novel lanthanide compound, in an OVX rat model of osteoporosis. Bone Reports, 2021, 14, 100753.	0.4	4
9	An exclusion approach for addressing partial volume artifacts with quantititive computed tomography-based finite element modeling of the proximal tibia. Medical Engineering and Physics, 2020, 76, 95-100.	1.7	1
10	Distal radius sections offer accurate and precise estimates of forearm fracture load. Clinical Biomechanics, 2020, 80, 105144.	1.2	3
11	Offâ€axis loads cause failure of the distal radius at lower magnitudes than axial loads: A sideâ€toâ€side experimental study. Journal of Orthopaedic Research, 2020, 38, 1688-1692.	2.3	1
12	Investigation of white line separation under load in bovine claws with and without toe-tip necrosis. American Journal of Veterinary Research, 2019, 80, 736-742.	0.6	1
13	Predicting experimentally-derived failure load at the distal radius using finite element modelling based on peripheral quantitative computed tomography cross-sections (pQCT-FE): A validation study. Bone, 2019, 129, 115051.	2.9	7
14	Separate modeling of cortical and trabecular bone offers little improvement in FE predictions of local structural stiffness at the proximal tibia. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 1258-1268.	1.6	3
15	A single-spring model predicts the majority of variance in impact force during a fall onto the outstretched hand. Journal of Biomechanics, 2019, 90, 149-152.	2.1	12
16	Reliability of Annual Changes and Monitoring Time Intervals for Bone Strength, Size, Density, and Microarchitectural Development at the Distal Radius and Tibia in Children: A 1-Year HR-pQCT Follow-Up. Journal of Bone and Mineral Research, 2019, 34, 1297-1305.	2.8	6
17	Cortical porosity assessment in the distal radius: A comparison of HR-pQCT measures with Synchrotron-Radiation micro-CT-based measures. Bone, 2019, 120, 439-445.	2.9	9
18	Knee osteoarthritis patients with more subchondral cysts have altered tibial subchondral bone mineral density. BMC Musculoskeletal Disorders, 2019, 20, 14.	1.9	20

#	Article	IF	Citations
19	Moderate to vigorous physical activity and impact loading independently predict variance in bone strength at the tibia but not at the radius in children. Applied Physiology, Nutrition and Metabolism, 2019, 44, 326-331.	1.9	10
20	Interpreting the threeâ€dimensional orientation of vascular canals and crossâ€sectional geometry of cortical bone in birds and bats. Journal of Anatomy, 2018, 232, 931-942.	1.5	19
21	Mechanical Metrics of the Proximal Tibia are Precise and Differentiate Osteoarthritic and Normal Knees: A Finite Element Study. Scientific Reports, 2018, 8, 11478.	3.3	15
22	Assessing the sharpness of hypodermic needles after repeated use. Canadian Veterinary Journal, 2018, 59, 1112-1114.	0.0	1
23	Optimizing finite element predictions of local subchondral bone structural stiffness using neural network-derived density-modulus relationships for proximal tibial subchondral cortical and trabecular bone. Clinical Biomechanics, 2017, 41, 1-8.	1.2	18
24	Accounting for spatial variation of trabecular anisotropy with subject-specific finite element modeling moderately improves predictions of local subchondral bone stiffness at the proximal tibia. Journal of Biomechanics, 2017, 59, 101-108.	2.1	15
25	Precision of bone density and micro-architectural properties at the distal radius and tibia in children: an HR-pQCT study. Osteoporosis International, 2017, 28, 3189-3197.	3.1	11
26	Proximal tibial trabecular bone mineral density is related to pain in patients with osteoarthritis. Arthritis Research and Therapy, 2017, 19, 200.	3.5	13
27	Subchondral Bone Features and Mechanical Properties as Biomarkers of Osteoarthritis. Biomarkers in Disease, 2017, , 529-555.	0.1	0
28	Cortical Bone Porosity: What Is It, Why Is It Important, and How Can We Detect It?. Current Osteoporosis Reports, 2016, 14, 187-198.	3.6	114
29	Quantifying trabecular bone material anisotropy and orientation using low resolution clinical CT images: A feasibility study. Medical Engineering and Physics, 2016, 38, 978-987.	1.7	16
30	Role of endocortical contouring methods on precision of HR-pQCT-derived cortical micro-architecture in postmenopausal women and young adults. Osteoporosis International, 2016, 27, 789-796.	3.1	14
31	Subchondral Bone Features and Mechanical Properties as Biomarkers of Osteoarthritis. Exposure and Health, 2016, , 1-27.	4.9	1
32	Response to Letter to the Editor: â€˜Is subchondral bone mineral density associated with nocturnal pain in knee osteoarthritis patients?â€™. Osteoarthritis and Cartilage, 2015, 23, 2299-2301.	1.3	3
33	<i>Ex Vivo</i> Evaluation of Carpal Flexion After Partial Carpal Arthrodesis in Horses. Veterinary Surgery, 2015, 44, 386-391.	1.0	5
34	Measurement of muscle and fat in postmenopausal women: precision of previously reported pQCT imaging methods. Bone, 2015, 75, 49-54.	2.9	37
35	Individual and combined effects of OA-related subchondral bone alterations on proximal tibial surface stiffness: a parametric finite element modeling study. Medical Engineering and Physics, 2015, 37, 783-791.	1.7	23
36	Prediction of local proximal tibial subchondral bone structural stiffness using subject-specific finite element modeling: Effect of selected densityâ€“modulus relationship. Clinical Biomechanics, 2015, 30, 703-712.	1.2	21

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37	Effect of a Novel Movement Strategy in Decreasing ACL Risk Factors in Female Adolescent Soccer Players. Clinical Journal of Sport Medicine, 2014, 24, 134-141.	1.8	18
38	Does Physical Activity in Adolescence Have Site-Specific and Sex-Specific Benefits on Young Adult Bone Size, Content, and Estimated Strength?. Journal of Bone and Mineral Research, 2014, 29, 479-486.	2.8	53
39	Regional depth-specific subchondral bone density measures in osteoarthritic and normal patellae: in vivo precision and preliminary comparisons. Osteoporosis International, 2014, 25, 1107-1114.	3.1	11
40	Comparison of Short-Term InÂVivo Precision of Bone Density and Microarchitecture at the Distal Radius and Tibia Between Postmenopausal Women and Young Adults. Journal of Clinical Densitometry, 2014, 17, 510-517.	1.2	12
41	The Measurement of Joint Mechanics and Their Role in Osteoarthritis Genesis and Progression. Rheumatic Disease Clinics of North America, 2013, 39, 21-44.	1.9	9
42	The Effect of a Novel Movement Strategy in Decreasing ACL Risk Factors in Female Adolescent Soccer Players. Journal of Strength and Conditioning Research, 2012, 26, 3406-3417.	2.1	21
43	Predicting subchondral bone stiffness using a depth-specific CT topographic mapping technique in normal and osteoarthritic proximal tibiae. Clinical Biomechanics, 2011, 26, 1012-1018.	1.2	18
44	In vivo precision of a depth-specific topographic mapping technique in the CT analysis of osteoarthritic and normal proximal tibial subchondral bone density. Skeletal Radiology, 2011, 40, 1057-1064.	2.0	25
45	A comparison of conventional maximum intensity projection with a new depth-specific topographic mapping technique in the CT analysis of proximal tibial subchondral bone density. Skeletal Radiology, 2010, 39, 867-876.	2.0	22
46	Screw Versus Plate Fixation of Proximal First Metatarsal Crescentic Osteotomy. Foot and Ankle International, 2009, 30, 142-149.	2.3	16
47	Computed tomography topographic mapping of subchondral density (CT-TOMASD) in osteoarthritic and normal knees: methodological development and preliminary findings. Osteoarthritis and Cartilage, 2009, 17, 1319-1326.	1.3	61
48	The Measurement of Joint Mechanics and Their Role in Osteoarthritis Genesis and Progression. Medical Clinics of North America, 2009, 93, 67-82.	2.5	23
49	The Measurement of Joint Mechanics and their Role in Osteoarthritis Genesis and Progression. Rheumatic Disease Clinics of North America, 2008, 34, 605-622.	1.9	36
50	A Repeatable Ex Vivo Model of Spondylolysis and Spondylolisthesis. Spine, 2008, 33, 2387-2393.	2.0	16
51	The Biomechanical Basis of Bone Strength Development during Growth. , 2007, 51, 13-32.		34
52	Mechanical properties of the scapholunate ligament correlate with bone mineral density measurements of the hand. Journal of Orthopaedic Research, 2004, 22, 867-871.	2.3	29