Steven Boyd

List of Publications by Year in Descending Order

218 papers	10,876 citations	51 h-index	100 g-index
247 ext. papers	12,565 ext. citations	4.5 avg, IF	6.48 L-index

#	Paper	IF	Citations
218	Independent changes in bone mineralized and marrow soft tissues following acute knee injury require dual-energy or high-resolution computed tomography for accurate assessment of bone mineral density and stiffness.. *Journal of the Mechanical Behavior of Biomedical Materials*, **2022**, 127, 105091	4.1	
217	Bone microarchitecture and estimated failure load are deteriorated whether patients with chronic kidney disease have normal bone mineral density, osteopenia or osteoporosis. *Bone*, **2022**, 154, 116260	4.7	0
216	Diagnostic accuracy of a dual-energy computed tomography-based post-processing method for imaging bone marrow edema following an acute ligamentous knee injury.. *Skeletal Radiology*, **2022**, 1	2.7	
215	Response to High-Dose Vitamin D Supplementation Is Specific to Imaging Modality and Skeletal Site.. *JBMR Plus*, **2022**, 6, e10615	3.9	
214	Bone microarchitecture phenotypes identified in older adults are associated with different levels of osteoporotic fracture risk.. *Journal of Bone and Mineral Research*, **2021**,	6.3	2
213	Contrast-enhanced x-ray microscopy of articular cartilage. *Connective Tissue Research*, **2021**, 62, 542-553	3.3	0
212	A quantitative assessment of dual energy computed tomography-based material decomposition for imaging bone marrow edema associated with acute knee injury. *Medical Physics*, **2021**, 48, 1792-1803	4.4	3
211	Heterogenous bone response to biologic DMARD therapies in rheumatoid arthritis patients and their relationship to functional indices. *Scandinavian Journal of Rheumatology*, **2021**, 50, 417-426	1.9	0
210	Higher Hand Grip Strength Is Associated With Greater Radius Bone Size and Strength in Older Men and Women: The Framingham Osteoporosis Study. *JBMR Plus*, **2021**, 5, e10485	3.9	1
209	Maintained Bone Density in Young Hypoestrogenized Women with a High BMI: Case Series. *Calcified Tissue International*, **2021**, 109, 469-473	3.9	
208	Proximal Tibia Bone Stiffness and Strength in HR-pQCT- and QCT-Based Finite Element Models. *Annals of Biomedical Engineering*, **2021**, 49, 2389-2398	4.7	3
207	Improvements in radiographic and clinical assessment of distal radius fracture healing by FE-estimated bone stiffness. *Bone Reports*, **2021**, 14, 100748	2.6	2
206	Changements osseux valus par tomodensitomtrie quantitative priphrique haute rsolution (HR-pQCT) dans larthrite inflammatoire prcoce : tude longitudinale sur 12 mois. *Revue Du Rhumatisme (Edition Francaise)*, **2021**, 88, 450-450	0.1	
205	Bone Microarchitecture Decline and Risk of Fall and Fracture in Men With Poor Physical Performance-The STRAMBO Study. *Journal of Clinical Endocrinology and Metabolism*, **2021**, 106, e5180-e5194	5.6	0
204	Parity, Breastfeeding, and Osteoporosis-Authors' Response. *Calcified Tissue International*, **2021**, 108, 279-280	3.9	0
203	Reply to Effects of High-Dose Vitamin D Supplementation on Bone Fragility. *Journal of Bone and Mineral Research*, **2021**, 36, 622	6.3	
202	Bone changes in early inflammatory arthritis assessed with High-Resolution peripheral Quantitative Computed Tomography (HR-pQCT): A 12-month cohort study. *Joint Bone Spine*, **2021**, 88, 105065	2.9	1

201	Heterogeneity in microstructural deterioration following spinal cord injury. *Bone*, **2021**, 142, 115778	4.7	5
200	A new approach for quantifying localized bone loss by measuring void spaces. *Bone*, **2021**, 143, 115785	4.7	2
199	Restoration of Stiffness During Fracture Healing at the Distal Radius, Using HR-pQCT and Finite Element Methods. *Journal of Clinical Densitometry*, **2021**, 24, 422-432	3.5	1
198	Bone and joint enhancement filtering: Application to proximal femur segmentation from uncalibrated computed tomography datasets. *Medical Image Analysis*, **2021**, 67, 101887	15.4	0
197	Neuroprosthetic baroreflex controls haemodynamics after spinal cord injury. *Nature*, **2021**, 590, 308-314	50.4	27
196	Using 3D image registration to maximize the reproducibility of longitudinal bone strength assessment by HR-pQCT and finite element analysis. *Osteoporosis International*, **2021**, 32, 1849-1857	5.3	3
195	Reply to Vitamin D Supplements: Is Bone Loss by HR-pQCT Really Negative?. *Journal of Bone and Mineral Research*, **2021**, 36, 1206-1207	6.3	
194	Structural Consequences of a Partial Anterior Cruciate Ligament Injury on Remaining Joint Integrity: Evidence for Ligament and Bone Changes Over Time in an Ovine Model. *American Journal of Sports Medicine*, **2021**, 49, 637-648	6.8	3
193	Pre-flight exercise and bone metabolism predict unloading-induced bone loss due to spaceflight. *British Journal of Sports Medicine*, **2021**,	10.3	11
192	Reply to Burt LA, et al.: Adverse Effects of High-Dose Vitamin D Supplementation on Volumetric Bone Density Are Greater in Females Than Males. *Journal of Bone and Mineral Research*, **2021**, 36, 1417-1418	6.3	1
191	Opportunistic CT screening predicts individuals at risk of major osteoporotic fracture. *Osteoporosis International*, **2021**, 32, 1639-1649	5.3	4
190	The Assessment of Skeletal Muscle and Cortical Bone by Second-generation HR-pQCT at the Tibial Midshaft. *Journal of Clinical Densitometry*, **2021**, 24, 465-473	3.5	1
189	An inverse technique to identify participant-specific bone adaptation from serial CT measurements. *International Journal for Numerical Methods in Biomedical Engineering*, **2021**, 37, e3515	2.6	
188	Bone density, microarchitecture and strength in elite figure skaters is discipline dependent. *Journal of Science and Medicine in Sport*, **2021**,	4.4	2
187	Validation of Bone Density and Microarchitecture Measurements of the Load-Bearing Femur in the Human Knee Obtained Using In Vivo HR-pQCT Protocol. *Journal of Clinical Densitometry*, **2021**, 24, 651-657	3.5	3
186	Longitudinal bone microarchitectural changes are best detected using image registration. *Osteoporosis International*, **2020**, 31, 1995-2005	5.3	10
185	Guidelines for the assessment of bone density and microarchitecture in vivo using high-resolution peripheral quantitative computed tomography. *Osteoporosis International*, **2020**, 31, 1607-1627	5.3	72
184	Sex- and Site-Specific Reference Data for Bone Microarchitecture in Adults Measured Using Second-Generation HR-pQCT. *Journal of Bone and Mineral Research*, **2020**, 35, 2151-2158	6.3	19

183	Effect of high-dose vitamin D supplementation on peripheral arterial calcification: secondary analysis of a randomized controlled trial. *Osteoporosis International*, **2020**, 31, 2141-2150	5.3	1
182	Consensus approach for 3D joint space width of metacarpophalangeal joints of rheumatoid arthritis patients using high-resolution peripheral quantitative computed tomography. *Quantitative Imaging in Medicine and Surgery*, **2020**, 10, 314-325	3.6	12
181	Impact on bone microarchitecture and failure load in a patient with type I Gaucher disease who switched from Imiglucerase to Eliglustat. *Molecular Genetics and Metabolism Reports*, **2020**, 24, 100606	1.8	3
180	CT-based internal density calibration for opportunistic skeletal assessment using abdominal CT scans. *Medical Engineering and Physics*, **2020**, 78, 55-63	2.4	11
179	Postural Balance Effects Associated with 400, 4000 or 10,000 IU Vitamin D Daily for Three Years: A Secondary Analysis of a Randomized Clinical Trial. *Nutrients*, **2020**, 12,	6.7	5
178	Robust Self-Supervised Learning of Deterministic Errors in Single-Plane (Monoplanar) and Dual-Plane (Biplanar) X-Ray Fluoroscopy. *IEEE Transactions on Medical Imaging*, **2020**, 39, 2051-2060	11.7	0
177	Safety of High-Dose Vitamin D Supplementation: Secondary Analysis of a Randomized Controlled Trial. *Journal of Clinical Endocrinology and Metabolism*, **2020**, 105,	5.6	25
176	High-Dose Vitamin D Supplementation and Bone Health-Reply. *JAMA - Journal of the American Medical Association*, **2020**, 323, 93-94	27.4	1
175	Associations Between Breastfeeding History and Early Postmenopausal Bone Loss. *Calcified Tissue International*, **2020**, 106, 264-273	3.9	2
174	Optimizing HR-pQCT workflow: a comparison of bias and precision error for quantitative bone analysis. *Osteoporosis International*, **2020**, 31, 567-576	5.3	9
173	Adverse Effects of High-Dose Vitamin D Supplementation on Volumetric Bone Density Are Greater in Females than Males. *Journal of Bone and Mineral Research*, **2020**, 35, 2404-2414	6.3	11
172	Differences in fracture prevalence and in bone mineral density between Chinese and White Canadians: the Canadian Multicentre Osteoporosis Study (CaMos). *Archives of Osteoporosis*, **2020**, 15, 147	2.9	4
171	Spectrum of microarchitectural bone disease in inborn errors of metabolism: a cross-sectional, observational study. *Orphanet Journal of Rare Diseases*, **2020**, 15, 251	4.2	3
170	Microimaging **2020**, 1833-1856		1
169	Effect of High-Dose Vitamin D Supplementation on Volumetric Bone Density and Bone Strength: A Randomized Clinical Trial. *JAMA - Journal of the American Medical Association*, **2019**, 322, 736-745	27.4	122
168	The Correction of Systematic Error due to Plaster and Fiberglass Casts on HR-pQCT Bone Parameters Measured In Vivo at the Distal Radius. *Journal of Clinical Densitometry*, **2019**, 22, 401-408	3.5	6
167	The SPECTRA Collaboration OMERACT Working Group: Construct Validity of Joint Space Outcomes with High-resolution Peripheral Quantitative Computed Tomography. *Journal of Rheumatology*, **2019**, 46, 1369-1373	4.1	9
166	Absence of Proteoglycan 4 (Prg4) Leads to Increased Subchondral Bone Porosity Which Can Be Mitigated Through Intra-Articular Injection of PRG4. *Journal of Orthopaedic Research*, **2019**, 37, 2077-2088	3.8	7

165	Hip load capacity cut-points for Astronaut Skeletal Health NASA Finite Element Strength Task Group Recommendations. *Npj Microgravity*, **2019**, 5, 6	5.3	9
164	Absence of p21(WAF1/CIP1/SDI1) protects against osteopenia and minimizes bone loss after ovariectomy in a mouse model. *PLoS ONE*, **2019**, 14, e0215018	3.7	2
163	Concurrent Assessment of Cartilage Morphology and Bone Microarchitecture in the Human Knee Using Contrast-Enhanced HR-pQCT Imaging. *Journal of Clinical Densitometry*, **2019**, 22, 74-85	3.5	9
162	Trabecular Bone Score at the Distal Femur and Proximal Tibia in Individuals With Spinal Cord Injury. *Journal of Clinical Densitometry*, **2019**, 22, 249-256	3.5	5
161	Longitudinal Effects of Acute Anterior Cruciate Ligament Tears on Peri-Articular Bone in Human Knees Within the First Year of Injury. *Journal of Orthopaedic Research*, **2019**, 37, 2325-2336	3.8	20
160	Assessment of the elastic properties of human vertebral trabecular bone using computational mechanical tests and x-ray microtomography□ subvolume analysis. *Biomedical Physics and Engineering Express*, **2019**, 5, 045031	1.5	1
159	Bone Adaptation as Level Set Motion. *Lecture Notes in Computer Science*, **2019**, 58-72	0.9	1
158	Cortical and trabecular bone microarchitecture as an independent predictor of incident fracture risk in older women and men in the Bone Microarchitecture International Consortium (BoMIC): a prospective study. *Lancet Diabetes and Endocrinology,the*, **2019**, 7, 34-43	18.1	139
157	The Influence of Reconstruction Kernel on Bone Mineral and Strength Estimates Using Quantitative Computed Tomography and Finite Element Analysis. *Journal of Clinical Densitometry*, **2019**, 22, 219-228	3.5	9
156	Methods and procedures for: A randomized double-blind study investigating dose-dependent longitudinal effects of vitamin D supplementation on bone health. *Contemporary Clinical Trials*, **2018**, 67, 68-73	2.3	9
155	Differences in subchondral bone plate and cartilage thickness between women with anterior cruciate ligament reconstructions and uninjured controls. *Osteoarthritis and Cartilage*, **2018**, 26, 929-939	6.2	18
154	Lower Bone Density, Impaired Microarchitecture, and Strength Predict Future Fragility Fracture in Postmenopausal Women: 5-Year Follow-up of the Calgary CaMos Cohort. *Journal of Bone and Mineral Research*, **2018**, 33, 589-597	6.3	32
153	Subchondral bone microarchitecture in ACL reconstructed knees of young women: A comparison with contralateral and uninjured control knees. *Bone*, **2018**, 111, 1-8	4.7	17
152	Assessment of Bone Mineral Density at the Distal Femur and the Proximal Tibia by Dual-Energy X-ray Absorptiometry in Individuals With Spinal Cord Injury: Precision of Protocol and Relation to Injury Duration. *Journal of Clinical Densitometry*, **2018**, 21, 338-346	3.5	9
151	Diabetes and Deficits in Cortical Bone Density, Microarchitecture, and Bone Size: Framingham HR-pQCT Study. *Journal of Bone and Mineral Research*, **2018**, 33, 54-62	6.3	96
150	An automated algorithm for the detection of cortical interruptions and its underlying loss of trabecular bone; a reproducibility study. *BMC Medical Imaging*, **2018**, 18, 13	2.9	9
149	A study of the relationship between meniscal injury and bone microarchitecture in ACL reconstructed knees. *Knee*, **2018**, 25, 746-756	2.6	7
148	Contrast-enhanced x-ray microscopy of bovine articular cartilage **2018**,		2

147	Automatic Full Femur Segmentation from Computed Tomography Datasets Using an Atlas-Based Approach. *Lecture Notes in Computer Science*, **2018**, 120-132	0.9	
146	The relationship between estimated bone strength by finite element analysis at the peripheral skeleton to areal BMD and trabecular bone score at lumbar spine. *Bone*, **2018**, 117, 47-53	4.7	4
145	Harmonizing finite element modelling for non-invasive strength estimation by high-resolution peripheral quantitative computed tomography. *Journal of Biomechanics*, **2018**, 80, 63-71	2.9	27
144	Long-Term and Recent Weight Change Are Associated With Reduced Peripheral Bone Density, Deficits in Bone Microarchitecture, and Decreased Bone Strength: The Framingham Osteoporosis Study. *Journal of Bone and Mineral Research*, **2018**, 33, 1851-1858	6.3	8
143	Quantitative in vivo assessment of bone microarchitecture in the human knee using HR-pQCT. *Bone* , **2017**, 97, 43-48	4.7	45
142	Cranio-caudal asymmetries in trabecular architecture reflect vertebral fracture patterns. *Bone*, **2017**, 95, 102-107	4.7	4
141	Cortical porosity exhibits accelerated rate of change in peri- compared with post-menopausal women. *Osteoporosis International*, **2017**, 28, 1423-1431	5.3	8
140	Distal skeletal tibia assessed by HR-pQCT is highly correlated with femoral and lumbar vertebra failure loads. *Journal of Biomechanics*, **2017**, 59, 43-49	2.9	20
139	The Estimation of Second-Generation HR-pQCT From First-Generation HR-pQCT Using In Vivo Cross-Calibration. *Journal of Bone and Mineral Research*, **2017**, 32, 1514-1524	6.3	39
138	Cross-sectional Versus Longitudinal Change in a Prospective HR-pQCT Study. *Journal of Bone and Mineral Research*, **2017**, 32, 1505-1513	6.3	33
137	p21 mice exhibit enhanced bone regeneration after injury. *BMC Musculoskeletal Disorders*, **2017**, 18, 435	2.8	15
136	Bone Strength Estimated by Micro-Finite Element Analysis (μFEA) Is Heritable and Shares Genetic Predisposition With Areal BMD: The Framingham Study. *Journal of Bone and Mineral Research*, **2017** , 32, 2151-2156	6.3	3
135	Romosozumab Improves Bone Mass and Strength While Maintaining Bone Quality in Ovariectomized Cynomolgus Monkeys. *Journal of Bone and Mineral Research*, **2017**, 32, 788-801	6.3	65
134	Mechanical stimuli of trabecular bone in osteoporosis: A numerical simulation by finite element analysis of microarchitecture. *Journal of the Mechanical Behavior of Biomedical Materials*, **2017**, 66, 19-27	4.1	19
133	Operator variability in scan positioning is a major component of HR-pQCT precision error and is reduced by standardized training. *Osteoporosis International*, **2017**, 28, 245-257	5.3	24
132	Visceral Adipose Tissue Is Associated With Bone Microarchitecture in the Framingham Osteoporosis Study. *Journal of Bone and Mineral Research*, **2017**, 32, 143-150	6.3	37
131	Impact of Growth Hormone on Adult Bone Quality in Turner Syndrome: A HR-pQCT Study. *Calcified Tissue International*, **2016**, 98, 49-59	3.9	16
130	Bilateral Asymmetry of Radius and Tibia Bone Macroarchitecture and Microarchitecture: A High-Resolution Peripheral Quantitative Computed Tomography Study. *Journal of Clinical Densitometry*, **2016**, 19, 250-4	3.5	12

129	Evaluation of bone loss in antibacterial coated dental implants: An experimental study in dogs. *Materials Science and Engineering C*, **2016**, 69, 538-45	8.3	32
128	Integrin 11 protects against signs of post-traumatic osteoarthritis in the female murine knee partially via regulation of epidermal growth factor receptor signalling. *Osteoarthritis and Cartilage*, **2016**, 24, 1795-1806	6.2	11
127	Sex- and Site-Specific Normative Data Curves for HR-pQCT. *Journal of Bone and Mineral Research*, **2016**, 31, 2041-2047	6.3	75
126	Competitive trampolining influences trabecular bone structure, bone size, and bone strength. *Journal of Sport and Health Science*, **2016**, 5, 469-475	8.2	4
125	Determining Metacarpophalangeal Flexion Angle Tolerance for Reliable Volumetric Joint Space Measurements by High-resolution Peripheral Quantitative Computed Tomography. *Journal of Rheumatology*, **2016**, 43, 1941-1944	4.1	8
124	Morphology based anisotropic finite element models of the proximal femur validated with experimental data. *Medical Engineering and Physics*, **2016**, 38, 1339-1347	2.4	22
123	The distribution of bone mass in the lumbar vertebrae: are we measuring the right target?. *Spine Journal*, **2015**, 15, 2412-6	4	8
122	The relationship between serum 25(OH)D and bone density and microarchitecture as measured by HR-pQCT. *Osteoporosis International*, **2015**, 26, 2375-80	5.3	20
121	Bone micro-architecture of elite alpine skiers is not reflected by bone mineral density. *Osteoporosis International*, **2015**, 26, 2309-17	5.3	7
120	Improvement in Bone Mineral Density and Architecture in a Patient with Gaucher Disease Using Teriparatide. *JIMD Reports*, **2015**, 22, 23-8	1.9	5
119	A comparison of methods for in vivo assessment of cortical porosity in the human appendicular skeleton. *Bone*, **2015**, 73, 167-75	4.7	40
118	Longitudinal HR-pQCT and image registration detects endocortical bone loss in kidney transplantation patients. *Journal of Bone and Mineral Research*, **2015**, 30, 554-61	6.3	51
117	Premature changes in trabecular and cortical microarchitecture result in decreased bone strength in hemophilia. *Blood*, **2015**, 125, 2160-3	2.2	19
116	Cartilage imaging of a rabbit knee using dual-energy X-ray microscopy and 1.0 T and 9.4 T magnetic resonance imaging. *Journal of Orthopaedic Translation*, **2015**, 3, 212-218	4.2	6
115	Human trabecular bone microarchitecture can be assessed independently of density with second generation HR-pQCT. *Bone*, **2015**, 79, 213-21	4.7	105
114	Bone quality in osteopenic postmenopausal women is not improved after 12 months of whole-body vibration training. *Osteoporosis International*, **2015**, 26, 911-20	5.3	28
113	The poro-viscoelastic properties of trabecular bone: a micro computed tomography-based finite element study. *Journal of the Mechanical Behavior of Biomedical Materials*, **2015**, 44, 1-9	4.1	28
112	Classification of women with and without hip fracture based on quantitative computed tomography and finite element analysis. *Osteoporosis International*, **2014**, 25, 619-26	5.3	46

111	Proximal femur elastic behaviour is the same in impact and constant displacement rate fall simulation. *Journal of Biomechanics*, **2014**, 47, 3744-9	2.9	28
110	Mapping anisotropy of the proximal femur for enhanced image based finite element analysis. *Journal of Biomechanics*, **2014**, 47, 3272-8	2.9	33
109	Predicting the permeability of trabecular bone by micro-computed tomography and finite element modeling. *Journal of Biomechanics*, **2014**, 47, 3129-34	2.9	23
108	Bone microarchitecture and strength of the radius and tibia in a reference population of young adults: an HR-pQCT study. *Archives of Osteoporosis*, **2014**, 9, 183	2.9	25
107	AB0955 Determining Optimal Hand Position for Reliable Metacarpophalangeal Joint Width Measurements Using Volumetric Methodology by Hr-Pqct. *Annals of the Rheumatic Diseases*, **2014**, 73, 1116.1-1116	2.4	
106	International Combined Orthopaedic Research Societies: A model for international collaboration to promote orthopaedic and musculoskeletal research. *Journal of Orthopaedic Translation*, **2014**, 2, 165-169	4.2	1
105	Bone quality in prehistoric, Cis-Baikal forager femora: a micro-CT analysis of cortical canal microstructure. *American Journal of Physical Anthropology*, **2014**, 154, 486-97	2.5	3
104	Embryonic stem cell therapy improves bone quality in a model of impaired fracture healing in the mouse; tracked temporally using in vivo micro-CT. *Bone*, **2014**, 64, 263-72	4.7	24
103	Women with previous fragility fractures can be classified based on bone microarchitecture and finite element analysis measured with HR-pQCT. *Osteoporosis International*, **2013**, 24, 1733-40	5.3	89
102	High-resolution peripheral quantitative computed tomography for the assessment of bone strength and structure: a review by the Canadian Bone Strength Working Group. *Current Osteoporosis Reports*, **2013**, 11, 136-46	5.4	148
101	Bone micro-architecture, estimated bone strength, and the muscle-bone interaction in elite athletes: an HR-pQCT study. *Bone*, **2013**, 56, 281-9	4.7	64
100	Proximal femur bone strength estimated by a computationally fast finite element analysis in a sideways fall configuration. *Journal of Biomechanics*, **2013**, 46, 1231-6	2.9	79
99	Micro-CT evaluation of bone defects: applications to osteolytic bone metastases, bone cysts, and fracture. *Medical Engineering and Physics*, **2013**, 35, 1645-50	2.4	12
98	Regional variations in trabecular architecture of the lumbar vertebra: associations with age, disc degeneration and disc space narrowing. *Bone*, **2013**, 56, 249-54	4.7	21
97	Occupational loading may not affect the association between vertebral trabecular bone and intervertebral disc narrowing. *Bone*, **2013**, 57, 375-6	4.7	3
96	Reproducible metacarpal joint space width measurements using 3D analysis of images acquired with high-resolution peripheral quantitative computed tomography. *Medical Engineering and Physics*, **2013**, 35, 1540-4	2.4	21
95	Effects of growth hormone on the ontogenetic allometry of craniofacial bones. *Evolution & Development*, **2013**, 15, 133-45	2.6	32
94	In vivo monitoring of bone-implant bond strength by microCT and finite element modelling. *Computer Methods in Biomechanics and Biomedical Engineering*, **2013**, 16, 993-1001	2.1	11

93	Multicenter precision of cortical and trabecular bone quality measures assessed by high-resolution peripheral quantitative computed tomography. *Journal of Bone and Mineral Research*, **2013**, 28, 524-36	6.3	89
92	Assessment of the efficacy of MRI for detection of changes in bone morphology in a mouse model of bone injury. *Journal of Magnetic Resonance Imaging*, **2013**, 38, 231-7	5.6	10
91	Embryonic stem cells incorporate into newly formed bone and do not form tumors in an immunocompetent mouse fracture model. *Cell Transplantation*, **2013**, 22, 1453-62	4	10
90	In vivo bone architecture in pompe disease using high-resolution peripheral computed tomography. *JIMD Reports*, **2013**, 7, 81-8	1.9	10
89	Trabecular Bone Poroelasticity for MicroCT-Based FE Models **2013**, 145-155		0
88	Quantification of small joint space width, periarticular bone microstructure and erosions using high-resolution peripheral quantitative computed tomography in rheumatoid arthritis. *Clinical and Experimental Rheumatology*, **2013**, 31, 243-50	2.2	30
87	Deformable image registration and 3D strain mapping for the quantitative assessment of cortical bone microdamage. *Journal of the Mechanical Behavior of Biomedical Materials*, **2012**, 8, 184-93	4.1	55
86	Quality control for bone quality parameters affected by subject motion in high-resolution peripheral quantitative computed tomography. *Bone*, **2012**, 50, 1304-10	4.7	101
85	High-frequency, low-magnitude vibration does not prevent bone loss resulting from muscle disuse in mice following botulinum toxin injection. *PLoS ONE*, **2012**, 7, e36486	3.7	19
84	Quantitative ex-vivo micro-computed tomographic imaging of blood vessels and necrotic regions within tumors. *PLoS ONE*, **2012**, 7, e41685	3.7	22
83	Response to "Vertebral fracture and intervertebral discs" *Journal of Bone and Mineral Research*, **2012**, 27, 1433-1434	6.3	2
82	Cortical porosity is higher in boys compared with girls at the distal radius and distal tibia during pubertal growth: an HR-pQCT study. *Journal of Bone and Mineral Research*, **2012**, 27, 273-82	6.3	91
81	Microarchitecture, but not bone mechanical properties, is rescued with growth hormone treatment in a mouse model of growth hormone deficiency. *International Journal of Endocrinology*, **2012**, 2012, 294965	2.7	11
80	Fragile Spines on Cayo Santiago: Bone Mineral Density, Trabecular Morphology, and the Potential for Exploring the Genetics of Osteoporosis in Rhesus Monkeys **2012**, 85-116		3
79	The osseous endplates in lumbar vertebrae: thickness, bone mineral density and their associations with age and disk degeneration. *Bone*, **2011**, 48, 804-9	4.7	69
78	Increased bone strength is associated with improved bone microarchitecture in intact female rats treated with strontium ranelate: a finite element analysis study. *Bone*, **2011**, 48, 1109-16	4.7	27
77	The bone architecture is enhanced with combined PTH and alendronate treatment compared to monotherapy while maintaining the state of surface mineralization in the OVX rat. *Bone*, **2011**, 49, 225-32	4.7	23
76	Computational finite element bone mechanics accurately predicts mechanical competence in the human radius of an elderly population. *Bone*, **2011**, 48, 1232-8	4.7	103

75	Bone quality and muscle strength in female athletes with lower limb stress fractures. *Medicine and Science in Sports and Exercise*, **2011**, 43, 2110-9	1.2	69
74	Physical activity positively predicts bone architecture and bone strength in adolescent males and females. *Acta Paediatrica, International Journal of Paediatrics*, **2011**, 100, 97-101	3.1	29
73	Changes in trabecular and cortical bone microarchitecture at peripheral sites associated with 18´months of teriparatide therapy in postmenopausal women with osteoporosis. *Osteoporosis International*, **2011**, 22, 357-62	5.3	95
72	Bone quality is partially recovered after the discontinuation of RANKL administration in rats by increased bone mass on existing trabeculae: an in vivo micro-CT study. *Osteoporosis International*, **2011**, 22, 931-42	5.3	25
71	Age-related patterns of trabecular and cortical bone loss differ between sexes and skeletal sites: a population-based HR-pQCT study. *Journal of Bone and Mineral Research*, **2011**, 26, 50-62	6.3	263
70	Is greater lumbar vertebral BMD associated with more disk degeneration? A study using µCT and discography. *Journal of Bone and Mineral Research*, **2011**, 26, 2785-91	6.3	28
69	Vertical ground reaction forces diminish in mice after botulinum toxin injection. *Journal of Biomechanics*, **2011**, 44, 637-43	2.9	19
68	Automated quantification of three-dimensional subject motion to monitor image quality in high-resolution peripheral quantitative computed tomography. *Physics in Medicine and Biology*, **2011**, 56, 6523-43	3.8	20
67	In vivo assessment of trabecular and cortical bone microstructure. *Clinical Calcium*, **2011**, 21, 1011-9		11
66	Reproducibility of bone micro-architecture measurements in rodents by in vivo micro-computed tomography is maximized with three-dimensional image registration. *Bone*, **2010**, 46, 155-61	4.7	43
65	Muscle and bone follow similar temporal patterns of recovery from muscle-induced disuse due to botulinum toxin injection. *Bone*, **2010**, 46, 24-31	4.7	46
64	Timing of growth hormone treatment affects trabecular bone microarchitecture and mineralization in growth hormone deficient mice. *Bone*, **2010**, 47, 295-300	4.7	12
63	Reproducibility of direct quantitative measures of cortical bone microarchitecture of the distal radius and tibia by HR-pQCT. *Bone*, **2010**, 47, 519-28	4.7	342
62	Postmenopausal women with osteopenia have higher cortical porosity and thinner cortices at the distal radius and tibia than women with normal aBMD: an in vivo HR-pQCT study. *Journal of Bone and Mineral Research*, **2010**, 25, 882-90	6.3	228
61	Reduced bone mass accrual in swim-trained prepubertal mice. *Medicine and Science in Sports and Exercise*, **2010**, 42, 1834-42	1.2	6
60	High-fat, sucrose diet impairs geometrical and mechanical properties of cortical bone in mice. *British Journal of Nutrition*, **2010**, 103, 1302-8	3.6	31
59	Muscle changes can account for bone loss after botulinum toxin injection. *Calcified Tissue International*, **2010**, 87, 541-9	3.9	23
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