Direct Three-Dimensional Morphometric Analysis of He Microstructural Data from Spine, Femur, Iliac Crest, and

Journal of Bone and Mineral Research 14, 1167-1174 DOI: 10.1359/jbmr.1999.14.7.1167

Citation Report

#	Article	IF	CITATIONS
1	In vivo high resolution 3D-QCT of the human forearm. Technology and Health Care, 1998, 6, 329-337.	1.2	416
2	Genetic Regulation of Cortical and Trabecular Bone Strength and Microstructure in Inbred Strains of Mice. Journal of Bone and Mineral Research, 2000, 15, 1126-1131.	2.8	181
3	Stacks of Microfabricated Structures as Scaffolds for Cell Culture and Tissue Engineering. Biomedical Microdevices, 2000, 2, 207-214.	2.8	37
4	3D micro-computed tomography of trabecular and cortical bone architecture with application to a rat model of immobilisation osteoporosis. Medical and Biological Engineering and Computing, 2000, 38, 326-332.	2.8	195
5	High-resolution micro-computed tomography analyses of the abnormal trabecular bone structures in klotho gene mutant mice. Journal of Endocrinology, 2000, 164, 239-245.	2.6	68
6	Early morphometric and anisotropic change in periarticular cancellous bone in a model of experimental knee osteoarthritis quantified using microcomputed tomography. Clinical Biomechanics, 2000, 15, 624-631.	1.2	57
7	Parallel plate model for trabecular bone exhibits volume fraction-dependent bias. Bone, 2000, 27, 715-720.	2.9	51
8	Quantification of age-related changes in the structure model type and trabecular thickness of human tibial cancellous bone. Bone, 2000, 26, 291-295.	2.9	201
9	Structural Development of the Mineralized Tissue in the Human L4 Vertebral Body. Journal of Structural Biology, 2001, 136, 126-136.	2.8	135
10	Prediction of strength of cortical bone in vitro by microcomputed tomography. Clinical Biomechanics, 2001, 16, 252-256.	1.2	38
11	Effect of trabecular bone contour on ultimate strength of lumbar vertebra after bilateral ovariectomy in rats. Bone, 2001, 28, 625-633.	2.9	37
12	Increase in bone volume fraction precedes architectural adaptation in growing bone. Bone, 2001, 28, 650-654.	2.9	166
13	Biomechanics of Age-Related Fractures. , 2001, , 509-531.		46
14	For and against: Bone densitometry is not a good predictor of hip fracture For Against. BMJ: British Medical Journal, 2001, 323, 795-799.	2.3	36
15	Threeâ€dimensional microimaging (MRμI and μCT), finite element modeling, and rapid prototyping provide unique insights into bone architecture in osteoporosis. The Anatomical Record, 2001, 265, 101-110.	1.8	195
16	Three-dimensional analysis of nonhuman primate trabecular architecture using micro-computed tomography. American Journal of Physical Anthropology, 2001, 115, 327-336.	2.1	161
17	Dependence of yield strain of human trabecular bone on anatomic site. Journal of Biomechanics, 2001, 34, 569-577.	2.1	563
18	Effects of Daily Treatment with Parathyroid Hormone on Bone Microarchitecture and Turnover in Patients with Osteoporosis: A Paired Biopsy Study. Journal of Bone and Mineral Research, 2001, 16, 1846-1853	2.8	580

TATION REDO

#	Article	IF	CITATIONS
19	Quantitative Ultrasound and Trabecular Architecture in the Human Calcaneus*. Journal of Bone and Mineral Research, 2001, 16, 1886-1892.	2.8	101
20	The Skeletal Structure of Insulin-Like Growth Factor I-Deficient Mice. Journal of Bone and Mineral Research, 2001, 16, 2320-2329.	2.8	175
21	Variation in Bone Biomechanical Properties, Microstructure, and Density in BXH Recombinant Inbred Mice. Journal of Bone and Mineral Research, 2001, 16, 206-213.	2.8	100
22	Mechanical Consequences of Bone Loss in Cancellous Bone. Journal of Bone and Mineral Research, 2001, 16, 457-465.	2.8	129
23	Digital Topological Analysis of In Vivo Magnetic Resonance Microimages of Trabecular Bone Reveals Structural Implications of Osteoporosis. Journal of Bone and Mineral Research, 2001, 16, 1520-1531.	2.8	205
24	Human Parathyroid Hormone 1-34 Reverses Bone Loss in Ovariectomized Mice. Journal of Bone and Mineral Research, 2001, 16, 1665-1673.	2.8	145
25	Exogenously Regulated Stem Cell-Mediated Gene Therapy for Bone Regeneration. Molecular Therapy, 2001, 3, 449-461.	8.2	240
26	Inactivation of the Osteopontin Gene Enhances Vascular Calcification of Matrix Gla Protein–deficient Mice. Journal of Experimental Medicine, 2002, 196, 1047-1055.	8.5	301
27	<i>In vivo</i> NMR microscopy allows short-term serial assessment of multiple skeletal implications of corticosteroid exposure. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 4574-4579.	7.1	25
28	Stanniocalcin 1 Alters Muscle and Bone Structure and Function in Transgenic Mice. Endocrinology, 2002, 143, 3681-3690.	2.8	96
29	Deletion of the GATA Domain of TRPS1 Causes an Absence of Facial Hair and Provides New Insights into the Bone Disorder in Inherited Tricho-Rhino-Phalangeal Syndromes. Molecular and Cellular Biology, 2002, 22, 8592-8600.	2.3	101
30	The Zürich Experience: One Decade of Three-Dimensional High-Resolution Computed Tomography. Topics in Magnetic Resonance Imaging, 2002, 13, 307-322.	1.2	54
31	Role of Magnetic Resonance for Assessing Structure and Function of Trabecular Bone. Topics in Magnetic Resonance Imaging, 2002, 13, 335-355.	1.2	175
32	Body composition, bone mass and microstructural analysis in CH-transgenic mice reveals that skeletal changes are specific to bone compartment and gender. Growth Hormone and IGF Research, 2002, 12, 116-125.	1.1	26
33	Ultrasonic characterization of human cancellous bone using transmission and backscatter measurements: relationships to density and microstructure. Bone, 2002, 30, 229-237.	2.9	179
34	Surface curvatures of trabecular bone microarchitecture. Bone, 2002, 30, 191-194.	2.9	90
35	Stage-dependent changes in trabecular bone turnover and osteogenic capacity of marrow cells during development of type II collagen-induced arthritis in mice. Bone, 2002, 30, 872-879.	2.9	28
36	The influence of microcomputed tomography threshold variations on the assessment of structural and mechanical trabecular bone properties. Bone, 2002, 31, 107-109.	2.9	137

#	Article	IF	CITATIONS
37	Age-related differences between thinning of horizontal and vertical trabeculae in human lumbar bone as assessed by a new computerized method. Bone, 2002, 31, 136-142.	2.9	94
38	Mutation of the Ectodysplasin-A Gene Results in Bone Defects in Mice. Journal of Comparative Pathology, 2002, 126, 220-225.	0.4	12
39	Subvoxel processing: A method for reducing partial volume blurring with application to in vivo MR images of trabecular bone. Magnetic Resonance in Medicine, 2002, 47, 948-957.	3.0	61
40	In Vivo Assessment of Architecture and Micro-Finite Element Analysis Derived Indices of Mechanical Properties of Trabecular Bone in the Radius. Osteoporosis International, 2002, 13, 6-17.	3.1	132
41	A comparison of the femoral head and neck trabecular architecture of Galago and Perodicticus using micro-computed tomography (μCT). Journal of Human Evolution, 2002, 43, 89-105.	2.6	91
42	Bone Strength at Clinically Relevant Sites Displays Substantial Heterogeneity and Is Best Predicted From Site-Specific Bone Densitometry. Journal of Bone and Mineral Research, 2002, 17, 162-171.	2.8	93
43	Quantity and Quality of Trabecular Bone in the Femur Are Enhanced by a Strongly Anabolic, Noninvasive Mechanical Intervention. Journal of Bone and Mineral Research, 2002, 17, 349-357.	2.8	266
44	Generation of a New Congenic Mouse Strain to Test the Relationships Among Serum Insulin-like Growth Factor I, Bone Mineral Density, and Skeletal Morphology In Vivo. Journal of Bone and Mineral Research, 2002, 17, 570-579.	2.8	73
45	Risedronate Preserves Trabecular Architecture and Increases Bone Strength in Vertebra of Ovariectomized Minipigs as Measured by Three-Dimensional Microcomputed Tomography. Journal of Bone and Mineral Research, 2002, 17, 1139-1147.	2.8	145
46	Synchrotron Radiation Microtomography Allows the Analysis of Three-Dimensional Microarchitecture and Degree of Mineralization of Human Iliac Crest Biopsy Specimens: Effects of Etidronate Treatment. Journal of Bone and Mineral Research, 2002, 17, 1372-1382.	2.8	154
47	Radius Bone Strength in Bending, Compression, and Falling and Its Correlation With Clinical Densitometry at Multiple Sites. Journal of Bone and Mineral Research, 2002, 17, 1629-1638.	2.8	93
48	Megakaryocyte-Osteoblast Interaction Revealed in Mice Deficient in Transcription Factors GATA-1 and NF-E2. Journal of Bone and Mineral Research, 2003, 19, 652-660.	2.8	125
49	Mapping Quantitative Trait Loci for Vertebral Trabecular Bone Volume Fraction and Microarchitecture in Mice. Journal of Bone and Mineral Research, 2003, 19, 587-599.	2.8	98
50	Long-Term Treatment of Incadronate Disodium Accumulates Microdamage but Improves the Trabecular Bone Microarchitecture in Dog Vertebra. Journal of Bone and Mineral Research, 2003, 18, 512-520.	2.8	108
51	Can Novel Clinical Densitometric Techniques Replace or Improve DXA in Predicting Bone Strength in Osteoporosis at the Hip and Other Skeletal Sites?. Journal of Bone and Mineral Research, 2003, 18, 906-912.	2.8	83
52	High Bone Mass in Mice Expressing a Mutant LRP5 Gene. Journal of Bone and Mineral Research, 2003, 18, 960-974.	2.8	473
53	Precision and Accuracy of Peripheral Quantitative Computed Tomography (pQCT) in the Mouse Skeleton Compared With Histology and Microcomputed Tomography (μCT). Journal of Bone and Mineral Research, 2003, 18, 1486-1496.	2.8	92
54	Noninvasive In Vivo Monitoring of Bone Architecture Alterations in Hindlimb-Unloaded Female Rats Using Novel Three-Dimensional Microcomputed Tomography. Journal of Bone and Mineral Research, 2003, 18, 1622-1631.	2.8	135

#	Article	IF	CITATIONS
55	Combining high-resolution micro-computed tomography with material composition to define the quality of bone tissue. Current Osteoporosis Reports, 2003, 1, 11-19.	3.6	76
56	Architectural Measures of the Cancellous Bone of the Mandibular Condyle Identified by Principal Components Analysis. Calcified Tissue International, 2003, 73, 225-231.	3.1	12
57	Canine Cancellous Bone Microarchitecture after One Year of High-Dose Bisphosphonates. Calcified Tissue International, 2003, 72, 737-744.	3.1	49
58	Risedronate Preserves Bone Architecture in Early Postmenopausal Women In 1 Year as Measured by Three-Dimensional Microcomputed Tomography. Calcified Tissue International, 2003, 73, 423-432.	3.1	165
59	Bone microarchitecture assessment: current and future trends. Osteoporosis International, 2003, 14, 89-99.	3.1	75
60	Examination of continuum and micro-structural properties of human vertebral cancellous bone using combined cellular solid models. Biomechanics and Modeling in Mechanobiology, 2003, 2, 97-107.	2.8	15
61	Analyzing bone, blood vessels, and biomaterials with microcomputed tomography - A powerful tool for the evaluation and optimization of strategies for engineering tissues. IEEE Engineering in Medicine and Biology Magazine, 2003, 22, 77-83.	0.8	77
62	Does simvastatin stimulate bone formation in vivo?. BMC Musculoskeletal Disorders, 2003, 4, 8.	1.9	48
63	Trabecular bone modulus–density relationships depend on anatomic site. Journal of Biomechanics, 2003, 36, 897-904.	2.1	937
64	A review of morphology–elasticity relationships in human trabecular bone: theories and experiments. Journal of Biomechanics, 2003, 36, 1469-1485.	2.1	180
65	Microarchitectural and mechanical characterization of oriented porous polymer scaffolds. Biomaterials, 2003, 24, 481-489.	11.4	352
66	Adaptations of Trabecular Bone to Low Magnitude Vibrations Result in More Uniform Stress and Strain Under Load. Annals of Biomedical Engineering, 2003, 31, 12-20.	2.5	84
67	Mechanical consequences of different scenarios for simulated bone atrophy and recovery in the distal radius. Bone, 2003, 33, 937-945.	2.9	76
68	Noninvasive assessment of bone architecture by magnetic resonance micro-imaging-based virtual bone biopsy. Proceedings of the IEEE, 2003, 91, 1520-1542.	21.3	40
69	Microarchitecture of rabbit mandibular defects grafted with intramembranous or endochondral bone shown by micro-computed tomography. British Journal of Oral and Maxillofacial Surgery, 2003, 41, 385-391.	0.8	30
70	Three-Dimensional Quantitation of Periradicular Bone Destruction by Micro-Computed Tomography. Journal of Endodontics, 2003, 29, 252-256.	3.1	62
71	MR imaging at high magnetic fields. European Journal of Radiology, 2003, 46, 45-52.	2.6	120
72	Reductions in bone turnover, mineral, and structure associated with mechanical properties of lumbar vertebra and femur in glucocorticoid-treated growing minipigs. Bone, 2003, 33, 779-787.	2.9	48

#	Article	IF	CITATIONS
73	Repair of Calvarial Defects with Customised Tissue-Engineered Bone Grafts II. Evaluation of Cellular Efficiency and Efficacy <i>in Vivo</i> . Tissue Engineering, 2003, 9, 127-139.	4.6	181
74	Bone Formation on Tissue-Engineered Cartilage Constructsin Vivo: Effects of Chondrocyte Viability and Mechanical Loading. Tissue Engineering, 2003, 9, 587-596.	4.6	28
75	Changes in the three-dimensional microstructure of human tibial cancellous bone in early osteoarthritis. Journal of Bone and Joint Surgery: British Volume, 2003, 85-B, 906-912.	3.4	156
76	Changes in Bone Architecture During Spinal Fusion: Three Years Follow-up and the Role of Cage Stiffness. Spine, 2003, 28, 1802-1808.	2.0	63
77	X-ray micro-computed tomography system: novel applications in bone imaging. , 0, , .		3
78	Doxycycline effects on mechanical and morphometrical properties of early- and late-stage osteoarthritic bone following anterior cruciate ligament injury. Journal of Applied Physiology, 2004, 97, 1254-1260.	2.5	18
79	Changed Morphology and Mechanical Properties of Cancellous Bone in the Mandibular Condyles of Edentate People. Journal of Dental Research, 2004, 83, 255-259.	5.2	42
80	Estrogen prevents bone loss through transforming growth factor β signaling in T cells. Proceedings of the United States of America, 2004, 101, 16618-16623.	7.1	157
81	The Modified Super-Ellipsoid Yield Criterion for Human Trabecular Bone. Journal of Biomechanical Engineering, 2004, 126, 677-684.	1.3	91
82	Synergy between Genetic and Tissue Engineering: Runx2 Overexpression and in Vitro Construct Development Enhance in Vivo Mineralization. Tissue Engineering, 2004, 10, 1757-1766.	4.6	63
83	Evaluation of thresholding techniques for segmenting scaffold images in tissue engineering. , 2004, 5370, 1456.		16
84	Quantitative microcomputed tomography analysis of collateral vessel development after ischemic injury. American Journal of Physiology - Heart and Circulatory Physiology, 2004, 287, H302-H310.	3.2	207
85	Quantification and visualization of anisotropy in trabecular bone. Journal of Microscopy, 2004, 213, 158-171.	1.8	150
86	Investigation of microstructural features in regenerating bone using micro computed tomography. Journal of Materials Science: Materials in Medicine, 2004, 15, 529-532.	3.6	22
87	Genetically Based Influences on the Site-Specific Regulation of Trabecular and Cortical Bone Morphology. Journal of Bone and Mineral Research, 2004, 19, 600-606.	2.8	127
88	Genetically Linked Site-Specificity of Disuse Osteoporosis. Journal of Bone and Mineral Research, 2004, 19, 607-613.	2.8	110
89	Intermittent Ibandronate Preserves Bone Quality and Bone Strength in the Lumbar Spine After 16 Months of Treatment in the Ovariectomized Cynomolgus Monkey. Journal of Bone and Mineral Research, 2004, 19, 1787-1796.	2.8	83
90	β-Arrestin2 Regulates the Differential Response of Cortical and Trabecular Bone to Intermittent PTH in Female Mice. Journal of Bone and Mineral Research, 2004, 20, 635-643.	2.8	71

#	Article	IF	CITATIONS
91	Regulation of mineral-to-matrix ratio of lumbar trabecular bone in ovariectomized rats treated with risedronate in combination with or without vitamin K2. Journal of Bone and Mineral Metabolism, 2004, 22, 404-14.	2.7	38
92	Contribution of inter-site variations in architecture to trabecular bone apparent yield strains. Journal of Biomechanics, 2004, 37, 1413-1420.	2.1	75
93	The three-dimensional microstructure of the trabecular bone in the mandible. Surgical and Radiologic Anatomy, 2004, 26, 466-473.	1.2	59
94	In vivo application of 3D-line skeleton graph analysis (LSGA) technique with high-resolution magnetic resonance imaging of trabecular bone structure. Osteoporosis International, 2004, 15, 411-419.	3.1	31
95	Loss of vertebral bone and mechanical strength in estrogen-deficient rats is prevented by long-term administration of zoledronic acid. Osteoporosis International, 2004, 15, 707-15.	3.1	57
96	Technical Considerations for Microstructural Analysis of Human Trabecular Bone from Specimens Excised from Various Skeletal Sites. Calcified Tissue International, 2004, 75, 15-22.	3.1	39
97	Hydraulically loaded trabeculae may serve as springs within the normal femoral head. Arthritis and Rheumatism, 2004, 50, 3068-3075.	6.7	7
98	Runx2/Cbfa1-genetically engineered skeletal myoblasts mineralize collagen scaffolds in vitro. Biotechnology and Bioengineering, 2004, 88, 369-378.	3.3	47
99	Development of the trabecular structure within the ulnar medial coronoid process of young dogs. The Anatomical Record, 2004, 278A, 514-519.	1.8	43
100	Differential transcriptional effects of PTH and estrogen during anabolic bone formation. Journal of Cellular Biochemistry, 2004, 93, 476-490.	2.6	27
101	Time-lapsed microstructural imaging of bone failure behavior. Journal of Biomechanics, 2004, 37, 55-65.	2.1	155
102	An expression relating breaking stress and density of trabecular bone. Journal of Biomechanics, 2004, 37, 1241-1249.	2.1	21
103	A Finite Element Beam-model for Efficient Simulation of Large-scale Porous Structures. Computer Methods in Biomechanics and Biomedical Engineering, 2004, 7, 9-16.	1.6	15
104	The osteoporotic vertebral structure is well adapted to the loads of daily life, but not to infrequent "error―loads. Bone, 2004, 34, 510-516.	2.9	182
105	Risedronate preserves bone architecture in postmenopausal women with osteoporosis as measured by three-dimensional microcomputed tomography. Bone, 2004, 34, 736-746.	2.9	174
106	Reproducibility and error sources of μ-MRI-based trabecular bone structural parameters of the distal radius and tibia. Bone, 2004, 35, 266-276.	2.9	91
107	MicroCT quantification of in vitro bone resorption of neonatal murine calvaria exposed to IL-1 or PTH. Journal of Structural Biology, 2004, 147, 185-199.	2.8	28
108	Age-Related Changes of Bone Mineral Density and Microarchitecture in Miniature Pigs. Journal of Veterinary Medical Science, 2004, 66, 599-609.	0.9	22

# 109	ARTICLE Predicting mechanical competence of trabecular bone using 3D tensor-scale-based parameters. , 2005, ,	IF	Citations 2
110	Leaky ribosomal scanning in mammalian genomes: significance of histone H4 alternative translation in vivo. Nucleic Acids Research, 2005, 33, 1298-1308.	14.5	31
111	Interrelationship of trabecular mechanical and microstructural properties in sheep trabecular bone. Journal of Biomechanics, 2005, 38, 1229-1237.	2.1	158
112	In vivo bone regeneration with injectable calcium phosphate biomaterial: A three-dimensional micro-computed tomographic, biomechanical and SEM study. Biomaterials, 2005, 26, 5444-5453.	11.4	175
113	Synthesis and characterization of porous \hat{l}^2 -tricalcium phosphate blocks. Biomaterials, 2005, 26, 6099-6105.	11.4	143
114	Effects of Salmon Calcitonin on Trabecular Microarchitecture as Determined by Magnetic Resonance Imaging: Results From the QUEST Study. Journal of Bone and Mineral Research, 2005, 20, 1548-1561.	2.8	155
115	Effect of Testosterone Replacement on Trabecular Architecture in Hypogonadal Men. Journal of Bone and Mineral Research, 2005, 20, 1785-1791.	2.8	171
116	Periosteal Progenitor Cell Fate in Segmental Cortical Bone Graft Transplantations: Implications for Functional Tissue Engineering. Journal of Bone and Mineral Research, 2005, 20, 2124-2137.	2.8	294
117	Effects of Sex and Age on Bone Microstructure at the Ultradistal Radius: A Population-Based Noninvasive In Vivo Assessment. Journal of Bone and Mineral Research, 2005, 21, 124-131.	2.8	507
118	Stereological measures of trabecular bone structure: comparison of 3D micro computed tomography with 2D histological sections in human proximal tibial bone biopsies. Journal of Microscopy, 2005, 218, 171-179.	1.8	160
119	Determinants of skeletal fragility. Best Practice and Research in Clinical Rheumatology, 2005, 19, 897-911.	3.3	153
120	Long-term periarticular bone adaptation in a feline knee injury model for post-traumatic experimental osteoarthritis. Osteoarthritis and Cartilage, 2005, 13, 235-242.	1.3	63
121	Optimal segmentation of microcomputed tomographic images of porous tissue-engineering scaffolds. Journal of Biomedical Materials Research - Part A, 2005, 75A, 877-887.	4.0	56
122	Novel approach for quantification of porosity for biomaterial implants using microcomputed tomography (μCT). Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2005, 75B, 234-242.	3.4	18
123	Saline irrigation does not affect bone formation or fixation strength of hydroxyapatite/tricalcium phosphate-coated implants in a rat model. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2005, 74B, 712-717.	3.4	21
124	Architecture and mineralization of developing trabecular bone in the pig mandibular condyle. The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology, 2005, 285A, 659-666.	2.0	43
125	Three-dimensional trabecular bone architecture of the lumbar spine in bone metastasis from prostate cancer: comparison with degenerative sclerosis. Skeletal Radiology, 2005, 34, 149-155.	2.0	25
126	Compartmental Bone Morphometry in the Mouse Femur: Reproducibility and Resolution Dependence of Microtomographic Measurements. Calcified Tissue International, 2005, 77, 281-290.	3.1	73

#	Article	IF	CITATIONS
127	Long-term prediction of three-dimensional bone architecture in simulations of pre-, peri- and post-menopausal microstructural bone remodeling. Osteoporosis International, 2005, 16, S25-S35.	3.1	57
128	Intermittently administered parathyroid hormone 1–34 reverses bone loss and structural impairment in orchiectomized adult rats. Osteoporosis International, 2005, 16, 1436-1443.	3.1	30
129	The discriminative ability of peripheral and axial bone measurements to identify proximal femoral, vertebral, distal forearm and proximal humeral fractures: a case control study. Osteoporosis International, 2005, 16, 1794-1802.	3.1	42
130	Effect of trabecular curvature on the stiffness of trabecular bone. Journal of Biomechanics, 2005, 38, 1855-1864.	2.1	20
131	Neovascularization and mandibular condylar bone remodeling in adult rats under mechanical strain. Frontiers in Bioscience - Landmark, 2005, 10, 74.	3.0	36
132	Usefulness of quantitative ultrasound in evaluating structural and mechanical properties of bone: Comparison of ultrasound, dual-energy X-ray absorptiometry, micro-computed tomography, and mechanical testing of human phalanges in vitro. Technology and Health Care, 2005, 13, 497-510.	1.2	26
133	Bone Response to Intermittent Parathyroid Hormone Is Altered in Mice Null for Î ² -Arrestin2. Endocrinology, 2005, 146, 1854-1862.	2.8	134
134	The Effect of Aging on the Skeletal Response to Intermittent Treatment with Parathyroid Hormone. Endocrinology, 2005, 146, 1983-1990.	2.8	45
135	COMPRESSIVE PROPERTIES OF TRABECULAR BONE RELATED TO MICROCT EVALUATED MORPHOMETRIC PARAMETERS: PRELIMINARY RESULTS. Journal of Mechanics in Medicine and Biology, 2005, 05, 349-355.	0.7	2
136	Role of Matrix Extracellular Phosphoglycoprotein in the Pathogenesis of X-Linked Hypophosphatemia. Journal of the American Society of Nephrology: JASN, 2005, 16, 1645-1653.	6.1	81
137	Central IL-1 receptor signaling regulates bone growth and mass. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 12956-12961.	7.1	73
138	Bone Formation Is Impaired in a Model of Type 1 Diabetes. Diabetes, 2005, 54, 2875-2881.	0.6	153
139	Three-Dimensional Quantification of Alveolar Bone Loss inPorphyromonas gingivalis-Infected Mice Using Micro-Computed Tomography. Journal of Periodontology, 2005, 76, 1282-1286.	3.4	87
140	Relationship between compressive properties of human os calcis cancellous bone and microarchitecture assessed from 2D and 3D synchrotron microtomography. Bone, 2005, 36, 340-351.	2.9	35
141	The effect of bone loss on rod-like and plate-like trabeculae in the cancellous bone of the mandibular condyle. Bone, 2005, 36, 1078-1085.	2.9	34
142	Regional differences in trabecular BMD and micro-architecture of weight-bearing bone under habitual gait loading—A pQCT and microCT study in human cadavers. Bone, 2005, 37, 274-282.	2.9	36
143	Glucose-dependent insulinotropic polypeptide receptor knockout mice have altered bone turnover. Bone, 2005, 37, 759-769.	2.9	146
144	Testing Two Predictions for Fracture Load Using Computer Models of Trabecular Bone. Biophysical Journal, 2005, 89, 759-767.	0.5	13

		CITATION RE	PORT	
#	Article		IF	Citations
145	A microstructural approach to model heat transfer in snow. Geophysical Research Letters, 2	2005, 32, .	4.0	121
146	Methods: A Comparative Analysis of Radiography, Microcomputed Tomography, and Histo Tissue Engineering. Tissue Engineering, 2005, 11, 1356-1367.	ogy for Bone	4.6	55
147	Relevance of 2D radiographic texture analysis for the assessment of 3D bone micro-archite Medical Physics, 2006, 33, 3546-3556.	cture.	3.0	52
148	Comparison of synchrotron radiation and conventional x-ray microcomputed tomography a assessing trabecular bone microarchitecture of human femoral heads. Medical Physics, 200 3568-3577.	For 06, 33,	3.0	65
149	Effect of Scaffold Design on Bone MorphologyIn Vitro. Tissue Engineering, 2006, 12, 3417	-3429.	4.6	126
150	Ultrasonic characterization of cancellous bone using apparent integrated backscatter. Phy Medicine and Biology, 2006, 51, 2715-2727.	sics in	3.0	41
151	Segmentation of bone CT images and assessment of bone structure using measures of cor Medical Physics, 2006, 33, 3857-3873.	nplexity.	3.0	17
152	Biochemical and Genetic Analysis of ANK in Arthritis and Bone Disease. American Journal of Genetics, 2006, 79, 1017-1029.	Human	6.2	107
153	Hierarchical microimaging for multiscale analysis of large vascular networks. NeuroImage, 2 626-636.	2006, 32,	4.2	161
154	Ultrasonic characterization of human trabecular bone microstructure. Physics in Medicine a Biology, 2006, 51, 1633-1648.	and	3.0	85
155	Botox induced muscle paralysis rapidly degrades bone. Bone, 2006, 38, 257-264.		2.9	170
156	Volumetric spatial decomposition of trabecular bone into rods and plates—A new method bone morphometry. Bone, 2006, 38, 475-484.	d for local	2.9	153
157	Preservation of thoracic spine microarchitecture by alendronate: Comparison of histology a microCT. Bone, 2006, 38, 444-449.	and	2.9	25
158	Combined treatment with a $\hat{1}^2$ -blocker and intermittent PTH improves bone mass and micro in ovariectomized mice. Bone, 2006, 39, 260-267.	barchitecture	2.9	60
159	Time-lapsed investigation of three-dimensional failure and damage accumulation in trabecu using synchrotron light. Bone, 2006, 39, 289-299.	ılar bone	2.9	112
160	Alteration of femoral bone morphology and density in COX-2â^'/â^' mice. Bone, 2006, 39, 7	67-772.	2.9	38
161	Silk based biomaterials to heal critical sized femur defects. Bone, 2006, 39, 922-931.		2.9	214
162	A biomechanical perspective on bone quality. Bone, 2006, 39, 1173-1181.		2.9	261

#	Article	IF	CITATIONS
163	The interaction of microstructure and volume fraction in predicting failure in cancellous bone. Bone, 2006, 39, 1196-1202.	2.9	93
164	Influence of bone volume fraction and architecture on computed large-deformation failure mechanisms in human trabecular bone. Bone, 2006, 39, 1218-1225.	2.9	135
165	Specimen-specific beam models for fast and accurate prediction of human trabecular bone mechanical properties. Bone, 2006, 39, 1182-1189.	2.9	71
166	Relationship between two-dimensional and three-dimensional bone architecture in predicting the mechanical strength of the pig mandible. Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics, 2006, 101, 363-373.	1.4	14
168	Light transport in trabecular bone: Monte Carlo simulation based on 3D triangle meshes. , 2006, 6142, 557.		1
169	Image-based metrology of porous tissue engineering scaffolds. , 2006, 6144, 540.		3
170	A physical phantom for the calibration of three-dimensional X-ray microtomography examination. Journal of Microscopy, 2006, 222, 124-134.	1.8	40
171	Inducible regulation of Runx2-stimulated osteogenesis. Gene Therapy, 2006, 13, 873-882.	4.5	54
173	Compressive fatigue behavior of human vertebral trabecular bone. Journal of Biomechanics, 2006, 39, 2133-2139.	2.1	82
174	The effects of side-artifacts on the elastic modulus of trabecular bone. Journal of Biomechanics, 2006, 39, 1955-1963.	2.1	60
175	Biomechanics of Osteoporotic Fractures. Clinical Reviews in Bone and Mineral Metabolism, 2006, 4, 143-154.	0.8	11
176	Porous methacrylate tissue engineering scaffolds: using carbon dioxide to control porosity and interconnectivity. Journal of Materials Science, 2006, 41, 4197.	3.7	46
177	Age-related changes in trabecular bone microstructures: global and local morphometry. Osteoporosis International, 2006, 17, 616-626.	3.1	112
178	Three-dimensional texture analysis of cancellous bone cores evaluated at clinical CT resolutions. Osteoporosis International, 2006, 17, 259-266.	3.1	42
180	Calcium Supplementation Does Not Reproduce the Pharmacological Efficacy of Alfacalcidol for the Treatment of Osteoporosis in Rats. Calcified Tissue International, 2006, 78, 152-161.	3.1	14
181	Neurofibromatosis Type 1 Gene Haploinsufficiency Reduces AP-1 Gene Expression without Abrogating the Anabolic Effect of Parathyroid Hormone. Calcified Tissue International, 2006, 78, 162-170.	3.1	10
182	Adaptations in Cortical and Trabecular Bone in Response to Mechanical Loading with and without Weight Bearing. Calcified Tissue International, 2006, 79, 395-403.	3.1	53
183	Architecture and properties of anisotropic polymer composite scaffolds for bone tissue engineering. Biomaterials, 2006, 27, 905-916.	11.4	305

#	Article	IF	CITATIONS
184	Mineralization capacity of Runx2/Cbfa1-genetically engineered fibroblasts is scaffold dependent. Biomaterials, 2006, 27, 5535-5545.	11.4	43
185	Bone and cartilage tissue constructs grown using human bone marrow stromal cells, silk scaffolds and rotating bioreactors. Biomaterials, 2006, 27, 6138-6149.	11.4	171
186	Trabecular bone failure at the microstructural level. Current Osteoporosis Reports, 2006, 4, 80-86.	3.6	19
187	Imaging techniques forÂevaluating bone microarchitecture. Joint Bone Spine, 2006, 73, 254-261.	1.6	85
188	Trabecular bone ontogeny in the human proximal femur. Journal of Human Evolution, 2006, 51, 591-602.	2.6	155
189	Subchondral bone micro-architectural alterations in osteoarthritis: a synchrotron micro-computed tomography study. Osteoarthritis and Cartilage, 2006, 14, 215-223.	1.3	141
190	Assessment of the accuracy of dental enamel thickness measurements using microfocal X-ray computed tomography. The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology, 2006, 288A, 263-275.	2.0	120
191	Quantitative MRI for the assessment of bone structure and function. NMR in Biomedicine, 2006, 19, 731-764.	2.8	171
192	Effects of Runx2 genetic engineering andin vitro maturation of tissue-engineered constructs on the repair of critical size bone defects. Journal of Biomedical Materials Research - Part A, 2006, 76A, 646-655.	4.0	45
193	Heparanase is expressed in osteoblastic cells and stimulates bone formation and bone mass. Journal of Cellular Physiology, 2006, 207, 784-792.	4.1	53
194	New polyurethane-based material for vascular corrosion casting with improved physical and imaging characteristics. Microscopy Research and Technique, 2006, 69, 138-147.	2.2	117
195	Preliminary observations on the calcaneal trabecular microarchitecture of extant large-bodied hominoids. American Journal of Physical Anthropology, 2006, 129, 410-417.	2.1	74
196	Trabecular Bone Structure of the Calcaneus: Comparison of MR Imaging at 3.0 and 1.5 T with Micro-CT as the Standard of Reference. Radiology, 2006, 239, 488-496.	7.3	101
197	Hormonal and Biochemical Determinants of Trabecular Microstructure at the Ultradistal Radius in Women and Men. Journal of Clinical Endocrinology and Metabolism, 2006, 91, 885-891.	3.6	115
198	Effect of specimen conditioning on the microarchitectural parameters of trabecular bone assessed by micro-computed tomography. Physics in Medicine and Biology, 2006, 51, 4621-4634.	3.0	12
199	Bone Re/Modeling Is More Dynamic in the Endothelial Nitric Oxide Synthase(â^'/â^') Mouse. Endocrinology, 2006, 147, 4392-4399.	2.8	32
200	Two-week longitudinal survey of bone architecture alteration in the hindlimb-unloaded rat model of bone loss: sex differences. American Journal of Physiology - Endocrinology and Metabolism, 2006, 290, E440-E447.	3.5	69
201	Use of Axial X-Ray Microcomputed Tomography to Assess Three-Dimensional Trabecular Microarchitecture and Bone Mineral Density in Single Comb White Leghorn Hens. Poultry Science, 2006, 85, 706-711.	3.4	5

#	Article	IF	CITATIONS
202	Contribution of Three-Dimensional Trabecular Bone Microstructure of the Proximal Femur to its Mechanical Properties as Assessed by Micro-Finite Element Analysis. Key Engineering Materials, 2006, 321-323, 278-281.	0.4	0
203	X-Ray Tomography Measurements of the Moisture Distribution in Multilayered Clothing Systems. Textile Reseach Journal, 2006, 76, 18-26.	2.2	33
204	Hierarchical Assessment of Vascular Alterations in a Mouse Model for Alzheimer's Disease. , 2006, , .		0
205	Peripheral cannabinoid receptor, CB2, regulates bone mass. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 696-701.	7.1	487
206	Systemically Administered Bone Morphogenetic Protein-6 Restores Bone in Aged Ovariectomized Rats by Increasing Bone Formation and Suppressing Bone Resorption. Journal of Biological Chemistry, 2006, 281, 25509-25521.	3.4	94
207	Opposite Effects of Leptin on Bone Metabolism: A Dose-Dependent Balance Related to Energy Intake and Insulin-Like Growth Factor-I Pathway. Endocrinology, 2007, 148, 3419-3425.	2.8	98
208	Dermal Fibroblasts Genetically Modified to Express Runx2/Cbfa1 as a Mineralizing Cell Source for Bone Tissue Engineering. Tissue Engineering, 2007, 13, 2029-2040.	4.6	29
209	A sensitivity analysis of the volumetric spatial decomposition algorithm. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 25-37.	1.6	5
210	Effects of Thresholding Techniques on μCT-Based Finite Element Models of Trabecular Bone. Journal of Biomechanical Engineering, 2007, 129, 481-486.	1.3	37
211	Cyclic Mechanical Compression Increases Mineralization of Cell-Seeded Polymer Scaffolds In Vivo. Journal of Biomechanical Engineering, 2007, 129, 531-539.	1.3	54
212	Inhibin A Is an Endocrine Stimulator of Bone Mass and Strength. Endocrinology, 2007, 148, 1654-1665.	2.8	102
213	Healing of Segmental Bone Defects by Direct Percutaneous Gene Delivery: Effect of Vector Dose. Human Gene Therapy, 2007, 18, 907-915.	2.7	61
214	The Microstructural and Biomechanical Properties of the Primary Compressive Trabecular System in Human Femoral Head. Key Engineering Materials, 2007, 342-343, 917-920.	0.4	0
215	Application of the scaling index method to $\hat{l}^{1}\!\!/\!4CT$ images of human trabecular bone for the characterization of biomechanical strength. , 2007, , .		3
216	Quantitative morphometric evaluation of critical size experimental bone defects by microcomputed tomography. British Journal of Oral and Maxillofacial Surgery, 2007, 45, 203-207.	0.8	6
217	Age-related changes in trabecular bone microdamage initiation. Bone, 2007, 40, 973-980.	2.9	62
218	Micro-CT combined with bioluminescence imaging: A dynamic approach to detect early tumor–bone interaction in a tumor osteolysis murine model. Bone, 2007, 40, 1032-1040.	2.9	46
219	Contributions of parathyroid hormone (PTH)/PTH-related peptide receptor signaling pathways to the anabolic effect of PTH on bone. Bone, 2007, 40, 1453-1461.	2.9	88

#	Article	IF	CITATIONS
220	Preserved three-dimensional cancellous bone structure in mild primary hyperparathyroidism. Bone, 2007, 41, 19-24.	2.9	116
221	Automated compartmental analysis for high-throughput skeletal phenotyping in femora of genetic mouse models. Bone, 2007, 41, 659-667.	2.9	63
222	Automatic segmentation of cortical and trabecular compartments based on a dual threshold technique for in vivo micro-CT bone analysis. Bone, 2007, 41, 505-515.	2.9	502
223	Structural parameters and mechanical strength of cancellous bone in the femoral head in osteoarthritis do not depend on age. Bone, 2007, 41, 760-768.	2.9	62
224	Age-related changes in microarchitecture and mineralization of cancellous bone in the porcine mandibular condyle. Journal of Structural Biology, 2007, 158, 421-427.	2.8	31
225	Observation of isothermal metamorphism of new snow and interpretation as a sintering process. Journal of Geophysical Research, 2007, 112, .	3.3	91
226	Quantification of Porosity, Connectivity and Material Density of Calcium Phosphate Ceramic Implants Using Micro-Computed Tomography. , 2007, , 289-305.		3
227	Nonhuman anthropoid primate femoral neck trabecular architecture and its relationship to locomotor mode. Anatomical Record, 2007, 290, 422-436.	1.4	87
228	Micro-CT based quantification of non-mineralized tissue on cultured hydroxyapatite scaffolds. Journal of Biomedical Materials Research - Part A, 2007, 82A, 1012-1021.	4.0	18
229	In vitro and in vivo osteoblastic differentiation of BMP-2- and Runx2-engineered skeletal myoblasts. Journal of Cellular Biochemistry, 2007, 100, 1324-1336.	2.6	26
230	Fluoxetine treatment increases trabecular bone formation in mice. Journal of Cellular Biochemistry, 2007, 100, 1387-1394.	2.6	59
231	Quantitative volumetric analysis of cardiac morphogenesis assessed through micro-computed tomography. Developmental Dynamics, 2007, 236, 802-809.	1.8	67
232	Morphology, constraints, and scaling of frontal sinuses in the hartebeest,Alcelaphus buselaphus (Mammalia: Artiodactyla, Bovidae). Journal of Morphology, 2007, 268, 243-253.	1.2	18
233	Structural and functional assessment of trabecular and cortical bone by micro magnetic resonance imaging. Journal of Magnetic Resonance Imaging, 2007, 25, 390-409.	3.4	184
234	Image metricâ€based correction (autofocusing) of motion artifacts in highâ€resolution trabecular bone imaging. Journal of Magnetic Resonance Imaging, 2007, 26, 191-197.	3.4	35
235	Decreased muscle loading delays maturation of the tendon enthesis during postnatal development. Journal of Orthopaedic Research, 2007, 25, 1154-1163.	2.3	129
236	Control of in vitro tissue-engineered bone-like structures using human mesenchymal stem cells and porous silk scaffolds. Biomaterials, 2007, 28, 1152-1162.	11.4	335
237	Effects of trabecular calcium phosphate scaffolds on stress signaling in osteoblast precursor cells. Biomaterials, 2007, 28, 2747-2753.	11.4	33

#	Article	IF	CITATIONS
238	Structural and nanoindentation studies of stem cell-based tissue-engineered bone. Journal of Biomechanics, 2007, 40, 399-411.	2.1	62
239	Densitometric, morphometric and mechanical distributions in the human proximal femur. Journal of Biomechanics, 2007, 40, 2573-2579.	2.1	74
240	Side-artifact errors in yield strength and elastic modulus for human trabecular bone and their dependence on bone volume fraction and anatomic site. Journal of Biomechanics, 2007, 40, 3381-3388.	2.1	39
241	A computational assessment of the independent contribution of changes in canine trabecular bone volume fraction and microarchitecture to increased bone strength with suppression of bone turnover. Journal of Biomechanics, 2007, 40, 3424-3431.	2.1	20
242	Changes in the macro-pore structure of restored soil caused by compaction beneath heavy agricultural machinery: a morphometric study. European Journal of Soil Science, 2007, 58, 1062-1073.	3.9	66
243	MicroCT examination of human bone specimens: effects of polymethylmethacrylate embedding on structural parameters. Journal of Microscopy, 2007, 225, 192-200.	1.8	62
244	Postcranial skeletal pneumaticity: a case study in the use of quantitative microCT to assess vertebral structure in birds. Journal of Anatomy, 2007, 211, 138-147.	1.5	37
245	Osteoblast Deletion of Exon 3 of the Androgen Receptor Gene Results in Trabecular Bone Loss in Adult Male Mice. Journal of Bone and Mineral Research, 2007, 22, 347-356.	2.8	117
246	Sex Differences of Human Trabecular Bone Microstructure in Aging Are Site-Dependent. Journal of Bone and Mineral Research, 2007, 22, 817-824.	2.8	129
247	Thyroid-Stimulating Hormone Restores Bone Volume, Microarchitecture, and Strength in Aged Ovariectomized Rats*. Journal of Bone and Mineral Research, 2007, 22, 849-859.	2.8	124
248	Age-Related Changes in Trabecular Architecture Differ in Female and Male C57BL/6J Mice. Journal of Bone and Mineral Research, 2007, 22, 1197-1207.	2.8	500
249	Caveolin-1 Knockout Mice Have Increased Bone Size and Stiffness. Journal of Bone and Mineral Research, 2007, 22, 1408-1418.	2.8	70
250	Ultrastructural Properties in Cortical Bone Vary Greatly in Two Inbred Strains of Mice as Assessed by Synchrotron Light Based Micro- and Nano-CT. Journal of Bone and Mineral Research, 2007, 22, 1557-1570.	2.8	166
251	Influence of Orthogonal Overload on Human Vertebral Trabecular Bone Mechanical Properties. Journal of Bone and Mineral Research, 2007, 22, 1690-1699.	2.8	17
252	Trabecular Structure Quantified With the MRI-Based Virtual Bone Biopsy in Postmenopausal Women Contributes to Vertebral Deformity Burden Independent of Areal Vertebral BMD. Journal of Bone and Mineral Research, 2008, 23, 64-74.	2.8	60
253	Trabecular Bone Gradient in Rat Long Bone Metaphyses: Mathematical Modeling and Application to Morphometric Measurements and Correction of Implant Positioning. Journal of Bone and Mineral Research, 2008, 23, 48-57.	2.8	37
254	Complete Volumetric Decomposition of Individual Trabecular Plates and Rods and Its Morphological Correlations With Anisotropic Elastic Moduli in Human Trabecular Bone. Journal of Bone and Mineral Research, 2008, 23, 223-235.	2.8	195
255	Measures of complexity for 3D image analysis of trabecular bone. European Physical Journal: Special Topics, 2007, 143, 109-116.	2.6	19

#	Article	IF	CITATIONS
256	An Automated Algorithm to Detect the Trabecular-Cortical Bone Interface in Micro-Computed Tomographic Images. Calcified Tissue International, 2007, 81, 285-293.	3.1	57
257	The Effects of Geometric and Threshold Definitions on Cortical Bone Metrics Assessed by In Vivo High-Resolution Peripheral Quantitative Computed Tomography. Calcified Tissue International, 2007, 81, 364-371.	3.1	50
259	Evaluation of bone response to titanium-coated polymethyl methacrylate resin (PMMA) implants by X-ray tomography. Journal of Materials Science: Materials in Medicine, 2007, 18, 2033-2039.	3.6	46
260	Vertebral Osteoporosis and Trabecular Bone Quality. Annals of Biomedical Engineering, 2007, 35, 170-189.	2.5	109
261	Non-Invasive Time-Lapsed Monitoring and Quantification of Engineered Bone-Like Tissue. Annals of Biomedical Engineering, 2007, 35, 1657-1667.	2.5	54
262	A Local Adaptive Threshold Strategy for High Resolution Peripheral Quantitative Computed Tomography of Trabecular Bone. Annals of Biomedical Engineering, 2007, 35, 1678-1686.	2.5	104
263	Preventative ibandronate treatment has the most beneficial effect on the microstructure of bone in experimental tumor osteolysis. Journal of Bone and Mineral Metabolism, 2007, 25, 86-92.	2.7	5
264	Three-dimensional characterization of cortical bone microstructure by microcomputed tomography: validation with ultrasonic and microscopic measurements. Journal of Orthopaedic Science, 2007, 12, 141-148.	1.1	65
265	Nondestructive micro-computed tomography for biological imaging and quantification of scaffold–bone interaction in vivo. Biomaterials, 2007, 28, 2479-2490.	11.4	186
266	Bulk and interface investigations of scaffolds and tissue-engineered bones by X-ray microtomography and X-ray microdiffraction. Biomaterials, 2007, 28, 2505-2524.	11.4	110
267	In vivo micro-CT scanning of a rabbit distal femur: Repeatability and reproducibility. Journal of Biomechanics, 2008, 41, 186-193.	2.1	23
268	Periodontal regeneration in experimentally-induced alveolar bone dehiscence by an improved porous biphasic calcium phosphate ceramic in beagle dogs. Journal of Materials Science: Materials in Medicine, 2008, 19, 3515-3524.	3.6	22
269	Does thoracic or lumbar spine bone architecture predict vertebral failure strength more accurately than density?. Osteoporosis International, 2008, 19, 537-545.	3.1	37
270	Regional variations of vertebral trabecular bone microstructure with age and gender. Osteoporosis International, 2008, 19, 1473-1483.	3.1	87
271	Age-and region-dependent changes in three-dimensional microstructural properties of proximal femoral trabeculae. Osteoporosis International, 2008, 19, 1579-1587.	3.1	44
272	Effects of Treatment with Parathyroid Hormone 1–84 on Quantity and Biomechanical Properties of Thoracic Vertebral Trabecular Bone in Ovariectomized Rhesus Monkeys. Calcified Tissue International, 2008, 82, 212-220.	3.1	24
273	Influence of Factors Regulating Bone Formation and Remodeling on Bone Quality in Osteonecrosis of the Femoral Head. Calcified Tissue International, 2008, 82, 300-308.	3.1	26
274	Differential Effects of Bone Structural and Material Properties on Bone Competence in C57BL/6 and C3H/He Inbred Strains of Mice. Calcified Tissue International, 2008, 83, 61-69.	3.1	15

#	Article	IF	CITATIONS
275	Quantitative Assessment of Bone Tissue Mineralization with Polychromatic Micro-Computed Tomography. Calcified Tissue International, 2008, 83, 129-138.	3.1	89
276	Measurement of Trabecular Bone Microstructure Does Not Improve Prediction of Mechanical Failure Loads at the Distal Radius Compared with Bone Mass Alone. Calcified Tissue International, 2008, 83, 293-299.	3.1	15
277	Bone Volume Fraction Explains the Variation in Strength and Stiffness of Cancellous Bone Affected by Metastatic Cancer and Osteoporosis. Calcified Tissue International, 2008, 83, 368-379.	3.1	174
278	The role of fabric in the quasi-static compressive mechanical properties of human trabecular bone from various anatomical locations. Biomechanics and Modeling in Mechanobiology, 2008, 7, 27-42.	2.8	96
279	Effect of age on bone mineral density and micro architecture in the radius and tibia of horses: An Xtreme computed tomographic study. BMC Veterinary Research, 2008, 4, 3.	1.9	18
280	Microstructural adaptation in trapezial bone due to subluxation of the thumb. Journal of Orthopaedic Research, 2008, 26, 208-216.	2.3	13
281	Fluorescence molecular tomography enables in vivo visualization and quantification of nonunion fracture repair induced by genetically engineered mesenchymal stem cells. Journal of Orthopaedic Research, 2008, 26, 522-530.	2.3	58
282	PERK is essential for neonatal skeletal development to regulate osteoblast proliferation and differentiation. Journal of Cellular Physiology, 2008, 217, 693-707.	4.1	110
283	Dependence of mechanical compressive strength on local variations in microarchitecture in cancellous bone of proximal human femur. Journal of Biomechanics, 2008, 41, 438-446.	2.1	115
284	Evaluation of trabecular mechanical and microstructural properties in human calcaneal bone of advanced age using mechanical testing, μCT, and DXA. Journal of Biomechanics, 2008, 41, 368-375.	2.1	52
285	Bone substitute: Transforming β-tricalcium phosphate porous scaffolds intoÂmonetite. Biomaterials, 2008, 29, 3400-3407.	11.4	50
286	Morphology, mechanical characterization and in vivo neo-vascularization of chitosan particle aggregated scaffolds architectures. Biomaterials, 2008, 29, 3914-3926.	11.4	99
287	X-ray imaging optimization of 3D tissue engineering scaffolds via combinatorial fabrication methods. Biomaterials, 2008, 29, 1901-1911.	11.4	40
288	Recent advances in X-ray microtomography applied to materials. International Materials Reviews, 2008, 53, 129-181.	19.3	415
289	Nonvirally Engineered Porcine Adipose Tissue-Derived Stem Cells: Use in Posterior Spinal Fusion. Stem Cells, 2008, 26, 1056-1064.	3.2	101
290	Antitumoral Activity and Osteogenic Potential of Mesenchymal Stem Cells Expressing the Urokinase-Type Plasminogen Antagonist Amino-Terminal Fragment in a Murine Model of Osteolytic Tumor. Stem Cells, 2008, 26, 2981-2990.	3.2	40
291	In Vivo Magnetic Resonance Detects Rapid Remodeling Changes in the Topology of the Trabecular Bone Network After Menopause and the Protective Effect of Estradiol. Journal of Bone and Mineral Research, 2008, 23, 730-740.	2.8	97
292	Comparison of Skeletal Effects of Ovariectomy Versus Chemically Induced Ovarian Failure in Mice. Journal of Bone and Mineral Research, 2008, 23, 1296-1303.	2.8	63

#	Article	IF	CITATIONS
293	Bone Morphometry Strongly Predicts Cortical Bone Stiffness and Strength, but Not Toughness, in Inbred Mouse Models of High and Low Bone Mass. Journal of Bone and Mineral Research, 2008, 23, 1194-1203.	2.8	39
294	In Vivo μMRI-Based Finite Element and Morphological Analyses of Tibial Trabecular Bone in Eugonadal and Hypogonadal Men Before and After Testosterone Treatment. Journal of Bone and Mineral Research, 2008, 23, 1426-1434.	2.8	75
295	Microarchitecture Influences Microdamage Accumulation in Human Vertebral Trabecular Bone. Journal of Bone and Mineral Research, 2008, 23, 1613-1618.	2.8	74
296	Site-Specific Deterioration of Trabecular Bone Architecture in Men and Women With Advancing Age. Journal of Bone and Mineral Research, 2008, 23, 1964-1973.	2.8	63
297	Accurate quantification of the influence of benthic macro- and meio-fauna on the geometric properties of estuarine muds by micro computer tomography. Journal of Experimental Marine Biology and Ecology, 2008, 354, 192-201.	1.5	21
298	Platelet Dysfunction and a High Bone Mass Phenotype in a Murine Model of Platelet-Type von Willebrand Disease. American Journal of Pathology, 2008, 172, 430-439.	3.8	70
299	Effects of chondrogenic and osteogenic regulatory factors on composite constructs grown using human mesenchymal stem cells, silk scaffolds and bioreactors. Journal of the Royal Society Interface, 2008, 5, 929-939.	3.4	57
300	Bone mass and architecture determination: state of the art. Best Practice and Research in Clinical Endocrinology and Metabolism, 2008, 22, 737-764.	4.7	98
301	Biomechanics of Age-Related Fractures. , 2008, , 601-623.		6
302	Poly(lactic-co-glycolic acid) Bone Scaffolds with Inverted Colloidal Crystal Geometry. Tissue Engineering - Part A, 2008, 14, 1639-1649.	3.1	45
303	TNF signaling contributes to the development of nociceptive sensitization in a tibia fracture model of complex regional pain syndrome type I. Pain, 2008, 137, 507-519.	4.2	82
304	CT-based visualization and quantification of bone microstructure in vivo. IBMS BoneKEy, 2008, 5, 410-425.	0.0	16
305	Bone microstructure and its associated genetic variability in 12 inbred mouse strains: μCT study and in silico genome scan. Bone, 2008, 42, 439-451.	2.9	35
306	Trabecular shear stress amplification and variability in human vertebral cancellous bone: Relationship with age, gender, spine level and trabecular architecture. Bone, 2008, 42, 591-596.	2.9	27
307	High impact exercise is more beneficial than dietary calcium for building bone strength in the growing rat skeleton. Bone, 2008, 42, 660-668.	2.9	52
308	Dynamic simulation of three dimensional architectural and mechanical alterations in human trabecular bone during menopause. Bone, 2008, 43, 292-301.	2.9	33
309	Predicting regional variations in trabecular bone mechanical properties within the human proximal tibia using MR imaging. Bone, 2008, 43, 1039-1046.	2.9	20
310	Soil and macro-pores under uniaxial compression. I. Mechanical stability of repacked soil and deformation of different types of macro-pores. Geoderma, 2008, 146, 183-191.	5.1	62

#	Article	IF	CITATIONS
311	Mathematical relationships between bone density and mechanical properties: A literature review. Clinical Biomechanics, 2008, 23, 135-146.	1.2	453
312	Novel three-dimensional analysis tool for vascular trees indicates complete micro-networks, not single capillaries, as the angiogenic endpoint in mice overexpressing human VEGF165 in the brain. NeuroImage, 2008, 39, 1549-1558.	4.2	69
313	Trabecular Bone Structure Analysis in the Limited Spatial Resolution Regime of In Vivo MRI. Academic Radiology, 2008, 15, 1482-1493.	2.5	27
314	Influence of density, elasticity, and structure on ultrasound transmission through trabecular bone cylinders. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 1465-1472.	3.0	16
315	Dissociation of the neuronal regulation of bone mass and energy metabolism by leptin in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20529-20533.	7.1	131
316	Improved 3D skeletonization of trabecular bone images derived from in vivo MRI. , 2008, , .		0
317	Comparative micro computed tomography study of a vertebral body. Proceedings of SPIE, 2008, , .	0.8	10
318	VEGF Facilitates Periosteal Distraction–Induced Osteogenesis in Rabbits: A Micro-Computerized Tomography Study. Tissue Engineering - Part A, 2008, 14, 247-253.	3.1	42
319	Robust Design for Acetabular Cup Stability Accounting for Patient and Surgical Variability. Journal of Biomechanical Engineering, 2008, 130, 031001.	1.3	8
320	Quantitative Imaging of Musculoskeletal Tissue. Annual Review of Biomedical Engineering, 2008, 10, 369-390.	12.3	25
321	Development of the Micro Architecture and Mineralization of the Basilar Part of the Pig Occipital Bone. Connective Tissue Research, 2008, 49, 22-29.	2.3	4
322	Virtual trabecular bone models and their mechanical response. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2008, 222, 1185-1195.	1.8	7
323	CD45 regulates retention, motility, and numbers of hematopoietic progenitors, and affects osteoclast remodeling of metaphyseal trabecules. Journal of Experimental Medicine, 2008, 205, 2381-2395.	8.5	78
324	Homozygous and heterozygous expression of a novel mutation of the acid-labile subunit. European Journal of Endocrinology, 2008, 159, 113-120.	3.7	55
325	Sevelamer Restores Bone Volume and Improves Bone Microarchitecture and Strength in Aged Ovariectomized Rats. Endocrinology, 2008, 149, 6092-6102.	2.8	15
326	Strength through structure: visualization and local assessment of the trabecular bone structure. New Journal of Physics, 2008, 10, 125010.	2.9	40
327	Automatic Thresholding of Micro-CT Trabecular Bone Images. , 2008, , .		6
328	Protocols of Micro-Computed Tomographic Analysis Established for Musculoskeletal Applications. , 2008, , 279-299.		1

#	Article	IF	CITATIONS
329	Calcium Requirements of Growing Rats Based on Bone Mass, Structure, or Biomechanical Strength Are Similar. Journal of Nutrition, 2008, 138, 1462-1468.	2.9	36
330	Quantification of Bone Structural Parameters and Mechanical Competence at the Distal Radius. Journal of Orthopaedic Trauma, 2008, 22, S66-S72.	1.4	14
331	Implications of resolution and noise for <i>in vivo</i> microâ€MRI of trabecular bone. Medical Physics, 2008, 35, 5584-5594.	3.0	21
332	The Nature of Osteoporosis. , 2008, , 27-36.		5
333	Reflectance Modeling for Real Snow Structures Using a Beam Tracing Model. Sensors, 2008, 8, 3482-3496.	3.8	12
334	Biomechanics of Bone and Age-Related Fractures. , 2008, , 29-51.		15
335	Lef1 Haploinsufficient Mice Display a Low Turnover and Low Bone Mass Phenotype in a Gender- and Age-Specific Manner. PLoS ONE, 2009, 4, e5438.	2.5	58
336	Three-dimensional quantification of structures in trabecular bone using measures of complexity. Physical Review E, 2009, 79, 021903.	2.1	6
337	Axin2 controls bone remodeling through the β-catenin–BMP signaling pathway in adult mice. Journal of Cell Science, 2009, 122, 3566-3578.	2.0	101
338	Human Acid-Labile Subunit Deficiency: Clinical, Endocrine and Metabolic Consequences. Hormone Research, 2009, 72, 129-141.	1.8	109
339	Healing of Large Segmental Bone Defects Induced by Expedited Bone Morphogenetic Protein-2 Gene-Activated, Syngeneic Muscle Grafts. Human Gene Therapy, 2009, 20, 1589-1596.	2.7	16
340	Volumetric topological analysis: a novel method for trabecular bone characterization on the continuum between plates and rods. , 2009, , .		3
341	Snow replica method for three-dimensional X-ray microtomographic imaging. Journal of Glaciology, 2009, 55, 631-639.	2.2	35
342	Bone Microarchitecture and Stiffness in Premenopausal Women with Idiopathic Osteoporosis. Journal of Clinical Endocrinology and Metabolism, 2009, 94, 4351-4360.	3.6	82
343	Classification of trabeculae into threeâ€dimensional rodlike and platelike structures via local inertial anisotropy. Medical Physics, 2009, 36, 3280-3291.	3.0	29
344	Effects of Mechanical Stimuli on Adaptive Remodeling of Condylar Cartilage. Journal of Dental Research, 2009, 88, 466-470.	5.2	19
345	The combination therapy with alfacalcidol and risedronate improves the mechanical property in lumbar spine by affecting the material properties in an ovariectomized rat model of osteoporosis. BMC Musculoskeletal Disorders, 2009, 10, 66.	1.9	39
346	Trabecular bone microâ€architecture and bone mineral density in adolescent idiopathic and congenital scoliosis. Orthopaedic Surgery, 2009, 1, 78-83.	1.8	22

#	Article	IF	CITATIONS
347	Site-specific bone loss in senescence-accelerated mouse (SAMP6): A murine model for senile osteoporosis. Experimental Gerontology, 2009, 44, 792-798.	2.8	42
348	Interaction of Osteoblasts with Macroporous Scaffolds Made of PLLA/PCL Blends Modified with Collagen and Hydroxyapatite. Advanced Engineering Materials, 2009, 11, B83.	3.5	17
349	Patterns in ontogeny of human trabecular bone from SunWatch Village in the Prehistoric Ohio Valley: General features of microarchitectural change. American Journal of Physical Anthropology, 2009, 138, 318-332.	2.1	81
350	Regional, ontogenetic, and sexâ€related variations in elastic properties of cortical bone in baboon mandibles. American Journal of Physical Anthropology, 2010, 141, 526-549.	2.1	41
351	<i>In vivo</i> study on hydroxyapatite scaffolds with trabecular architecture for bone repair. Journal of Biomedical Materials Research - Part A, 2009, 89A, 1019-1027.	4.0	68
352	Microâ€computed tomographic analysis of bone healing subsequent to graft placement. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 88B, 611-618.	3.4	25
353	Inhibition of osteoclast formation and function by bicarbonate: Role of soluble adenylyl cyclase. Journal of Cellular Physiology, 2009, 220, 332-340.	4.1	43
354	Inhomogeneity of rat vertebrae trabecular architecture by highâ€field 3D μâ€magnetic resonance imaging and variable threshold image segmentation. Journal of Magnetic Resonance Imaging, 2009, 30, 825-833.	3.4	3
355	Morphometric characterization of murine articular cartilage—Novel application of confocal laser scanning microscopy. Microscopy Research and Technique, 2009, 72, 650-658.	2.2	14
356	Trabecular Microarchitecture of Hominoid Thoracic Vertebrae. Anatomical Record, 2009, 292, 1098-1106.	1.4	43
357	Multi-axial mechanical properties of human trabecular bone. Biomechanics and Modeling in Mechanobiology, 2009, 8, 195-208.	2.8	134
358	Cancellous Bone Properties and Matrix Content of TGF-β2 and IGF-I in Human Tibia: A Pilot Study. Clinical Orthopaedics and Related Research, 2009, 467, 3079-3086.	1.5	6
359	Shortcomings of DXA to assess changes in bone tissue density and microstructure induced by metabolic bone diseases in rat models. Osteoporosis International, 2009, 20, 123-132.	3.1	34
360	Automated simulation of areal bone mineral density assessment in the distal radius from high-resolution peripheral quantitative computed tomography. Osteoporosis International, 2009, 20, 2017-2024.	3.1	37
361	Radiographic trabecular 2D and 3D parameters of proximal femoral bone cores correlate with each other and with yield stress. Osteoporosis International, 2009, 20, 1929-1938.	3.1	15
362	Pore characteristics of bone substitute materials assessed by microcomputed tomography. Clinical Oral Implants Research, 2009, 20, 67-74.	4.5	36
363	Strainâ€dependent activation of the mouse immune response is correlated with <i>Porphyromonas gingivalis</i> â€induced experimental periodontitis. Journal of Clinical Periodontology, 2009, 36, 915-921.	4.9	33
364	Anticipating bipedalism: trabecular organization in the newborn ilium. Journal of Anatomy, 2009, 214, 817-829.	1.5	52

#	Article	IF	CITATIONS
365	The use of a synthetic oxygen carrier-enriched hydrogel to enhance mesenchymal stem cell-based bone formation in vivo. Biomaterials, 2009, 30, 4639-4648.	11.4	82
366	Shockwave Exerts Osteogenic Effect on Osteoporotic Bone InÂanÂOvariectomized Goat Model. Ultrasound in Medicine and Biology, 2009, 35, 1109-1118.	1.5	20
367	Sampling sphere orientation distribution: An efficient method to quantify trabecular bone fabric on grayscale images. Medical Image Analysis, 2009, 13, 530-541.	11.6	23
368	Statistical osteoporosis models using composite finite elements: A parameter study. Journal of Biomechanics, 2009, 42, 2205-2209.	2.1	7
369	Rapid three-dimensional quantification of VEGF-induced scaffold neovascularisation by microcomputed tomography. Biomaterials, 2009, 30, 5959-5968.	11.4	31
370	In vivo biocompatibility and vascularization of biodegradable porous polyurethane scaffolds for tissue engineering. Acta Biomaterialia, 2009, 5, 1991-2001.	8.3	114
371	Nanohydroxyapatite/poly(ester urethane) scaffold for bone tissue engineering. Acta Biomaterialia, 2009, 5, 3316-3327.	8.3	75
372	Mineralization and Bone Resorption Are Regulated by the Androgen Receptor in Male Mice. Journal of Bone and Mineral Research, 2009, 24, 621-631.	2.8	98
373	Trabecular Bone Structure Analysis in the Osteoporotic Spine Using a Clinical In Vivo Setup for 64-Slice MDCT Imaging: Comparison to μCT Imaging and μFE Modeling. Journal of Bone and Mineral Research, 2009, 24, 1628-1637.	2.8	38
374	Type 1 Diabetes in Young Rats Leads to Progressive Trabecular Bone Loss, Cessation of Cortical Bone Growth, and Diminished Whole Bone Strength and Fatigue Life. Journal of Bone and Mineral Research, 2009, 24, 1618-1627.	2.8	128
375	Role of Trabecular Microarchitecture in Whole-Vertebral Body Biomechanical Behavior. Journal of Bone and Mineral Research, 2009, 24, 1523-1530.	2.8	102
376	High-resolution peripheral quantitative computed tomography can assess microstructural and mechanical properties of human distal tibial bone. Journal of Bone and Mineral Research, 2010, 25, 746-756.	2.8	160
377	Age- and gender-related differences in the geometric properties and biomechanical significance of intracortical porosity in the distal radius and tibia. Journal of Bone and Mineral Research, 2010, 25, 983-993.	2.8	271
378	Analysis of calvarial bone defects in rats using microcomputed tomography: potential for a novel composite material and a new quantitative measurement. British Journal of Oral and Maxillofacial Surgery, 2009, 47, 616-621.	0.8	17
379	High resolution computed tomography of the vertebrae yields accurate information on trabecular distances if processed by 3D fuzzy segmentation approaches. Bone, 2009, 44, 145-152.	2.9	36
380	Cancellous and cortical bone architecture and turnover at the iliac crest of postmenopausal osteoporotic women treated with parathyroid hormone $1\hat{a}\in$ 84. Bone, 2009, 44, 113-119.	2.9	90
381	Non-invasive bone competence analysis by high-resolution pQCT: An in vitro reproducibility study on structural and mechanical properties at the human radius. Bone, 2009, 44, 364-371.	2.9	88
382	Effects of cod bone gelatin on bone metabolism and bone microarchitecture in ovariectomized rats. Bone, 2009, 44, 942-947.	2.9	37

#	Article	IF	Citations
383	Revealing the interplay of bone and cartilage in osteoarthritis through multimodal imaging of murine joints. Bone, 2009, 45, 414-422.	2.9	31
384	Constrained tibial vibration does not produce an anabolic bone response in adult mice. Bone, 2009, 45, 750-759.	2.9	17
385	Regional, age and gender differences in architectural measures of bone quality and their correlation to bone mechanical competence in the human radius of an elderly population. Bone, 2009, 45, 882-891.	2.9	80
386	Restrain of bone growth by Estrogen-Mimetic Peptide-1 (EMP-1): A micro-computed tomographic study. Peptides, 2009, 30, 1181-1186.	2.4	4
387	Dentin sialoprotein and dentin phosphoprotein have distinct roles in dentin mineralization. Matrix Biology, 2009, 28, 221-229.	3.6	183
388	Characterization of a novel calibration method for mineral density determination of dentine by X-ray micro-tomography. Analyst, The, 2009, 134, 72-79.	3.5	36
389	Hierarchical microimaging of bone structure and function. Nature Reviews Rheumatology, 2009, 5, 373-381.	8.0	132
390	Bone marrow lesions from osteoarthritis knees are characterized by sclerotic bone that is less well mineralized. Arthritis Research and Therapy, 2009, 11, R11.	3.5	165
391	Alginate/Hydroxyapatite Biocomposite For Bone Ingrowth: A Trabecular Structure With High And Isotropic Connectivity. Biomacromolecules, 2009, 10, 1575-1583.	5.4	183
392	Rescue of Impaired Fracture Healing in COX-2â°'/â^' Mice via Activation of Prostaglandin E2 Receptor Subtype 4. American Journal of Pathology, 2009, 175, 772-785.	3.8	95
393	Ability of Recombinant Human Bone Morphogenetic Protein 2 to Enhance Bone Healing in the Presence of Tobramycin: Evaluation in a Rat Segmental Defect Model. Journal of Orthopaedic Trauma, 2009, 23, 693-701.	1.4	23
394	Neuropeptide Y Knockout Mice Reveal a Central Role of NPY in the Coordination of Bone Mass to Body Weight. PLoS ONE, 2009, 4, e8415.	2.5	143
395	Glucocorticoid Induced Osteopenia in Cancellous Bone of Sheep. Spine, 2010, 35, 363-370.	2.0	50
396	Mineral crystal alignment in mineralized fracture callus determined by 3D small-angle X-ray scattering. Journal of Physics: Conference Series, 2010, 247, 012031.	0.4	7
397	Local plate/rod descriptors of 3D trabecular bone micro T images from medial axis topologic analysis. Medical Physics, 2010, 37, 4364-4376.	3.0	16
398	Endosseous implant anchorage is critically dependent on mechanostructural determinants of peri-implant bone trabeculae. Journal of Bone and Mineral Research, 2010, 25, 575-583.	2.8	62
399	Hyponatremia-induced osteoporosis. Journal of Bone and Mineral Research, 2010, 25, 554-563.	2.8	358
400	Assessment of trabecular bone structure using MDCT: comparison of 64- and 320-slice CT using HR-pQCT as the reference standard. European Radiology, 2010, 20, 458-468.	4.5	52

#	Article	IF	CITATIONS
401	Assessment of trabecular and cortical architecture and mechanical competence of bone by high-resolution peripheral computed tomography: comparison with transiliac bone biopsy. Osteoporosis International, 2010, 21, 263-273.	3.1	148
402	Age- and gender-dependent changes in three-dimensional microstructure of cortical and trabecular bone at the human femoral neck. Osteoporosis International, 2010, 21, 627-636.	3.1	133
403	Micro-CT and mechanical evaluation of subchondral trabecular bone structure between postmenopausal women with osteoarthritis and osteoporosis. Osteoporosis International, 2010, 21, 1383-1390.	3.1	100
404	Detecting early bone changes using in vivo micro-CT in ovariectomized, zoledronic acid-treated, and sham-operated rats. Osteoporosis International, 2010, 21, 1371-1382.	3.1	61
405	Particle seeding enhances interconnectivity in polymeric scaffolds foamed using supercritical CO2. Acta Biomaterialia, 2010, 6, 1055-1060.	8.3	20
406	In vitro and in vivo evaluation of a novel nanosize hydroxyapatite particles/poly(ester-urethane) composite scaffold for bone tissue engineering. Acta Biomaterialia, 2010, 6, 2020-2027.	8.3	121
407	Bioengineered 3D platform to explore cell–ECM interactions and drug resistance of epithelial ovarian cancer cells. Biomaterials, 2010, 31, 8494-8506.	11.4	533
408	3D histomorphometric quantification of trabecular bones by computed microtomography using synchrotron radiation. Micron, 2010, 41, 990-996.	2.2	23
409	Mechanical competence of bone-implant systems can accurately be determined by image-based micro-finite element analyses. Archive of Applied Mechanics, 2010, 80, 513-525.	2.2	33
410	Mechanical loading of mouse caudal vertebrae increases trabecular and cortical bone mass-dependence on dose and genotype. Biomechanics and Modeling in Mechanobiology, 2010, 9, 737-747.	2.8	35
411	Effect of Compressive Straining on Nanoindentation Elastic Modulus of Trabecular Bone. Experimental Mechanics, 2010, 50, 773-781.	2.0	9
412	Finite element analysis of idealised unit cell cancellous structure based on morphological indices of cancellous bone. Medical and Biological Engineering and Computing, 2010, 48, 497-505.	2.8	31
413	Modelling Young's modulus for porous bones with microstructural variation and anisotropy. Journal of Materials Science: Materials in Medicine, 2010, 21, 463-472.	3.6	4
414	Volumetric Topological Analysis: A Novel Approach for Trabecular Bone Classification on the Continuum Between Plates and Rods. IEEE Transactions on Medical Imaging, 2010, 29, 1821-1838.	8.9	83
415	In early OA, thinning of the subchondral plate is directly related to cartilage damage: results from a canine ACLT-meniscectomy model. Osteoarthritis and Cartilage, 2010, 18, 691-698.	1.3	135
416	Critical molecular regulators, histomorphometric indices and their correlations in the trabecular bone in primary hip osteoarthritis. Osteoarthritis and Cartilage, 2010, 18, 1337-1344.	1.3	25
417	A new route to produce starchâ€based fiber mesh scaffolds by wet spinning and subsequent surface modification as a way to improve cell attachment and proliferation. Journal of Biomedical Materials Research - Part A, 2010, 92A, 369-377.	4.0	58
418	Farsenolâ€modified biodegradable polyurethanes for cartilage tissue engineering. Journal of Biomedical Materials Research - Part A, 2010, 92A, 393-408	4.0	35

#	Article	IF	CITATIONS
419	Guidelines for assessment of bone microstructure in rodents using micro–computed tomography. Journal of Bone and Mineral Research, 2010, 25, 1468-1486.	2.8	3,449
420	Role of trabecular microarchitecture and its heterogeneity parameters in the mechanical behavior of ex vivo human L3 vertebrae. Journal of Bone and Mineral Research, 2010, 25, 2324-2331.	2.8	79
421	Accuracy of high-resolution in vivo micro magnetic resonance imaging for measurements of microstructural and mechanical properties of human distal tibial bone. Journal of Bone and Mineral Research, 2010, 25, 2039-2050.	2.8	115
422	Aged mice have enhanced endocortical response and normal periosteal response compared with young-adult mice following 1 week of axial tibial compression. Journal of Bone and Mineral Research, 2010, 25, 2006-2015.	2.8	86
423	Skeletal effects of wholeâ€body vibration in adult and aged mice. Journal of Orthopaedic Research, 2010, 28, 241-247.	2.3	41
424	Compressive axial mechanical properties of rat bone as functions of bone volume fraction, apparent density and micro-ct based mineral density. Journal of Biomechanics, 2010, 43, 953-960.	2.1	80
425	What humeri are suitable for comparative testing of suture anchors? An ultrastructural bone analysis and biomechanical study of ovine, bovine and human humeri and four different anchor types. Journal of Biomechanics, 2010, 43, 1125-1130.	2.1	13
426	The effect of the trabecular microstructure on the pullout strength of suture anchors. Journal of Biomechanics, 2010, 43, 1953-1959.	2.1	49
427	Quantitative, structural, and image-based mechanical analysis of nonunion fracture repaired by genetically engineered mesenchymal stem cells. Journal of Biomechanics, 2010, 43, 2315-2320.	2.1	25
428	Deformation of epoxy shape memory polymer foam. Part I: Experiments and macroscale constitutive modeling. Mechanics of Materials, 2010, 42, 304-314.	3.2	55
429	Development of a multi-scale finite element model of the osteoporotic lumbar vertebral body for the investigation of apparent level vertebra mechanics and micro-level trabecular mechanics. Medical Engineering and Physics, 2010, 32, 653-661.	1.7	33
430	Hydroxyapatite whisker-reinforced polyetherketoneketone bone ingrowth scaffolds. Acta Biomaterialia, 2010, 6, 856-863.	8.3	107
431	Micro computed tomography for vascular exploration. Journal of Angiogenesis Research, 2010, 2, 7.	2.9	112
432	Quantitative imaging of cartilage and bone for functional assessment of gene therapy approaches in experimental arthritis. Journal of Tissue Engineering and Regenerative Medicine, 2010, 4, 387-394.	2.7	8
433	3D visualization and quantification of rat cortical bone porosity using a desktop microâ€CT system: a case study in the tibia. Journal of Microscopy, 2010, 240, 32-37.	1.8	44
434	Pharmacological inhibition of gut-derived serotonin synthesis is a potential bone anabolic treatment for osteoporosis. Nature Medicine, 2010, 16, 308-312.	30.7	273
435	Effects of antiresorptive agents on osteomyelitis. Annals of the New York Academy of Sciences, 2010, 1192, 84-94.	3.8	31
436	Evolution and functional morphology of the frontal sinuses in Bovidae (Mammalia: Artiodactyla), and implications for the evolution of cranial pneumaticity. Zoological Journal of the Linnean Society, 0,	2.3	53

#	ARTICLE	IF	CITATIONS
437	Simulation of Subject Specific Bone Remodeling and Virtual Reality Visualization. , 0, , .		1
438	Bildgebung und Bildverarbeitung. Biomedizinische Technik, 2010, 55, 1-264.	0.8	0
439	Heparanase Enhances Local and Systemic Osteolysis in Multiple Myeloma by Upregulating the Expression and Secretion of RANKL. Cancer Research, 2010, 70, 8329-8338.	0.9	60
440	CREB mediates brain serotonin regulation of bone mass through its expression in ventromedial hypothalamic neurons. Genes and Development, 2010, 24, 2330-2342.	5.9	105
441	DNA-binding-dependent androgen receptor signaling contributes to gender differences and has physiological actions in males and females. Journal of Endocrinology, 2010, 206, 93-103.	2.6	37
442	The Repair of Critical-Sized Bone Defects Using Expedited, Autologous <i>BMP-2</i> Gene-Activated Fat Implants. Tissue Engineering - Part A, 2010, 16, 1093-1101.	3.1	42
443	Design and validation of a novel bioreactor principle to combine online micro-computed tomography monitoring and mechanical loading in bone tissue engineering. Review of Scientific Instruments, 2010, 81, 014303.	1.3	28
444	Probing long bones with ultrasonic body waves. Applied Physics Letters, 2010, 96, .	3.3	53
445	Bone Microarchitecture Assessment by High-Resolution Peripheral Quantitative Computed Tomography in Patients with Systemic Lupus Erythematosus Taking Corticosteroids. Journal of Rheumatology, 2010, 37, 1473-1479.	2.0	26
446	The Role of Fabric in the Large Strain Compressive Behavior of Human Trabecular Bone. Journal of Biomechanical Engineering, 2010, 132, 121006.	1.3	35
447	Novel Assessment of Subregional Bone Mineral Density Using DXA and pQCT and Subregional Microarchitecture Using Micro-CT in Whole Human Vertebrae: Applications, Methods, and Correspondence Between Technologies. Journal of Clinical Densitometry, 2010, 13, 161-174.	1.2	21
448	High-Resolution Imaging Techniques for the Assessment of Osteoporosis. Radiologic Clinics of North America, 2010, 48, 601-621.	1.8	174
449	Fundamental Biomechanics in Bone Tissue Engineering. Synthesis Lectures on Tissue Engineering, 2010, 2, 1-225.	0.3	48
450	Quantitative microstructural studies of the armor of the marine threespine stickleback (Gasterosteus aculeatus). Journal of Structural Biology, 2010, 171, 318-331.	2.8	70
451	8,8″-Biapigeninyl stimulates osteoblast functions and inhibits osteoclast and adipocyte functions: Osteoprotective action of 8,8″-biapigeninyl in ovariectomized mice. Molecular and Cellular Endocrinology, 2010, 323, 256-267.	3.2	45
452	Three dimensional cancellous bone structure in hypoparathyroidism. Bone, 2010, 46, 190-195.	2.9	84
453	Reproducibility of bone micro-architecture measurements in rodents by in vivo micro-computed tomography is maximized with three-dimensional image registration. Bone, 2010, 46, 155-161.	2.9	49
454	Correlation of mechanical properties within the equine third metacarpal with trabecular bending and multi-density micro-computed tomography data. Bone, 2010, 46, 1108-1113.	2.9	17

#	Article	IF	CITATIONS
455	Characterization of a small animal growth plate injury model using microcomputed tomography. Bone, 2010, 46, 1555-1563.	2.9	21
456	Heavy ion irradiation and unloading effects on mouse lumbar vertebral microarchitecture, mechanical properties and tissue stresses. Bone, 2010, 47, 248-255.	2.9	62
457	Towards quantitative 3D imaging of the osteocyte lacuno-canalicular network. Bone, 2010, 47, 848-858.	2.9	139
458	BoneJ: Free and extensible bone image analysis in ImageJ. Bone, 2010, 47, 1076-1079.	2.9	1,695
459	Stereological measurement of the specific surface area of seasonal snow types: Comparison to other methods, and implications for mm-scale vertical profiling. Cold Regions Science and Technology, 2010, 64, 1-8.	3.5	38
460	Genetically Modified Mesenchymal Stem Cells Induce Mechanically Stable Posterior Spine Fusion. Tissue Engineering - Part A, 2010, 16, 3679-3686.	3.1	50
461	Ibandronate increases cortical bone density in patients with systemic lupus erythematosus on long-term glucocorticoid. Arthritis Research and Therapy, 2010, 12, R198.	3.5	34
462	Bone Mass and Microarchitecture in CKD Patients with Fracture. Journal of the American Society of Nephrology: JASN, 2010, 21, 1371-1380.	6.1	155
463	Three-Dimensional Visualization of Bioactive Glass-Bone Integration in a Rabbit Tibia Model Using Synchrotron X-Ray Microcomputed Tomography. Tissue Engineering - Part A, 2011, 17, 3077-3084.	3.1	19
464	Adipose-Derived Stem Cells Enhance Bone Regeneration in Vascular Necrosis of the Femoral Head in the Rabbit. Journal of International Medical Research, 2011, 39, 1852-1860.	1.0	45
465	Physiologically Relevant Oxidative Degradation of Oligo(proline) Cross-Linked Polymeric Scaffolds. Biomacromolecules, 2011, 12, 4357-4366.	5.4	98
466	Patient-Specific Diagnosis and Visualization of Bone Micro-Structures. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2011, , 27-52.	1.0	1
467	Medical Imaging in the Diagnosis of Osteoporosis and Estimation of the Individual Bone Fracture Risk. Biological and Medical Physics Series, 2011, , 193-225.	0.4	2
468	Measurements of ultrasonic phase velocities and attenuation of slow waves in cellular aluminum foams as cancellous bone-mimicking phantoms. Journal of the Acoustical Society of America, 2011, 129, 3317-3326.	1.1	41
469	Gene-Modified Adult Stem Cells Regenerate Vertebral Bone Defect in a Rat Model. Molecular Pharmaceutics, 2011, 8, 1592-1601.	4.6	83
470	Augmented Osteolysis in SPARC-Deficient Mice with Bone-Residing Prostate Cancer. Neoplasia, 2011, 13, 31-IN5.	5.3	23
471	Dependence of trabecular structure on bone quantity: A comparison between osteoarthritic and non-pathological bone. Clinical Biomechanics, 2011, 26, 632-639.	1.2	11
472	In vivo micro-computed tomography allows direct three-dimensional quantification of both bone formation and bone resorption parameters using time-lapsed imaging. Bone, 2011, 48, 433-442.	2.9	153

ARTICLE IF CITATIONS # 3D hierarchical geometric modeling and multiscale FE analysis as a base for individualized medical 473 2.9 49 diagnosis of bone structure. Bone, 2011, 48, 693-703. 474 microarchitectural and mechanical study. Bone, 2011, 48, 1154-1163. Fabric-mechanical property relationships of trabecular bone allografts are altered by supercritical 475 2.9 9 CO2 treatment and gamma sterilization. Bone, 2011, 48, 1370-1377. Serial FIB/SEM imaging for quantitative 3D assessment of the osteocyte lacuno-canalicular network. 123 Bone, 2011, 49, 304-311. Implant stability is affected by local bone microstructural quality. Bone, 2011, 49, 473-478. 477 2.9 83 Coordinated tether formation in anatomically distinct mice growth centers is dependent on a functional vitamin D receptor and is tightly linked to three-dimensional tissue morphology. Bone, 2011, 49, 419-427. MicroCT morphometry analysis of mouse cancellous bone: Intra- and inter-system reproducibility. 479 2.9 49 Bone, 2011, 49, 580-587. Variability of trabecular microstructure is age-, gender-, race- and anatomic site-dependent and affects stiffness and stress distribution properties of human vertebral cancellous bone. Bone, 2011, 49, 480 2.9 886-894. Performance of the MRI-based virtual bone biopsy in the distal radius: Serial reproducibility and 481 reliability of structural and mechanical parameters in women representative of osteoporosis study 2.9 35 populations. Bone, 2011, 49, 895-903. Comparison of 2D and 3D bone microarchitecture evaluation at the femoral neck, among 34 postmenopausal women with hip fracture or hip osteoarthritis. Bone, 2011, 49, 1055-1061. Mouse tail vertebrae adapt to cyclic mechanical loading by increasing bone formation rate and decreasing bone resorption rate as shown by time-lapsed in vivo imaging of dynamic bone 483 101 2.9 morphometry. Bone, 2011, 49, 1340-1350. Bone morphogenetic protein (BMP)1-3 enhances bone repair. Biochemical and Biophysical Research 484 Communications, 2011, 408, 25-31. Age-related changes in human trabecular bone: Relationship between microstructural stress and 485 2.1 29 strain and damage morphology. Journal of Biomechanics, 2011, 44, 2279-2285. Tensile properties of rat femoral bone as functions of bone volume fraction, apparent density and 2.1 volumetric bone mineral density. Journal of Biomechanics, 2011, 44, 2482-2488. Microstructural Assessment of Cancellous Bone Using 3D Microtomography. Journal of Physics: 487 0.4 1 Conference Series, 2011, 313, 012008. Microcomputed tomography–based structural analysis of various bone tissue regeneration models. 488 Nature Protocols, 2011, 6, 105-110. Study of the behavior of the trabecular bone under cyclic compression with stepwise increasing 489 3.117 amplitude. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 1755-1763. Bone structural changes in osteoarthritis as a result of mechanoregulated bone adaptation: a 490 1.3 modeling approach. Östeoarthritis and Cartilage, 2011, 19, 676-682.

#	Article	IF	CITATIONS
491	Curcumin improves bone microarchitecture and enhances mineral density in APP/PS1 transgenic mice. Phytomedicine, 2011, 18, 205-213.	5.3	69
492	The impact of occlusal function on structural adaptation in alveolar bone of the growing pig, Sus Scrofa. Archives of Oral Biology, 2011, 56, 79-89.	1.8	8
493	Fabric dependence of wave propagation in anisotropic porous media. Biomechanics and Modeling in Mechanobiology, 2011, 10, 39-65.	2.8	47
494	Analysis of bone architecture sensitivity for changes in mechanical loading, cellular activity, mechanotransduction, and tissue properties. Biomechanics and Modeling in Mechanobiology, 2011, 10, 701-712.	2.8	25
495	Monthly Administration of a Novel PTH-Collagen Binding Domain Fusion Protein is Anabolic in Mice. Calcified Tissue International, 2011, 88, 511-520.	3.1	27
496	Three-Dimensional Evaluation of Mandibular Bone Regenerated By Bone Transport Distraction Osteogenesis. Calcified Tissue International, 2011, 89, 43-52.	3.1	10
497	Phenotypic characterization of skeletal abnormalities of Osteopotentia mutant mice by micro-CT: a descriptive approach with emphasis on reconstruction techniques. Skeletal Radiology, 2011, 40, 1073-1078.	2.0	5
498	Initial cell pre-cultivation can maximize ECM mineralization by human mesenchymal stem cells on silk fibroin scaffolds. Acta Biomaterialia, 2011, 7, 2218-2228.	8.3	32
499	High-resolution Computed Tomography for Clinical Imaging of Bone Microarchitecture. Clinical Orthopaedics and Related Research, 2011, 469, 2179-2193.	1.5	213
500	Stereologic Analysis of Tibial-Plateau Cartilage and Femoral Cancellous Bone in Guinea Pigs With Spontaneous Osteoarthritis. Clinical Orthopaedics and Related Research, 2011, 469, 2796-2805.	1.5	13
501	Effects of diet-induced obesity and voluntary wheel running on the microstructure of the murine distal femur. Nutrition and Metabolism, 2011, 8, 1.	3.0	71
502	The effect of ex vivo dynamic loading on the osteogenic differentiation of genetically engineered mesenchymal stem cell model. Journal of Tissue Engineering and Regenerative Medicine, 2011, 5, 384-393.	2.7	18
503	Performance of μMRIâ€Based virtual bone biopsy for structural and mechanical analysis at the distal tibia at 7T field strength. Journal of Magnetic Resonance Imaging, 2011, 33, 372-381.	3.4	19
504	Role of trabecular microarchitecture in the formation, accumulation, and morphology of microdamage in human cancellous bone. Journal of Orthopaedic Research, 2011, 29, 1739-1744.	2.3	47
505	A Three‣ayered Osteochondral Plug: Structural, Mechanical, and in vitro Biocompatibility Analysis. Advanced Engineering Materials, 2011, 13, B511.	3.5	28
506	Hyaluronic acid stimulates neovascularization during the regeneration of bone marrow after ablation. Journal of Biomedical Materials Research - Part A, 2011, 96A, 575-583.	4.0	25
507	Osteoprotegerin deficiency attenuates strontium-mediated inhibition of osteoclastogenesis and bone resorption. Journal of Bone and Mineral Research, 2011, 26, 1272-1282.	2.8	50
508	Trabecular bone microstructure and local gene expression in iliac crest biopsies of men with idiopathic osteoporosis. Journal of Bone and Mineral Research, 2011, 26, 1584-1592.	2.8	35

#	Article	IF	CITATIONS
509	Variation of trabecular architecture in proximal femur of postmenopausal women. Journal of Biomechanics, 2011, 44, 248-256.	2.1	16
510	Spectral analysis and connectivity of porous microstructures in bone. Journal of Biomechanics, 2011, 44, 337-344.	2.1	13
511	Three-dimensional micro-level computational study of Wolff's law via trabecular bone remodeling in the human proximal femur using design space topology optimization. Journal of Biomechanics, 2011, 44, 935-942.	2.1	112
512	The turnover of mineralized growth plate cartilage into bone may be regulated by osteocytes. Journal of Biomechanics, 2011, 44, 1765-1770.	2.1	6
513	Long range nodeâ€strut analysis of trabecular bone microarchitecture. Medical Physics, 2011, 38, 5003-5011.	3.0	5
514	Microstructural evolution of fine-grained layers through the firn column at Summit, Greenland. Journal of Glaciology, 2011, 57, 755-762.	2.2	42
515	Intermittent posterior displacement of the rat mandible in the growth period affects the condylar cancellous bone. Angle Orthodontist, 2011, 81, 975-982.	2.4	15
516	Assessing Methods for Characterising Local and Global Structural and Biomechanical Properties of the Trabecular Bone Network. Current Medicinal Chemistry, 2011, 18, 3402-3409.	2.4	9
517	Soft classification of trabeculae in trabecular bone. , 2011, , .		5
518	Fabric dependence of quasi-waves in anisotropic porous media. Journal of the Acoustical Society of America, 2011, 129, 3302-3316.	1.1	29
519	3D shape-dependent thinning method for trabecular bone characterization. Medical Physics, 2011, 39, 168-178.	3.0	8
520	Discriminants of Prevalent Fractures in Chronic Kidney Disease. Journal of the American Society of Nephrology: JASN, 2011, 22, 1560-1572.	6.1	126
521	Substantial expression of mature elastin in arterial constructs. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 2705-2710.	7.1	135
522	Adiponectin Inhibits Osteoclastogenesis and Bone Resorption via APPL1-mediated Suppression of Akt1. Journal of Biological Chemistry, 2011, 286, 12542-12553.	3.4	100
523	Site-1 Protease Is Essential to Growth Plate Maintenance and Is a Critical Regulator of Chondrocyte Hypertrophic Differentiation in Postnatal Mice. Journal of Biological Chemistry, 2011, 286, 29227-29240.	3.4	15
524	Genetic determination of the cellular basis of the sympathetic regulation of bone mass accrual. Journal of Experimental Medicine, 2011, 208, 841-851.	8.5	148
525	Structure based classification of μ-CT images of human trabecular bone using local Minkowski Functionals. Proceedings of SPIE, 2011, , .	0.8	2
526	Abnormal Bone Microarchitecture and Evidence of Osteoblast Dysfunction in Premenopausal Women with Idiopathic Osteoporosis. Journal of Clinical Endocrinology and Metabolism, 2011, 96, 3095-3105.	3.6	72

		CITATION REF	PORT	
#	Article		IF	CITATIONS
527	APPLICATION OF A BIPHASIC REPRESENTATIVE VOLUME ELEMENT TO THE SIMULATION (PROPAGATION THROUGH CANCELLOUS BONE. Journal of Computational Acoustics, 201	OF WAVE 1, 19, 111-138.	1.0	11
528	Characterization of Subchondral Bone Repair for Marrow-Stimulated Chondral Defects ar Relationship to Articular Cartilage Resurfacing. American Journal of Sports Medicine, 201 1731-1741.	d Its 1, 39,	4.2	107
529	High-Resolution Imaging Techniques for Bone Quality Assessment. , 2011, , 891-925.			1
530	Cytoskeletal defects in Bmpr2-associated pulmonary arterial hypertension. American Jour Physiology - Lung Cellular and Molecular Physiology, 2012, 302, L474-L484.	nal of	2.9	90
531	Relationships of quantitative ultrasound parameters with cancellous bone microstructure calcaneus in vitro. Journal of the Acoustical Society of America, 2012, 131, 1605-1612.	: in human	1.1	65
532	Methods and interpretation of performance studies for dental implants. , 2012, , 308-344	4.		19
533	Direct Recognition of Fusobacterium nucleatum by the NK Cell Natural Cytotoxicity Rece Aggravates Periodontal Disease. PLoS Pathogens, 2012, 8, e1002601.	ptor NKp46	4.7	106
534	Induction of osteoclastogenesis and bone loss by human autoantibodies against citrulling vimentin. Journal of Clinical Investigation, 2012, 122, 1791-1802.	ated	8.2	606
535	Increased Marrow Adiposity in Premenopausal Women with Idiopathic Osteoporosis. Jour Clinical Endocrinology and Metabolism, 2012, 97, 2782-2791.	rnal of	3.6	88
536	Mechanical and morphological properties of trabecular bone samples obtained from third bones of cadavers of horses with a bone fragility syndrome and horses unaffected by that American Journal of Veterinary Research, 2012, 73, 1742-1751.	metacarpal syndrome.	0.6	8
537	The effect of voxel size on highâ€resolution peripheral computed tomography measurem trabecular and cortical bone microstructure. Medical Physics, 2012, 39, 1893-1903.	ents of	3.0	96
538	Evaluation of the plate-rod model assumption of trabecular bone. , 2012, , .			4
539	QUANTIFYING CHANGES IN THE SPATIAL STRUCTURE OF TRABECULAR BONE. Internation Bifurcation and Chaos in Applied Sciences and Engineering, 2012, 22, 1250027.	al Journal of	1.7	1
540	Trabecular microstructure of the human lunate in Kienböck's disease. Journal of Han European Volume, 2012, 37, 336-341.	d Surgery:	1.0	14
541	Vapor flux and recrystallization during dry snow metamorphism under a steady temperat as observed by time-lapse micro-tomography. Cryosphere, 2012, 6, 1141-1155.	ure gradient	3.9	112
542	Alterations in Brca1 expression in mouse ovarian granulosa cells have short-term and long consequences on estrogen-responsive organs. Laboratory Investigation, 2012, 92, 802-8	g-term 11.	3.7	20
544	Roles of chemokine receptor CX3CR1 in maintaining murine bone homeostasis through t of both osteoblasts and osteoclasts. Journal of Cell Science, 2013, 126, 1032-45.	he regulation	2.0	59
545	Microarchitecture and bone quality in the human calcaneus: Local variations of fabric anis Journal of Bone and Mineral Research, 2012, 27, 2562-2572.	sotropy.	2.8	24

#	Article	IF	CITATIONS
546	Evaluation of bone microarchitecture by high-resolution peripheral quantitative computed tomography (HR-pQCT) in hemodialysis patients. Osteoporosis International, 2012, 23, 2543-2550.	3.1	41
547	Effects of a perfusion bioreactor activated novel bone substitute in spine fusion in sheep. European Spine Journal, 2012, 21, 1740-1747.	2.2	9
548	Bone fragility and decline in stem cells in prematurely aging DNA repair deficient trichothiodystrophy mice. Age, 2012, 34, 845-861.	3.0	20
549	The discrete nature of trabecular bone microarchitecture affects implant stability. Journal of Biomechanics, 2012, 45, 1060-1067.	2.1	41
550	Shear strength behavior of human trabecular bone. Journal of Biomechanics, 2012, 45, 2513-2519.	2.1	63
551	Proteinase-activated receptor-2 is required for normal osteoblast and osteoclast differentiation during skeletal growth and repair. Bone, 2012, 50, 704-712.	2.9	25
552	The different contributions of cortical and trabecular bone to implant anchorage in a human vertebra. Bone, 2012, 50, 733-738.	2.9	39
553	Failure strength of human vertebrae: Prediction using bone mineral density measured by DXA and bone volume by micro-CT. Bone, 2012, 50, 1416-1425.	2.9	73
554	Evaluation of high-resolution peripheral quantitative computed tomography, finite element analysis and biomechanical testing in a pre-clinical model of osteoporosis: A study with odanacatib treatment in the ovariectomized adult rhesus monkey. Bone, 2012, 50, 1379-1388.	2.9	30
555	Local topological analysis at the distal radius by HR-pQCT: Application to in vivo bone microarchitecture and fracture assessment in the OFELY study. Bone, 2012, 51, 362-368.	2.9	21
556	Biomechanical effects of simulated resorption cavities in cancellous bone across a wide range of bone volume fractions. Journal of Bone and Mineral Research, 2012, 27, 1927-1935.	2.8	6
557	Three-dimensional microarchitecture of adolescent cancellous bone. Bone, 2012, 51, 953-960.	2.9	27
558	Repair of rabbit ulna segmental bone defect using freshly isolated adipose-derived stromal vascular fraction. Cytotherapy, 2012, 14, 296-305.	0.7	30
559	Fast and accurate approximation of digital shape thickness distribution in arbitrary dimension. Computer Vision and Image Understanding, 2012, 116, 1159-1167.	4.7	3
560	Interrelationship of Cranial Suture Fusion, Basicranial Development, and Resynostosis Following Suturectomy in Twist1+/â^' Mice, a Murine Model of Saethre-Chotzen Syndrome. Calcified Tissue International, 2012, 91, 255-266.	3.1	17
561	Neuropeptide Deficient Mice Have Attenuated Nociceptive, Vascular, and Inflammatory Changes in a Tibia Fracture Model of Complex Regional Pain Syndrome. Molecular Pain, 2012, 8, 1744-8069-8-85.	2.1	61
562	Quantitative Ex-Vivo Micro-Computed Tomographic Imaging of Blood Vessels and Necrotic Regions within Tumors. PLoS ONE, 2012, 7, e41685.	2.5	24
563	Simulating Bone Atrophy and Its Effects on the Structure and Stability of the Trabecular Bone. , 2012, , .		1

#	Article	IF	CITATIONS
564	Telomere length, telomerase activity and osteogenic differentiation are maintained in adipose-derived stromal cells from senile osteoporotic SAMP6 mice. Journal of Tissue Engineering and Regenerative Medicine, 2012, 6, 378-390.	2.7	61
565	Wing Shape as an Indicator of Larval Rearing Conditions for <i>Aedes albopictus</i> and <i>Aedes aegypti</i> (Diptera: Culicidae). Journal of Medical Entomology, 2012, 49, 927-938.	1.8	12
566	Evaluation of BMPâ€2 tethered polyelectrolyte coatings on hydroxyapatite scaffolds <i>in vivo</i> . Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2012, 100B, 1782-1791.	3.4	10
567	The effects of a novelâ€reinforced bone substitute and Colloss®E on bone defect healing in sheep. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2012, 100B, 1826-1835.	3.4	15
568	Relationship of age to bone microstructure independent of areal bone mineral density. Journal of Bone and Mineral Research, 2012, 27, 637-644.	2.8	115
569	Evaluation of trabecular microarchitecture in nonosteoporotic postmenopausal women with and without fracture. Journal of Bone and Mineral Research, 2012, 27, 1494-1500.	2.8	28
570	Trabecular Architecture and Vertebral Fragility in Osteoporosis. Current Osteoporosis Reports, 2012, 10, 132-140.	3.6	22
571	Bone morphology allows estimation of loading history in a murine model of bone adaptation. Biomechanics and Modeling in Mechanobiology, 2012, 11, 483-492.	2.8	73
572	Do regional modifications in tissue mineral content and microscopic mineralization heterogeneity adapt trabecular bone tracts for habitual bending? Analysis in the context of trabecular architecture of deer calcanei. Journal of Anatomy, 2012, 220, 242-255.	1.5	15
573	Threeâ€dimensional bone structure and bone mineral density evaluations of autogenous bone graft after sinus augmentation: a microcomputed tomography analysis. Clinical Oral Implants Research, 2012, 23, 1098-1103.	4.5	13
574	A fully automated trabecular bone structural analysis tool based on T2*-weighted magnetic resonance imaging. Computerized Medical Imaging and Graphics, 2012, 36, 85-94.	5.8	5
575	Three-dimensional alteration of microvasculature in a rat model of traumatic spinal cord injury. Journal of Neuroscience Methods, 2012, 204, 150-158.	2.5	33
576	Dependence of threshold variations on the assessment of histomorphometric indices from computed microtomography using synchrotron radiation. Micron, 2012, 43, 739-745.	2.2	0
577	Anti ILâ€17A therapy inhibits bone loss in TNFâ€Î±â€mediated murine arthritis by modulation of the Tâ€cell balance. European Journal of Immunology, 2012, 42, 413-423.	2.9	42
578	The interrelation of trabecular microstructural parameters of the greater tubercle measured for different species. Journal of Orthopaedic Research, 2012, 30, 429-434.	2.3	10
579	Augmentation of periâ€implant bone improves implant stability: Quantification using simulated bone loss. Journal of Orthopaedic Research, 2012, 30, 178-184.	2.3	11
580	Experimental and finite element analysis of the mouse caudal vertebrae loading model: prediction of cortical and trabecular bone adaptation. Biomechanics and Modeling in Mechanobiology, 2012, 11, 221-230.	2.8	28
581	BMP-6 is more efficient in bone formation than BMP-2 when overexpressed in mesenchymal stem cells. Gene Therapy, 2013, 20, 370-377.	4.5	83

# 582	ARTICLE Is micro-computed tomography reliable to determine the microstructure of the maxillary alveolar bone?. Clinical Oral Implants Research, 2013, 24, 730-737.	IF 4.5	Citations 28
583	Differences in non-enzymatic glycation and collagen cross-links between human cortical and cancellous bone. Osteoporosis International, 2013, 24, 2441-2447.	3.1	106
584	Glucocorticoid-Induced Changes in the Geometry of Osteoclast Resorption Cavities Affect Trabecular Bone Stiffness. Calcified Tissue International, 2013, 92, 240-250.	3.1	29
585	The Nature of Osteoporosis. , 2013, , 21-30.		12
586	The Mechanical Behavior of Bone. , 2013, , 431-452.		6
587	Bone augmentation for cancellous bone-development of a new animal model. BMC Musculoskeletal Disorders, 2013, 14, 200.	1.9	9
588	Computed tomography in paleoanthropology — an overview. Archaeological and Anthropological Sciences, 2013, 5, 205-214.	1.8	8
589	Morphology–elasticity relationships using decreasing fabric information of human trabecular bone from three major anatomical locations. Biomechanics and Modeling in Mechanobiology, 2013, 12, 793-800.	2.8	52
590	Exogenous heparin binds and inhibits bone morphogenetic protein 6 biological activity. International Orthopaedics, 2013, 37, 529-541.	1.9	26
591	Waterjet drilling in porcine bone: The effect of the nozzle diameter and bone architecture on the hole dimensions. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 27, 84-93.	3.1	33
592	Scaling relations between trabecular bone volume fraction and microstructure at different skeletal sites. Bone, 2013, 57, 377-383.	2.9	9
593	Age-related changes of vertical and horizontal lumbar vertebral trabecular 3D bone microstructure is different in women and men. Bone, 2013, 57, 47-55.	2.9	30
594	Micro-architecture and mineralization of the human alveolar bone obtained with microCT. Archives of Oral Biology, 2013, 58, 621-627.	1.8	24
595	The artiodactyl calcaneus as a potential †control bone' cautions against simple interpretations of trabecular bone adaptation in the anthropoid femoral neck. Journal of Human Evolution, 2013, 64, 366-379.	2.6	17
596	A generalized anisotropic quadric yield criterion and its application to bone tissue at multiple length scales. Biomechanics and Modeling in Mechanobiology, 2013, 12, 1155-1168.	2.8	58
597	Repair of large segmental bone defects: BMP-2 gene activated muscle grafts vs. autologous bone grafting. BMC Biotechnology, 2013, 13, 65.	3.3	25
598	Defective Endochondral Ossification-Derived Matrix and Bone Cells Alter the Lymphopoietic Niche in Collagen X Mouse Models. Stem Cells and Development, 2013, 22, 2581-2595.	2.1	7
599	Textural characteristics of model and natural bone tissues and interfacial behavior of bound water. Journal of Colloid and Interface Science, 2013, 392, 446-462.	9.4	5

#	Article	IF	CITATIONS
600	Vitamin D2 from light-exposed edible mushrooms is safe, bioavailable and effectively supports bone growth in rats. Osteoporosis International, 2013, 24, 197-207.	3.1	46
601	Lumbar Vertebral Body Bone Microstructural Scaling in Small to Mediumâ€ S ized Strepsirhines. Anatomical Record, 2013, 296, 210-226.	1.4	25
602	Trabecular Bone Microarchitecture in the Median Palate and Maxillary Premolar Alveolar Sites of Edentulous Elderly Cadavers. Journal of Oral and Maxillofacial Surgery, 2013, 71, 1852.e1-1852.e11.	1.2	3
603	Time-lapsed imaging of implant fixation failure in human femoral heads. Medical Engineering and Physics, 2013, 35, 636-643.	1.7	26
604	ls there any information on micro-structure in microwave tomography of bone tissue?. Medical Engineering and Physics, 2013, 35, 1173-1180.	1.7	7
605	Theoretical bounds for the influence of tissue-level ductility on the apparent-level strength of human trabecular bone. Journal of Biomechanics, 2013, 46, 1293-1299.	2.1	32
606	Characterization and three-dimensional reconstruction of synthetic bone model foams. Materials Science and Engineering C, 2013, 33, 3329-3335.	7.3	19
607	Prediction of trabecular bone qualitative properties using scanning quantitative ultrasound. Acta Astronautica, 2013, 92, 79-88.	3.2	22
608	Carbon meringues derived from flavonoid tannins. Carbon, 2013, 65, 214-227.	10.3	38
609	Vertebroplasty increases compression of adjacent IVDs and vertebrae in osteoporotic spines. Spine Journal, 2013, 13, 1872-1880.	1.3	19
610	Effects of the 3D bone-to-implant contact and bone stiffness on the initial stability of a dental implant: micro-CT and resonance frequency analyses. International Journal of Oral and Maxillofacial Surgery, 2013, 42, 276-280.	1.5	28
611	Remodeling of tissue-engineered bone structures in vivo. European Journal of Pharmaceutics and Biopharmaceutics, 2013, 85, 119-129.	4.3	52
612	Trabecular Bone Score Is Associated With Volumetric Bone Density and Microarchitecture as Assessed by Central QCT and HRpQCT in Chinese American and White Women. Journal of Clinical Densitometry, 2013, 16, 554-561.	1.2	73
613	Growthâ€related structural, biochemical, and mechanical properties of the functional bone–cartilage unit. Journal of Anatomy, 2013, 222, 248-259.	1.5	11
614	Magnetic resonance of calcified tissues. Journal of Magnetic Resonance, 2013, 229, 35-48.	2.1	68
615	Composition and microarchitecture of human trabecular bone change with age and differ between anatomical locations. Bone, 2013, 54, 118-125.	2.9	39
616	Characterisation of Trabecular Bone Structure. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2013, , 31-51.	1.0	23
617	Modeling hepatic osteodystrophy in Abcb4 deficient mice. Bone, 2013, 55, 501-511.	2.9	20

#	Article	IF	CITATIONS
618	Teriparatide for Idiopathic Osteoporosis in Premenopausal Women: A Pilot Study. Journal of Clinical Endocrinology and Metabolism, 2013, 98, 1971-1981.	3.6	72
619	PLGA/PEGâ€hydrogel composite scaffolds with controllable mechanical properties. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2013, 101B, 648-655.	3.4	49
620	High-Resolution Imaging. Medical Radiology, 2013, , 149-159.	0.1	0
621	Overview of Bone Structure and Strength. , 2013, , 25-34.		4
622	Partial reductions in mechanical loading yield proportional changes in bone density, bone architecture, and muscle mass. Journal of Bone and Mineral Research, 2013, 28, 875-885.	2.8	87
623	Variation in osteocyte lacunar morphology and density in the human femur — a synchrotron radiation micro-CT study. Bone, 2013, 52, 126-132.	2.9	111
624	Post-processing of polymer foam tissue scaffolds with high power ultrasound: A route to increased pore interconnectivity, pore size and fluid transport. Materials Science and Engineering C, 2013, 33, 4825-4832.	7.3	18
625	Trapezium Trabecular Morphology in Carpometacarpal Arthritis. Journal of Hand Surgery, 2013, 38, 309-315.	1.6	31
626	Osteochondral Repair: Evaluation with Sweep Imaging with Fourier Transform in an Equine Model. Radiology, 2013, 269, 113-121.	7.3	14
627	Abdominal Fat Is Associated With Lower Bone Formation and Inferior Bone Quality in Healthy Premenopausal Women: A Transiliac Bone Biopsy Study. Journal of Clinical Endocrinology and Metabolism, 2013, 98, 2562-2572.	3.6	165
628	Potential and field of a homogeneous magnetic spheroid of arbitrary direction in a homogeneous magnetic field in Cartesian coordinates. COMPEL - the International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2013, 32, 936-960.	0.9	8
629	Pure Waterjet Drilling of Articular Bone: An in vitro Feasibility Study. Strojniski Vestnik/Journal of Mechanical Engineering, 2013, , 425-432.	1.1	14
630	Effect of Specimen-Specific Anisotropic Material Properties in Quantitative Computed Tomography-Based Finite Element Analysis of the Vertebra. Journal of Biomechanical Engineering, 2013, 135, 101007-11.	1.3	22
631	Correlations of linear and nonlinear ultrasound parameters with density and microarchitectural parameters in trabecular bone. Journal of the Acoustical Society of America, 2013, 134, EL381-EL386.	1.1	8
632	Tortuosity and the Averaging of Microvelocity Fields in Poroelasticity. Journal of Applied Mechanics, Transactions ASME, 2013, 80, 0209061-209065.	2.2	7
633	Biaxial Normal Strength Behavior in the Axial-Transverse Plane for Human Trabecular Bone—Effects of Bone Volume Fraction, Microarchitecture, and Anisotropy. Journal of Biomechanical Engineering, 2013, 135, 121010.	1.3	9
634	A Correlative Method for Imaging Identical Regions of Samples by Micro-CT, Light Microscopy, and Electron Microscopy. Journal of Histochemistry and Cytochemistry, 2013, 61, 263-271.	2.5	50
635	Trabecular bone microstructure scales allometrically in the primate humerus and femur. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130172.	2.6	87

#	Article	IF	CITATIONS
636	SIRT1 regulates differentiation of mesenchymal stem cells by deacetylating β atenin. EMBO Molecular Medicine, 2013, 5, 430-440.	6.9	233
637	Decreased stability of erythroblastic islands in integrin β3-deficient mice. Physiological Reports, 2013, 1, e00018.	1.7	15
638	Evolution of crystal orientation in snow during temperature gradient metamorphism. Journal of Glaciology, 2013, 59, 47-55.	2.2	25
639	Prevention of cartilage dehydration in imaging studies with a customized humidity chamber. Review of Scientific Instruments, 2013, 84, 093703.	1.3	5
640	A comparative study of automatic thresholding approaches for 3D xâ€ray microtomography of trabecular bone. Medical Physics, 2013, 40, 091903.	3.0	12
641	Rapid cortical bone loss in patients with chronic kidney disease. Journal of Bone and Mineral Research, 2013, 28, 1811-1820.	2.8	241
642	The effects of GATAâ€1 and NFâ€E2 deficiency on bone biomechanical, biochemical, and mineral properties. Journal of Cellular Physiology, 2013, 228, 1594-1600.	4.1	14
643	Age-related changes in the 3D hierarchical structure of rat tibia cortical bone characterized by high-resolution micro-CT. Journal of Applied Physiology, 2013, 114, 923-933.	2.5	17
644	Short-term Precision Error in Dual Energy X-Ray Absorptiometry, Bone Mineral Density and Trabecular Bone Score Measurements; and Effects of Obesity on Precision Error. Journal of Biomedical Graphics and Computing, 2013, 4, .	0.2	4
645	Simulation of Subject Specific Bone Remodeling. , 2013, , .		0
646	A comparison of the microarchitecture of lower limb long bones between some animal models and humans: a review. Veterinarni Medicina, 2013, 58, 339-351.	0.6	11
647	A Novel In Vivo Vascular Imaging Approach for Hierarchical Quantification of Vasculature Using Contrast Enhanced Micro-Computed Tomography. PLoS ONE, 2014, 9, e86562.	2.5	34
648	Influence of the Mechanical Environment on the Engineering of Mineralised Tissues Using Human Dental Pulp Stem Cells and Silk Fibroin Scaffolds. PLoS ONE, 2014, 9, e111010.	2.5	43
649	A Digital Model to Simulate Effects of Bone Architecture Variations on Texture at Spatial Resolutions of CT, HR-pQCT, and <i>î¼</i> CT Scanners. Journal of Medical Engineering, 2014, 2014, 1-13.	1.1	5
650	Two and three-dimensional morphometric analysis of trabecular bone using X-ray microtomography (ÂμCT). Revista Brasileira De Engenharia Biomedica, 2014, 30, 93-101.	0.3	20
651	Architecture and Properties of PUR/Calcite Composite Scaffolds for Bone Tissue Engineering. Journal of Bioprocessing & Biotechniques, 2014, 04, .	0.2	0
652	The effect of resorption cavities on bone stiffness is site dependent. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 1483-1491.	1.6	1
653	CCR2 Elimination in Mice Results in Larger and Stronger Tibial Bones but Bone Loss is not Attenuated	3.1	11

#	Article	IF	CITATIONS
654	On estimating the directionality distribution in pedicle trabecular bone from micro-CT images. Physiological Measurement, 2014, 35, 2415-2428.	2.1	23
656	Absence of substance P and the sympathetic nervous system impact on bone structure and chondrocyte differentiation in an adult model of endochondral ossification. Matrix Biology, 2014, 38, 22-35.	3.6	73
657	Characterization of knee osteoarthritis-related changes in trabecular bone using texture parameters at various levels of spatial resolution—a simulation study. BoneKEy Reports, 2014, 3, 615.	2.7	5
658	The 2014 ABJS Nicolas Andry Award: The Puzzle of the Thumb: Mobility, Stability, and Demands in Opposition. Clinical Orthopaedics and Related Research, 2014, 472, 3605-3622.	1.5	50
659	Early Changes in Bone Density, Microarchitecture, Bone Resorption, and Inflammation Predict the Clinical Outcome 12 Weeks After Conservatively Treated Distal Radius Fractures: An Exploratory Study. Journal of Bone and Mineral Research, 2014, 29, 2065-2073.	2.8	23
660	Image interpolation allows accurate quantitative bone morphometry in registered micro-computed tomography scans. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 539-548.	1.6	28
661	Assessment of Bone Microarchitecture in Postmenopausal Women on Long-Term Bisphosphonate Therapy With Atypical Fractures of the Femur. Journal of Bone and Mineral Research, 2014, 29, 999-1004.	2.8	27
662	Difficulties arising from different definitions of tortuosity for wave propagation in saturated poroelastic media models. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2014, 94, 694-704.	1.6	1
663	Limitations of Global Morphometry in Predicting Trabecular Bone Failure. Journal of Bone and Mineral Research, 2014, 29, 134-141.	2.8	10
664	Accuracy of trabecular bone microstructural measurement at planned dental implant sites using coneâ€beam <scp>CT</scp> datasets. Clinical Oral Implants Research, 2014, 25, 941-945.	4.5	52
665	Lower Cortical Porosity and Higher Tissue Mineral Density in Chinese American Versus White Women. Journal of Bone and Mineral Research, 2014, 29, 551-561.	2.8	32
666	A Narrative Review of Morphology of Cancellous Bone at Different Human Anatomy - Methods and Parameters. Applied Mechanics and Materials, 0, 695, 567-571.	0.2	1
667	Kidney Transplantation with Early Corticosteroid Withdrawal. Journal of the American Society of Nephrology: JASN, 2014, 25, 1331-1341.	6.1	78
668	Snow Height Determination by Polarimetric Phase Differences in X-Band SAR Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3794-3810.	4.9	78
669	Effect of sterilization on structural and material properties of 3-D silk fibroin scaffolds. Acta Biomaterialia, 2014, 10, 308-317.	8.3	60
670	MHC Class II Transactivator Is an In Vivo Regulator of Osteoclast Differentiation and Bone Homeostasis Co-opted From Adaptive Immunity. Journal of Bone and Mineral Research, 2014, 29, 290-303.	2.8	15
671	Non-destructive assessment of human ribs mechanical properties using quantitative ultrasound. Journal of Biomechanics, 2014, 47, 1548-1553.	2.1	6
672	The influence of disuse on bone microstructure and mechanics assessed by HR-pQCT. Bone, 2014, 63, 132-140.	2.9	66

#	Article	IF	CITATIONS
673	Creep of trabecular bone from the human proximal tibia. Materials Science and Engineering C, 2014, 40, 219-227.	7.3	21
674	The effect of sodium chloride solution on the hardness of compacted snow. Cold Regions Science and Technology, 2014, 102, 1-7.	3.5	28
675	Does cancellous screw insertion torque depend on bone mineral density and/or microarchitecture?. Journal of Biomechanics, 2014, 47, 347-353.	2.1	25
676	Assessment of the healing process in distal radius fractures by high resolution peripheral quantitative computed tomography. Bone, 2014, 64, 65-74.	2.9	47
677	Dependence of mechanical properties of trabecular bone on plate–rod microstructure determined by individual trabecula segmentation (ITS). Journal of Biomechanics, 2014, 47, 702-708.	2.1	56
678	Challenges in longitudinal measurements with HR-pQCT: Evaluation of a 3D registration method to improve bone microarchitecture and strength measurement reproducibility. Bone, 2014, 63, 147-157.	2.9	80
679	Growth Factors Engineered for Super-Affinity to the Extracellular Matrix Enhance Tissue Healing. Science, 2014, 343, 885-888.	12.6	406
680	Combined Effects of Botulinum Toxin Injection and Hind Limb Unloading on Bone and Muscle. Calcified Tissue International, 2014, 94, 327-337.	3.1	40
681	A new method for preparing tannin-based foams. Industrial Crops and Products, 2014, 54, 40-53.	5.2	76
682	Bone Histomorphometry of Transiliac Paired Bone Biopsies After 6 or 12 Months of Treatment With Oral Strontium Ranelate in 387 Osteoporotic Women: Randomized Comparison to Alendronate. Journal of Bone and Mineral Research, 2014, 29, 618-628.	2.8	57
683	CT Imaging Biomarker for Evaluation of Emodin as a Potential Drug on LPS-mediated Osteoporosis Mice. Academic Radiology, 2014, 21, 457-462.	2.5	15
684	Modeling of the dielectric properties of trabecular bone samples at microwave frequency. Medical and Biological Engineering and Computing, 2014, 52, 439-447.	2.8	20
685	Injectable and porous PLGA microspheres that form highly porous scaffolds at body temperature. Acta Biomaterialia, 2014, 10, 5090-5098.	8.3	94
686	Fibromodulin and Biglycan Modulate Periodontium through TGFβ/BMP Signaling. Journal of Dental Research, 2014, 93, 780-787.	5.2	29
687	Beyond the Sniffer: Frontal Sinuses in Carnivora. Anatomical Record, 2014, 297, 2047-2064.	1.4	37
688	Mechanical loading leads to osteoarthritis-like changes in the hypofunctional temporomandibular joint in rats. Archives of Oral Biology, 2014, 59, 1368-1376.	1.8	34
689	Improved Trabecular Bone Structure of 20-Month-Old Male Spontaneously Hypertensive Rats. Calcified Tissue International, 2014, 95, 282-291.	3.1	8
690	A Network Modeling Approach for the Spatial Distribution and Structure of Bone Mineral Content. AAPS Journal, 2014, 16, 478-487.	4.4	1

#	Article	IF	CITATIONS
691	Micro-imaging of implanted scaffolds using combined MRI and micro-CT. Computerized Medical Imaging and Graphics, 2014, 38, 458-468.	5.8	22
692	On the Road to Personalized Medicine: Multiscale Computational Modeling of Bone Tissue. Archives of Computational Methods in Engineering, 2014, 21, 399-479.	10.2	25
693	Effects of glucosamine and risedronate alone or in combination in an experimental rabbit model of osteoarthritis. BMC Veterinary Research, 2014, 10, 97.	1.9	14
694	Porous poly(para-phenylene) scaffolds for load-bearing orthopedic applications. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 30, 347-357.	3.1	20
695	Therapeutic potential of adipose-derived stromal cells in age-related osteoporosis. Biomaterials, 2014, 35, 7326-7335.	11.4	55
696	2D/3D Quantification of bone morphometric parameter changes using X-ray microtomograpphy with different pixel sizes. Radiation Physics and Chemistry, 2014, 95, 227-229.	2.8	2
697	Radiological and micro omputed tomography analysis of the bone at dental implants inserted 2, 3 and 4Âmm apart in a minipig model with platform switching incorporated. Clinical Oral Implants Research, 2014, 25, e22-9.	4.5	19
698	Trabecular bone score: perspectives of an imaging technology coming of age. Arquivos Brasileiros De Endocrinologia E Metabologia, 2014, 58, 493-503.	1.3	51
699	Bone Volume Fraction and Fabric Anisotropy Are Better Determinants of Trabecular Bone Stiffness Than Other Morphological Variables. Journal of Bone and Mineral Research, 2015, 30, 1000-1008.	2.8	131
700	A Nonterminal Equine Mandibular Model of Bone Healing. Veterinary Surgery, 2015, 44, 314-321.	1.0	4
701	Neural networks for analysis of trabecular bone in osteoarthritis. Bioinspired, Biomimetic and Nanobiomaterials, 2015, 4, 90-100.	0.9	19
702	Density, specific surface area, and correlation length of snow measured by highâ€resolution penetrometry. Journal of Geophysical Research F: Earth Surface, 2015, 120, 346-362.	2.8	112
703	A Novel, Stable, Estradiol-Stimulating, Osteogenic Yam Protein with Potential for the Treatment of Menopausal Syndrome. Scientific Reports, 2015, 5, 10179.	3.3	18
704	Characterization of trabecular bone plateâ€rod microarchitecture using multirow detector CT and the tensor scale: Algorithms, validation, and applications to pilot human studies. Medical Physics, 2015, 42, 5410-5425.	3.0	22
705	The micro-architecture of human cancellous bone from fracture neck of femur patients in relation to the structural integrity and fracture toughness of the tissue. Bone Reports, 2015, 3, 67-75.	0.4	39
706	Efficacy of a small cell-binding peptide coated hydroxyapatite substitute on bone formation and implant fixation in sheep. Journal of Biomedical Materials Research - Part A, 2015, 103, 1357-1365.	4.0	16
707	Textons for 3D Binary Data with Applications to Classifying Cancellous Bone. , 2015, , .		3
708	Collaborative cross mice in a genetic association study reveal new candidate genes for bone microarchitecture. BMC Genomics, 2015, 16, 1013.	2.8	39

#	Article	IF	CITATIONS
709	Alginate–Hydroxyapatite Bone Scaffolds with Isotropic or Anisotropic Pore Structure: Material Properties and Biological Behavior. Macromolecular Materials and Engineering, 2015, 300, 989-1000.	3.6	29
710	Early Trabecular Development in Human Vertebrae: Overproduction, Constructive Regression, and Refinement. Frontiers in Endocrinology, 2015, 6, 67.	3.5	35
711	mTORC1 Prevents Preosteoblast Differentiation through the Notch Signaling Pathway. PLoS Genetics, 2015, 11, e1005426.	3.5	78
712	Registering 2D and 3D imaging data of bone during healing. Connective Tissue Research, 2015, 56, 133-143.	2.3	9
713	Influence of age and gender on microarchitecture and bone remodeling in subchondral bone of the osteoarthritic femoral head. Bone, 2015, 77, 91-97.	2.9	31
714	Modic (endplate) changes in the lumbar spine: bone micro-architecture and remodelling. European Spine Journal, 2015, 24, 1926-1934.	2.2	61
715	Development of trabecular bone surrogates for kyphoplasty-balloon dilatation training. , 2015, 2015, 5106-9.		2
716	The effect of BMP-7 gene activated muscle tissue implants on the repair of large segmental bone defects. Injury, 2015, 46, 2351-2358.	1.7	14
717	Human trabecular bone microarchitecture can be assessed independently of density with second generation HR-pQCT. Bone, 2015, 79, 213-221.	2.9	138
718	High-strength, surface-porous polyether-ether-ketone for load-bearing orthopedic implants. Acta Biomaterialia, 2015, 13, 159-167.	8.3	158
719	Effect of fetal bovine serum on mineralization in silk fibroin scaffolds. Acta Biomaterialia, 2015, 13, 277-285.	8.3	53
720	Strain energy density gradients in bone marrow predict osteoblast and osteoclast activity: A finite element study. Journal of Biomechanics, 2015, 48, 866-874.	2.1	38
722	Age-related changes in vertebral and iliac crest 3D bone microstructure—differences and similarities. Osteoporosis International, 2015, 26, 219-228.	3.1	26
723	Effects of vertebroplasty on endplate subsidence in elderly female spines. Journal of Neurosurgery: Spine, 2015, 22, 273-282.	1.7	15
724	Does mechanical stimulation really protect the architecture of trabecular bone? A simulation study. Biomechanics and Modeling in Mechanobiology, 2015, 14, 795-805.	2.8	4
725	Regional Variations in Trabecular Morphological Features of Femoral Head of Patients with Proximal Femoral Fractures. Journal of Bionic Engineering, 2015, 12, 294-303.	5.0	1
726	TBS reflects trabecular microarchitecture in premenopausal women and men with idiopathic osteoporosis and low-traumatic fractures. Bone, 2015, 79, 259-266.	2.9	119
727	Effects of infrared laser on the bone repair assessed by x-ray microtomography (μct) and histomorphometry. , 2015, , .		1

#	Article	IF	CITATIONS
728	Biomechanics and Mechanobiology of Trabecular Bone: A Review. Journal of Biomechanical Engineering, 2015, 137, .	1.3	286
729	Nonlinear attenuation and dispersion in human calcaneusin vitro: Statistical validation and relationships to microarchitecture. Journal of the Acoustical Society of America, 2015, 137, 1126-1133.	1.1	5
730	Multi-level femoral morphology and mechanical properties of rats of different ages. Bone, 2015, 76, 76-87.	2.9	33
731	Novel methodology for assessing biomaterial–biofluid interaction in cancellous bone. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 46, 158-167.	3.1	4
732	Insight into the 3D-trabecular architecture of the human patella. Annals of Anatomy, 2015, 200, 98-104.	1.9	20
733	Femoral bone mesoscale structural architecture prediction using musculoskeletal and finite element modelling. International Biomechanics, 2015, 2, 43-61.	1.0	52
734	Selective laser sintering of aliphatic-polycarbonate/hydroxyapatite composite scaffolds for medical applications. International Journal of Advanced Manufacturing Technology, 2015, 81, 15-25.	3.0	57
735	Effects of diacerein on cartilage and subchondral bone in early stages of osteoarthritis in a rabbit model. BMC Veterinary Research, 2015, 11, 143.	1.9	26
736	Comparison of various SYSADOA for the osteoarthritis treatment: an experimental study in rabbits. BMC Musculoskeletal Disorders, 2015, 16, 120.	1.9	21
737	Osteopathology in the Equine Distal Phalanx Associated With the Development and Progression of Laminitis. Veterinary Pathology, 2015, 52, 928-944.	1.7	24
738	Effect of fluoxetine on induced tooth movement in rats. American Journal of Orthodontics and Dentofacial Orthopedics, 2015, 148, 450-456.	1.7	15
739	A versatile x-ray microtomography station for biomedical imaging and materials research. Review of Scientific Instruments, 2015, 86, 063705.	1.3	15
740	Impact of screw location and endplate preparation on pullout strength for anterior plates and integrated fixation cages. Spine Journal, 2015, 15, 2425-2432.	1.3	13
741	3D <scp>B</scp> ioprinting of complex channels—Effects of material, orientation, geometry, and cell embedding. Journal of Biomedical Materials Research - Part A, 2015, 103, 2558-2570.	4.0	52
742	Gracility of the modern <i>Homo sapiens</i> skeleton is the result of decreased biomechanical loading. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 372-377.	7.1	146
743	Endochondral bone formation in gelatin methacrylamide hydrogel with embedded cartilage-derived matrix particles. Biomaterials, 2015, 37, 174-182.	11.4	153
744	Interspecies comparison of subchondral bone properties important for cartilage repair. Journal of Orthopaedic Research, 2015, 33, 63-70.	2.3	46
745	Bone Response to Mechanical Loads. , 2015, , 107-125.		0

#	Article	IF	CITATIONS
746	Sensitivity of snow density and specific surface area measured by microtomography to different image processing algorithms. Cryosphere, 2016, 10, 1039-1054.	3.9	30
747	Anisotropy of seasonal snow measured by polarimetric phase differences in radar time series. Cryosphere, 2016, 10, 1771-1797.	3.9	43
748	Limited Trabecular Bone Density Heterogeneity in the Human Skeleton. Anatomy Research International, 2016, 2016, 1-7.	1.1	15
749	BMP6-Engineered MSCs Induce Vertebral Bone Repair in a Pig Model: A Pilot Study. Stem Cells International, 2016, 2016, 1-8.	2.5	27
750	Modeling the Mechanical Consequences of Age-Related Trabecular Bone Loss by XFEM Simulation. Computational and Mathematical Methods in Medicine, 2016, 2016, 1-12.	1.3	8
751	Preparation and in vivo evaluation of an orally available enteric-microencapsulated parathyroid hormone (1-34)-deoxycholic acid nanocomplex. International Journal of Nanomedicine, 2016, Volume 11, 4231-4246.	6.7	10
752	Human Induced Pluripotent Stem Cells Differentiate Into Functional Mesenchymal Stem Cells and Repair Bone Defects. Stem Cells Translational Medicine, 2016, 5, 1447-1460.	3.3	106
753	Effects of Parathyroid Hormone Administration on Bone Strength in Hypoparathyroidism. Journal of Bone and Mineral Research, 2016, 31, 1082-1088.	2.8	18
754	Fracture Repair in the Distal Radius in Postmenopausal Women: A Follow-Up 2 Years Postfracture Using HRpQCT. Journal of Bone and Mineral Research, 2016, 31, 1114-1122.	2.8	31
755	Experimental validation of a nonlinear <i>μ</i> FE model based on cohesiveâ€frictional plasticity for trabecular bone. International Journal for Numerical Methods in Biomedical Engineering, 2016, 32, e02739.	2.1	36
756	Micro-CT Structural Analysis of the Canine Medial Coronoid Disease. Veterinary Surgery, 2016, 45, 336-346.	1.0	17
757	Trabecular network arrangement within the human patella: how osteoarthritis remodels the 3D trabecular structure. Proceedings of SPIE, 2016, , .	0.8	0
758	Internal Bone Architecture in the Zygoma of Human and <i>Pan</i> . Anatomical Record, 2016, 299, 1704-1717.	1.4	5
759	Comparisons of Anterior Plate Screw Pullout Strength Between Polyurethane Foams and Thoracolumbar Cadaveric Vertebrae. Journal of Biomechanical Engineering, 2016, 138, .	1.3	28
760	The vertebral trabecular model revisited: magnetic field distribution in the vicinity of osseous disconnections. Physics in Medicine and Biology, 2016, 61, N618-N631.	3.0	0
761	Bone microstructure in men assessed by HR-pQCT: Associations with risk factors and differences between men with normal, low, and osteoporosis-range areal BMD. Bone Reports, 2016, 5, 312-319.	0.4	7
762	Diabetes and disordered bone metabolism (diabetic osteodystrophy): time for recognition. Osteoporosis International, 2016, 27, 1931-1951.	3.1	37
763	Treatment of acromegaly increases BMD but reduces trabecular bone score: a longitudinal study. European Journal of Endocrinology, 2016, 175, 155-164.	3.7	46

#	Article	IF	CITATIONS
764	Do Surface Porosity and Pore Size Influence Mechanical Properties and Cellular Response to PEEK?. Clinical Orthopaedics and Related Research, 2016, 474, 2373-2383.	1.5	66
765	Efficient storage of microCT data preserving bone morphometry assessment. Computers and Electrical Engineering, 2016, 53, 292-300.	4.8	ο
766	Synthesis and performance of iron oxide-based porous ceramsite in a biological aerated filter for the simultaneous removal of nitrogen and phosphorus from domestic wastewater. Separation and Purification Technology, 2016, 167, 154-162.	7.9	48
767	Effect of a Cast on Short-Term Reproducibility and Bone Parameters Obtained from HR-pQCT Measurements at the Distal End of the Radius. Journal of Bone and Joint Surgery - Series A, 2016, 98, 356-362.	3.0	15
768	Micro T scouting for transmission electron microscopy of human tissue specimens. Journal of Microscopy, 2016, 263, 113-117.	1.8	27
769	Mechanical properties of cortical bone and their relationships with age, gender, composition and microindentation properties in the elderly. Bone, 2016, 93, 196-211.	2.9	207
770	Biomechanical properties of lumbar endplates and their correlation with MRI findings of lumbar degeneration. Journal of Biomechanics, 2016, 49, 586-593.	2.1	28
771	In vivo assessment of bone structure and estimated bone strength by first- and second-generation HR-pQCT. Osteoporosis International, 2016, 27, 2955-2966.	3.1	46
772	Effect of micro-computed tomography voxel size and segmentation method on trabecular bone microstructure measures in mice. Bone Reports, 2016, 5, 136-140.	0.4	71
773	A new magnetic resonance-based technique for high-resolution quantification of amorphous and quasi-amorphous structures. Journal of the Royal Society Interface, 2016, 13, 20160589.	3.4	0
774	Finite Element-Based Mechanical Assessment of Bone Quality on the Basis of In Vivo Images. Current Osteoporosis Reports, 2016, 14, 374-385.	3.6	31
775	Identification of elastic properties of human patellae using micro-finite element analysis. Journal of Biomechanics, 2016, 49, 3111-3115.	2.1	8
776	An expedited approach for sustained delivery of bone morphogenetic proteinâ€7 to bone defects using gene activated fragments of subcutaneous fat. Journal of Gene Medicine, 2016, 18, 199-207.	2.8	10
777	Inter-trabecular angle: A parameter of trabecular bone architecture in the human proximal femur that reveals underlying topological motifs. Acta Biomaterialia, 2016, 44, 65-72.	8.3	41
778	Synthesis, application and evaluation of non-sintered zeolite porous filter (ZPF) as novel filter media in biological aerated filters (BAFs). Journal of Environmental Chemical Engineering, 2016, 4, 3374-3384.	6.7	20
779	Osteoporosis and Imaging: The Big Picture. Journal of Radiology Nursing, 2016, 35, 97-110.	0.4	0
780	Osteocyte lacunar properties and cortical microstructure in human iliac crest as a function of age and sex. Bone, 2016, 91, 11-19.	2.9	49
781	Performance and characterization of a non-sintered zeolite porous filter for the simultaneous removal of nitrogen and phosphorus in a biological aerated filter (BAF). RSC Advances, 2016, 6, 50217-50227.	3.6	7

#	Article	IF	CITATIONS
782	Inhibition of IL-1R1/MyD88 signalling promotes mesenchymal stem cell-driven tissue regeneration. Nature Communications, 2016, 7, 11051.	12.8	104
783	The influence of curvature on three-dimensional mineralized matrix formation under static and perfused conditions: an in vitro bioreactor model. Journal of the Royal Society Interface, 2016, 13, 20160425.	3.4	24
784	Effect of Denosumab on Peripheral Compartmental Bone Density, Microarchitecture and Estimated Bone Strength in <i>De Novo</i> Kidney Transplant Recipients. Kidney and Blood Pressure Research, 2016, 41, 614-622.	2.0	16
785	Poly (L-Lactic Acid) Porous Scaffold-Supported Alginate Hydrogel with Improved Mechanical Properties and Biocompatibility. International Journal of Artificial Organs, 2016, 39, 435-443.	1.4	14
786	Thermo-mechanical behavior and structure of melt blown shape-memory polyurethane nonwovens. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 62, 545-555.	3.1	23
787	Clinical cone beam computed tomography compared to high-resolution peripheral computed tomography in the assessment of distal radius bone. Osteoporosis International, 2016, 27, 3073-3082.	3.1	20
788	Femoral subchondral bone properties of patients with cam-type femoroacetabular impingement. Osteoarthritis and Cartilage, 2016, 24, 1000-1006.	1.3	4
789	Biglycan potentially regulates angiogenesis during fracture repair by altering expression and function of endostatin. Matrix Biology, 2016, 52-54, 141-150.	3.6	39
790	Novel methods for microCT-based analyses of vasculature in the renal cortex reveal a loss of perfusable arterioles and glomeruli in eNOS-/- mice. BMC Nephrology, 2016, 17, 24.	1.8	33
791	Using porous bioceramic scaffolds to model healthy and osteoporotic bone. Journal of the European Ceramic Society, 2016, 36, 2175-2182.	5.7	52
792	Mechanically Tunable Curcumin Incorporated Polyurethane Hydrogels as Potential Biomaterials. Chemistry of Materials, 2016, 28, 2120-2130.	6.7	40
793	Assessment of activated porous granules on implant fixation and early bone formation in sheep. Journal of Orthopaedic Translation, 2016, 5, 38-47.	3.9	7
794	Impact of surface porosity and topography on the mechanical behavior of high strength biomedical polymers. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 59, 459-473.	3.1	31
795	3D X-ray ultra-microscopy of bone tissue. Osteoporosis International, 2016, 27, 441-455.	3.1	29
796	Molecular mechanisms of osteoporotic hip fractures in elderly women. Experimental Gerontology, 2016, 73, 49-58.	2.8	23
797	Influence of trabecular bone quality and implantation direction on pressâ€fit mechanics. Journal of Orthopaedic Research, 2017, 35, 224-233.	2.3	14
798	Influence of different calcium phosphate ceramics on growth and differentiation of cells in osteoblast-endothelial co-cultures. , 2017, 105, 1950-1962.		18
799	μCT-based trabecular anisotropy can be reproducibly computed from HR-pQCT scans using the triangulated bone surface. Bone, 2017, 97, 114-120.	2.9	14

	CITATION	Report	
#	Article	IF	CITATIONS
800	lliac crest histomorphometry and skeletal heterogeneity in men. Bone Reports, 2017, 6, 9-16.	0.4	11
801	The layered evolution of fabric and microstructure of snow at Point Barnola, Central East Antarctica. Earth and Planetary Science Letters, 2017, 460, 293-301.	4.4	14
802	A Conditional Knockout Mouse Model Reveals a Critical Role of PKD1 in Osteoblast Differentiation and Bone Development. Scientific Reports, 2017, 7, 40505.	3.3	19
803	Scaling of titanium implants entrains inflammation-induced osteolysis. Scientific Reports, 2017, 7, 39612.	3.3	80
804	Anisotropic Permeability of Trabecular Bone and its Relationship to Fabric and Architecture: A Computational Study. Annals of Biomedical Engineering, 2017, 45, 1543-1554.	2.5	5
805	Healing efficacy of fracture-targeted GSK3β inhibitor-loaded micelles for improved fracture repair. Nanomedicine, 2017, 12, 185-193.	3.3	11
806	Time Dependent Behaviour of Trabecular Bone at Multiple Load Levels. Annals of Biomedical Engineering, 2017, 45, 1219-1226.	2.5	22
807	Quantifying the micro-architectural similarity of bioceramic scaffolds to bone. Ceramics International, 2017, 43, 9443-9450.	4.8	18
808	Oral infection with <i>Porphyromonas gingivalis</i> induces periâ€implantitis in a murine model: Evaluation of bone loss and the local inflammatory response. Journal of Clinical Periodontology, 2017, 44, 739-748.	4.9	43
809	VALIDATION OF A BONE MINERAL DENSITY CALIBRATION PROTOCOL FOR MICRO-COMPUTED TOMOGRAPHY. Journal of Mechanics in Medicine and Biology, 2017, 17, 1750015.	0.7	1
810	Bone Microarchitecture and Biomechanics of the Necrotic Femoral Head. Scientific Reports, 2017, 7, 13345.	3.3	32
811	Femoral head trabecular micro-architecture in patients with osteoporotic hip fractures: Impact of bisphosphonate treatment. Bone, 2017, 105, 148-153.	2.9	5
812	Influence of the shape of the micro-finite element model on the mechanical properties calculated from micro-finite element analysis. Experimental and Therapeutic Medicine, 2017, 14, 1744-1748.	1.8	1
813	Fabrication of Trabecular Boneâ€Templated Tissueâ€Engineered Constructs by 3D Inkjet Printing. Advanced Healthcare Materials, 2017, 6, 1700369.	7.6	19
814	Solid-state 31P and 1H chemical MR micro-imaging of hard tissues and biomaterials with magic angle spinning at very high magnetic field. Scientific Reports, 2017, 7, 8224.	3.3	10
815	Skeletal Site-specific Changes in Bone Mass in a Genetic Mouse Model for Human 15q11-13 Duplication Seen in Autism. Scientific Reports, 2017, 7, 9902.	3.3	17
816	Getting PEEK to Stick to Bone: The Development of Porous PEEK for Interbody Fusion Devices. Techniques in Orthopaedics, 2017, 32, 158-166.	0.2	67
817	Statistical analysis of the inter-individual variations of the bone shape, volume fraction and fabric and their correlations in the proximal femur. Bone, 2017, 103, 252-261.	2.9	13

#	ARTICLE Soft-tissue thickness compensation for ultrasound transit time spectroscopy estimated bone volume fraction—an experimental replication study. Biomedical Physics and Engineering Express, 2017, 3,	IF 1.2	Citations 4
819	045013. Micro-computed tomography characterization of tissue engineering scaffolds: effects of pixel size	3.6	26
820	Treatment of sarcopenia and glucose intolerance through mitochondrial activation by	3.3	21
821	Relationships among ultrasonic and mechanical properties of cancellous bone in human calcaneus in vitro. Bone, 2017, 103, 93-101.	2.9	28
822	Microstructure study of normal lunates with micro-computed tomography. Journal of Huazhong University of Science and Technology [Medical Sciences], 2017, 37, 384-389.	1.0	2
823	Automatic outer surface extraction of femoral head in CT images. Journal of Shanghai Jiaotong University (Science), 2017, 22, 377-384.	0.9	0
825	Cortical Bony Thickening of the Lateral Intercondylar Wall: The Functional Attachment of the Anterior Cruciate Ligament. American Journal of Sports Medicine, 2017, 45, 394-402.	4.2	14
826	Not only stiffness, but also yield strength of the trabecular structure determined by non-linear µFE is best predicted by bone volume fraction and fabric tensor. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 808-813.	3.1	48
827	Silk fibroin scaffolds with inverse opal structure for bone tissue engineering. , 2017, 105, 2074-2084.		39
828	Microstructural study of the lunate in stage III Kienböck's disease with micro-computed tomography imaging. Journal of Hand Surgery: European Volume, 2017, 42, 71-77.	1.0	7
829	3D perfusion bioreactorâ€activated porous granules on implant fixation and early bone formation in sheep. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2017, 105, 2465-2476.	3.4	2
830	Altered architecture and cell populations affect bone marrow mechanobiology in the osteoporotic human femur. Biomechanics and Modeling in Mechanobiology, 2017, 16, 841-850.	2.8	11
831	Osteoarthritis alters the patellar bones subchondral trabecular architecture. Journal of Orthopaedic Research, 2017, 35, 1982-1989.	2.3	3
832	Local deformation behavior of surface porous polyether-ether-ketone. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 522-532.	3.1	28
833	Yougui Pills Attenuate Cartilage Degeneration via Activation of TGF-β/Smad Signaling in Chondrocyte of Osteoarthritic Mouse Model. Frontiers in Pharmacology, 2017, 8, 611.	3.5	16
834	Tissue Engineering Approaches in the Design of Healthy and Pathological In Vitro Tissue Models. Frontiers in Bioengineering and Biotechnology, 2017, 5, 40.	4.1	185
835	3.24 Magnetic Resonance of Bone Microstructure and Chemistry â~†. , 2017, , 519-534.		1
836	Fully automated segmentation of callus by micro-CT compared to biomechanics. Journal of Orthopaedic Surgery and Research, 2017, 12, 108.	2.3	7

#	Article	IF	CITATIONS
837	Image-Based Histological Evaluation of Scaffold-Free 3D Osteoblast Cultures. Journal of Functional Morphology and Kinesiology, 2017, 2, 42.	2.4	1
838	Local delivery of HMGB1 in gelatin sponge scaffolds combined with mesenchymal stem cell sheets to accelerate fracture healing. Oncotarget, 2017, 8, 42098-42115.	1.8	27
839	Characterization of a polymer, open-cell rigid foam that simulates the ultrasonic properties of cancellous bone. Journal of the Acoustical Society of America, 2018, 143, 911-920.	1.1	12
840	Effect of porous orthopaedic implant material and structure on load sharing with simulated bone ingrowth: A finite element analysis comparing titanium and PEEK. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 80, 68-76.	3.1	91
841	In vitro assessments of bone microcomputed tomography in an aged male rat model supplemented with Panax ginseng. Saudi Journal of Biological Sciences, 2018, 25, 1135-1139.	3.8	7
842	Volumetric Bone Mineral Density and Failure Load of Distal Limbs Predict Incident Clinical Fracture Independent of FRAX and Clinical Risk Factors Among Older Men. Journal of Bone and Mineral Research, 2018, 33, 1302-1311.	2.8	57
843	Cuttlebone as a Marine-Derived Material for Preparing Bone Grafts. Marine Biotechnology, 2018, 20, 363-374.	2.4	12
844	Site-1 protease regulates skeletal stem cell population and osteogenic differentiation in mice. Biology Open, 2018, 7, .	1.2	5
845	Impaction durability of porous polyether-ether-ketone (PEEK) and titanium-coated PEEK interbody fusion devices. Spine Journal, 2018, 18, 857-865.	1.3	57
846	Bioactive solâ€gel glasses: Processing, properties, and applications. International Journal of Applied Ceramic Technology, 2018, 15, 841-860.	2.1	124
847	Systemic patterns of trabecular bone across the human and chimpanzee skeleton. Journal of Anatomy, 2018, 232, 641-656.	1.5	41
848	Injectable, Tough Alginate Cryogels as Cancer Vaccines. Advanced Healthcare Materials, 2018, 7, e1701469.	7.6	96
849	Age-related regulation of bone formation by the sympathetic cannabinoid CB1 receptor. Bone, 2018, 108, 34-42.	2.9	20
850	Utilité du scanner périphérique à haute résolution dans la prise en charge des maladies ostéoarticulaires. Revue Du Rhumatisme (Edition Francaise), 2018, 85, 138-145.	0.0	0
851	Computational study of estimating 3D trabecular bone microstructure for the volume of interest from CT scan data. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2950.	2.1	17
852	Polymerase delta-interacting protein 2 deficiency protects against blood-brain barrier permeability in the ischemic brain. Journal of Neuroinflammation, 2018, 15, 45.	7.2	23
853	Bushenhuoxue formula attenuates cartilage degeneration in an osteoarthritic mouse model through TGF-β/MMP13 signaling. Journal of Translational Medicine, 2018, 16, 72.	4.4	27
854	Commonality in the microarchitecture of trabecular bone: A preliminary study. Bone, 2018, 111, 59-70.	2.9	13

#	Article	IF	CITATIONS
855	Weight loss in men in late life and bone strength and microarchitecture: a prospective study. Osteoporosis International, 2018, 29, 1549-1558.	3.1	15
856	Ectopic implantation of juvenile osteochondral tissues recapitulates endochondral ossification. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 468-478.	2.7	6
857	Contribution of high resolution peripheral quantitative CT to the management of bone and joint diseases. Joint Bone Spine, 2018, 85, 301-306.	1.6	15
858	Interactive design and manufacturing of a Voronoi-based biomimetic bone scaffold for morphological characterization. International Journal on Interactive Design and Manufacturing, 2018, 12, 585-596.	2.2	41
859	High dairy protein intake is associated with greater bone strength parameters at the distal radius and tibia in older men: a cross-sectional study. Osteoporosis International, 2018, 29, 69-77.	3.1	29
860	Tracking the Progression of Osteolytic and Osteosclerotic Lesions in Mice Using Serial In Vivo μCT: Applications to the Assessment of Bisphosphonate Treatment Efficacy. Journal of Bone and Mineral Research, 2018, 33, 410-418.	2.8	3
861	Bone volume fraction and structural parameters for estimation of mechanical stiffness and failure load of human cancellous bone samples; in-vitro comparison of ultrasound transit time spectroscopy and X-ray μCT. Bone, 2018, 107, 145-153.	2.9	22
862	A High Precision Deep-CNN Framework for Classification of Metabolic Bone Diseases Among Women. , 2018, , .		4
863	In-Line X-Ray Phase Tomography of Bone and Biomaterials for Regenerative Medicine. Fundamental Biomedical Technologies, 2018, , 91-109.	0.2	0
864	Segmentation of the Proximal Femur from MR Images using Deep Convolutional Neural Networks. Scientific Reports, 2018, 8, 16485.	3.3	122
865	Localisation of mineralised tissue in a complex spinner flask environment correlates with predicted wall shear stress level localisation. , 2018, 36, 57-68.		44
866	Age-Related Changes in Femoral Head Trabecular Microarchitecture. , 2018, 9, 976.		20
867	Effects of Extracorporeal Shock Wave Therapy on Distraction Osteogenesis in Rat Mandible. Plastic and Reconstructive Surgery, 2018, 142, 1501-1509.	1.4	12
868	Micro-CT – a digital 3D microstructural voyage into scaffolds: a systematic review of the reported methods and results. Biomaterials Research, 2018, 22, 26.	6.9	70
869	Low temperature decreases bone mass in mice: Implications for humans. American Journal of Physical Anthropology, 2018, 167, 557-568.	2.1	21
870	Porous PEEK improves the bone-implant interface compared to plasma-sprayed titanium coating on PEEK. Biomaterials, 2018, 185, 106-116.	11.4	155
871	Investigation of Lake HévÃz Mineral Water Balneotherapy and HévÃz Mud Treatment in Murine Osteoarthritis and Rheumatoid Arthritis Models. Evidence-based Complementary and Alternative Medicine, 2018, 2018, 1-15.	1.2	12
872	<pre><scp>CD</scp>109 deficiency induces osteopenia with an osteoporosisâ€like phenotype in vivo. Genes To Cells, 2018, 23, 590-598.</pre>	1.2	14

#	Article	IF	CITATIONS
873	Deterioration of Cortical Bone Microarchitecture: Critical Component of Renal Osteodystrophy Evaluation. American Journal of Nephrology, 2018, 47, 376-384.	3.1	39
874	Comparison of Bone Grafts From Various Donor Sites in Human Bone Specimens. Journal of Craniofacial Surgery, 2018, 29, 1661-1665.	0.7	20
875	Magnetic resonance imaging based assessment of bone microstructure as a non-invasive alternative to histomorphometry in patients with chronic kidney disease. Bone, 2018, 114, 14-21.	2.9	26
876	Numerical comparison of lattice unit cell designs for medical implants by additive manufacturing. Virtual and Physical Prototyping, 2018, 13, 266-281.	10.4	107
877	Overview of Bone Structure and Strength. , 2018, , 197-208.		3
878	High-Resolution Imaging Techniques for Bone Quality Assessment. , 2018, , 1007-1041.		3
879	Resolvin D2 Restrains Th1 Immunity and Prevents Alveolar Bone Loss in Murine Periodontitis. Frontiers in Immunology, 2018, 9, 785.	4.8	53
880	A Decellularized Porcine Xenograft-Derived Bone Scaffold for Clinical Use as a Bone Graft Substitute: A Critical Evaluation of Processing and Structure. Journal of Functional Biomaterials, 2018, 9, 45.	4.4	47
881	Application of Composite Hydrogels to Control Physical Properties in Tissue Engineering and Regenerative Medicine. Gels, 2018, 4, 51.	4.5	30
882	Ultrasonic backscatter difference measurements of cancellous bone from the human femur: Relation to bone mineral density and microstructure. Journal of the Acoustical Society of America, 2018, 143, 3642-3653.	1.1	17
883	Accelerated Bone Loss in Older Men: Effects on Bone Microarchitecture and Strength. Journal of Bone and Mineral Research, 2018, 33, 1859-1869.	2.8	12
884	Effect of setting atmosphere on apatite cement resorption: An in vitro and in vivo study. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 88, 463-469.	3.1	6
885	Bone Mechanical Properties in Healthy and Diseased States. Annual Review of Biomedical Engineering, 2018, 20, 119-143.	12.3	451
886	The Accuracy of Cone-Beam Computed Tomography for Evaluating Bone Density and Cortical Bone Thickness at the Implant Site: Micro-Computed Tomography and Histologic Analysis. Journal of Craniofacial Surgery, 2018, 29, 2026-2031.	0.7	23
887	Female Human Spines with Simulated Osteolytic Defects: CT-based Structural Analysis of Vertebral Body Strength. Radiology, 2018, 288, 436-444.	7.3	11
888	Hormone-Independent Sexual Dimorphism in the Regulation of Bone Resorption by Krox20. Journal of Bone and Mineral Research, 2019, 34, 2277-2286.	2.8	7
889	Microenvironment engineering of osteoblastic bone metastases reveals osteomimicry of patient-derived prostate cancer xenografts. Biomaterials, 2019, 220, 119402.	11.4	28
890	Women With Pregnancy and Lactation–Associated Osteoporosis (PLO) Have Low Bone Remodeling Rates at the Tissue Level. Journal of Bone and Mineral Research, 2019, 34, 1552-1561.	2.8	32

#	Article	IF	CITATIONS
891	Nurse's A-Phase–Silicocarnotite Ceramic–Bone Tissue Interaction in a Rabbit Tibia Defect Model. Journal of Clinical Medicine, 2019, 8, 1714.	2.4	6
892	Bone regeneration on implants of titanium alloys produced by laser powder bed fusion: A review. , 2019, , 197-233.		23
893	Melatonin prevents bone destruction in mice with retinoic acid–induced osteoporosis. Molecular Medicine, 2019, 25, 43.	4.4	50
894	Orcinol glucoside facilitates the shift of MSC fate to osteoblast and prevents adipogenesis via Wnt/l²-catenin signaling pathway. Drug Design, Development and Therapy, 2019, Volume 13, 2703-2713.	4.3	13
895	Development of open-cell polyurethane-based bone surrogates for biomechanical testing of pedicle screws. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 97, 247-253.	3.1	7
896	Long-term functional outcome of distal radius fractures is associated with early post-fracture bone stiffness of the fracture region: An HR-pQCT exploratory study. Bone, 2019, 127, 510-516.	2.9	9
897	Ultrasonic backscatter characterization of cancellous bone using a general Nakagami statistical model. Chinese Physics B, 2019, 28, 024302.	1.4	7
898	Modelling the relationship between tensile strength and porosity in bioceramic scaffolds. International Journal of Applied Ceramic Technology, 2019, 16, 1823-1829.	2.1	3
899	High-Temperature Requirement A1 Protease as a Rate-Limiting Factor in the Development of Osteoarthritis. American Journal of Pathology, 2019, 189, 1423-1434.	3.8	15
900	Multi-level customized 3D printing for autogenous implants in skull tissue engineering. Biofabrication, 2019, 11, 045007.	7.1	26
901	Bone loss and biomechanical reduction of appendicular and axial bones under ketogenic diet in rats. Experimental and Therapeutic Medicine, 2019, 17, 2503-2510.	1.8	16
902	Homogenization of cortical bone reveals that the organization and shape of pores marginally affect elasticity. Journal of the Royal Society Interface, 2019, 16, 20180911.	3.4	20
903	Subregional areal bone mineral density (aBMD) is a better predictor of heterogeneity in trabecular microstructure of vertebrae in young and aged women than subregional trabecular bone score (TBS). Bone, 2019, 122, 156-165.	2.9	10
904	Melatonin Reverses the Loss of Stemness Induced by TNF- <i>α</i> in Human Bone Marrow Mesenchymal Stem Cells through Upregulation of YAP Expression. Stem Cells International, 2019, 2019, 1-16.	2.5	33
905	Ice Spheres as Model Snow: Tumbling, Sintering, and Mechanical Tests. Frontiers in Earth Science, 2019, 7, .	1.8	9
906	Type 2 Diabetes Mellitus Increases the Risk to Hip Fracture in Postmenopausal Osteoporosis by Deteriorating the Trabecular Bone Microarchitecture and Bone Mass. Journal of Diabetes Research, 2019, 2019, 1-10.	2.3	26
907	Bone surrogates provide authentic onlay graft fixation torques. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 91, 159-163.	3.1	2
908	Liposomal steroid nano-drug is superior to steroids as-is in mdx mouse model of Duchenne muscular dystrophy. Nanomedicine: Nanotechnology, Biology, and Medicine, 2019, 16, 34-44.	3.3	11

Cr	ΤΑΤ	ION	I Re	PO	RT

#	Article	IF	CITATIONS
909	Osteoconductive 3D porous composite scaffold from regenerated cellulose and cuttlebone-derived hydroxyapatite. Journal of Biomaterials Applications, 2019, 33, 876-890.	2.4	18
910	Architectural Design of 3D Printed Scaffolds Controls the Volume and Functionality of Newly Formed Bone. Advanced Healthcare Materials, 2019, 8, e1801353.	7.6	89
911	Laplace–Beltrami Operator on Digital Surfaces. Journal of Mathematical Imaging and Vision, 2019, 61, 359-379.	1.3	9
912	The Effects of Bone Microstructure on Subsidence Risk for ALIF, LLIF, PLIF, and TLIF Spine Cages. Journal of Biomechanical Engineering, 2019, 141, .	1.3	34
913	Biomimetic 3D Printing of Hierarchical and Interconnected Porous Hydroxyapatite Structures with High Mechanical Strength for Bone Cell Culture. Advanced Engineering Materials, 2019, 21, 1800678.	3.5	55
914	Functionally Graded Bioactive Glass-Derived Scaffolds Mimicking Bone Tissue. , 2019, , 443-466.		5
915	Loganin ameliorates cartilage degeneration and osteoarthritis development in an osteoarthritis mouse model through inhibition of NF-κB activity and pyroptosis in chondrocytes. Journal of Ethnopharmacology, 2020, 247, 112261.	4.1	80
916	Microimaging. , 2020, , 1833-1856.		1
917	The generation of enlarged eroded pores upon existing intracortical canals is a major contributor to endocortical trabecularization. Bone, 2020, 130, 115127.	2.9	13
918	Autologous blood coagulum is a physiological carrier for BMP6 to induce new bone formation and promote posterolateral lumbar spine fusion in rabbits. Journal of Tissue Engineering and Regenerative Medicine, 2020, 14, 147-159.	2.7	25
919	Growth factors with enhanced syndecan binding generate tonic signalling and promote tissue healing. Nature Biomedical Engineering, 2020, 4, 463-475.	22.5	53
920	How does mechanical stimulus affect the coupling process of the scaffold degradation and bone formation: An in silico approach. Computers in Biology and Medicine, 2020, 117, 103588.	7.0	9
921	Measurement of apparent mechanical properties of trabecular bone tissue: Accuracy and limitation of digital image correlation technique. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 103, 103542.	3.1	7
922	Effects of Surface Topography and Chemistry on Polyether-Ether-Ketone (PEEK) and Titanium Osseointegration. Spine, 2020, 45, E417-E424.	2.0	26
923	Trabecular architecture of the capitate and third metacarpal through ontogeny in chimpanzees (Pan) Tj ETQq0 0	0 rgBT /O	verlgck 10 Tf
924	Performance studies for dental implants: Methodological approach. , 2020, , 339-370.		1
925	Local and global microarchitecture is associated with different features of bone biomechanics. Bone Reports, 2020, 13, 100716.	0.4	4
926	Interspecies Comparison of Alveolar Bone Biology, Part I: Morphology and Physiology of Pristine Bone. JDR Clinical and Translational Research, 2021, 6, 352-360.	1.9	10

#	Article	IF	CITATIONS
927	Validation of HR-pQCT against micro-CT for morphometric and biomechanical analyses: A review. Bone Reports, 2020, 13, 100711.	0.4	7
928	Compression moulding and injection over moulding of porous PEEK components. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 111, 103996.	3.1	7
929	Reference Intervals for Bone Histomorphometric Measurements Based on Data from Healthy Premenopausal Women. Calcified Tissue International, 2020, 107, 543-550.	3.1	6
930	Differing trabecular bone architecture in dinosaurs and mammals contribute to stiffness and limits on bone strain. PLoS ONE, 2020, 15, e0237042.	2.5	4
931	Comparison of different microCT-based morphology assessment tools using human trabecular bone. Bone Reports, 2020, 12, 100261.	0.4	14
932	Varying development of femoral and tibial subchondral bone tissue and their interaction with articular cartilage during progressing osteoarthritis. Archives of Orthopaedic and Trauma Surgery, 2020, 140, 1919-1930.	2.4	4
933	Guidelines for the assessment of bone density and microarchitecture in vivo using high-resolution peripheral quantitative computed tomography. Osteoporosis International, 2020, 31, 1607-1627.	3.1	181
934	Poly‣ ″actide scaffolds with super pores obtained by freezeâ€extraction method. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2020, 108, 3162-3173.	3.4	5
935	Sex―and <scp>Siteâ€Specific</scp> Reference Data for Bone Microarchitecture in Adults Measured Using <scp>Secondâ€Generation HRâ€pQCT</scp> . Journal of Bone and Mineral Research, 2020, 35, 2151-2158.	2.8	38
936	Ageâ€, Siteâ€, and Sexâ€Specific Normative Centile Curves for <scp>HRâ€pQCT</scp> â€Derived Microarchitectural and Bone Strength Parameters in a Chinese Mainland Population. Journal of Bone and Mineral Research, 2020, 35, 2159-2170.	2.8	27
937	A novel mechanical parameter to quantify the microarchitecture effect on apparent modulus of trabecular bone: A computational analysis of ineffective bone mass. Bone, 2020, 135, 115314.	2.9	9
938	Angle of repose experiments with snow: role of grain shape and cohesion. Journal of Glaciology, 2020, 66, 658-666.	2.2	8
939	Age-Related Trends in the Trabecular Micro-Architecture of the Medial Clavicle: Is It of Use in Forensic Science?. Frontiers in Bioengineering and Biotechnology, 2019, 7, 467.	4.1	9
940	In vivo analysis of bone-tissue interface in medical grade titanium and porous titanium with and without cenosphere as space holder. Materialia, 2020, 9, 100623.	2.7	6
941	Study of the combined effects of PTH treatment and mechanical loading in postmenopausal osteoporosis using a new mechanistic PK-PD model. Biomechanics and Modeling in Mechanobiology, 2020, 19, 1765-1780.	2.8	13
942	Orbital seeding of mesenchymal stromal cells increases osteogenic differentiation and boneâ€like tissue formation. Journal of Orthopaedic Research, 2020, 38, 1228-1237.	2.3	24
943	Effects of porogen morphology on the architecture, permeability, and mechanical properties of hydroxyapatite whisker reinforced polyetheretherketone scaffolds. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 106, 103730.	3.1	18
944	Biocompatible liquid-crystal elastomers mimic the intervertebral disc. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 107, 103757.	3.1	44

#	Article	IF	Citations
945	Breaking new ground in mineralized tissue: Assessing tissue quality in clinical and laboratory studies. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 113, 104138.	3.1	9
946	Discrimination of Low-Energy Acetabular Fractures from Controls Using Computed Tomography-Based Bone Characteristics. Annals of Biomedical Engineering, 2021, 49, 367-381.	2.5	3
947	Are drug holidays a safe option in treatment of osteoporosis? — Insights from an in silico mechanistic PK–PD model of denosumab treatment of postmenopausal osteoporosis. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 113, 104140.	3.1	7
948	Heterogeneity in microstructural deterioration following spinal cord injury. Bone, 2021, 142, 115778.	2.9	10
949	Mice lacking substance P have normal bone modeling but diminished bone formation, increased resorption, and accelerated osteopenia with aging. Bone, 2021, 144, 115806.	2.9	6
950	Noninflammatory Stress-Induced Remodeling of Mandibular Bone: Impact of Age and Pregnancy. Journal of Oral and Maxillofacial Surgery, 2021, 79, 1147-1155.	1.2	5
951	Comprehensive assessment of bioactive glass and glass-ceramic scaffold permeability: experimental measurements by pressure wave drop, modelling and computed tomography-based analysis. Acta Biomaterialia, 2021, 119, 405-418.	8.3	21
953	The mechanical behavior of bone. , 2021, , 283-307.		1
955	Ultrasonic Bone Assessment: Ability of Apparent Backscatter Techniques to Detect Changes in the Microstructure of Human Cancellous Bone. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 3309-3325.	3.0	6
956	The nature of osteoporosis. , 2021, , 3-13.		Ο
957	Maternal vitamin B ₁₂ in mice positively regulates bone, but not muscle mass and strength in post-weaning and mature offspring. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2021, 320, R984-R993.	1.8	4
958	An Organoid for Woven Bone. Advanced Functional Materials, 2021, 31, 2010524.	14.9	65
959	Coaxial micro-extrusion of a calcium phosphate ink with aqueous solvents improves printing stability, structure fidelity and mechanical properties. Acta Biomaterialia, 2021, 125, 322-332.	8.3	7
960	Experimental Aqueous Alteration of Cortical Bone Microarchitecture Analyzed by Quantitative Micro-Computed Tomography. Frontiers in Earth Science, 2021, 9, .	1.8	4
961	Novel strategies for the characterization of cancellous bone morphology: Virtual isolation and analysis. American Journal of Physical Anthropology, 2021, 175, 920-930.	2.1	9
962	Physicochemical properties of 3D bovine natural scaffolds as a function of the anterior-posterior, lateral and superior-inferior directions. Materialia, 2021, 16, 101100.	2.7	5
963	Digital light processing stereolithography of hydroxyapatite scaffolds with boneâ€like architecture, permeability, and mechanical properties. Journal of the American Ceramic Society, 2022, 105, 1648-1657.	3.8	54
964	Recent Trends in the Development of Bone Regenerative Biomaterials. Frontiers in Cell and Developmental Biology, 2021, 9, 665813.	3.7	82

# 965	ARTICLE Bone quality in hypoparathyroidism. Minerva Endocrinology, 2021, 46, 325-334.	IF 1.1	CITATIONS
966	Quantitative measures of bone shape, cartilage morphometry and joint alignment are associated with disease in an ACLT and MMx rat model of osteoarthritis. Bone, 2021, 146, 115903.	2.9	8
967	Effects of Osteoporosis on Bone Morphometry and Material Properties of Individual Human Trabeculae in the Femoral Head. JBMR Plus, 2021, 5, e10503.	2.7	5
968	Multisite longitudinal calibration of HR-pQCT scanners and precision in osteogenesis imperfecta. Bone, 2021, 147, 115880.	2.9	6
969	Excellent mid-term follow-up for a new 3D-printed cementless total knee arthroplasty. Bone and Joint Journal, 2021, 103-B, 32-37.	4.4	20
970	The Effect of Bolus Vitamin D3 Supplementation on Distal Radius Fracture Healing: A Randomized Controlled Trial Using HR-pQCT. Journal of Bone and Mineral Research, 2020, 36, 1492-1501.	2.8	11
971	Comparative effect of eldecalcitol and alfacalcidol on bone microstructure: A preliminary report of secondary analysis of a prospective trial. Osteoporosis and Sarcopenia, 2021, 7, 47-53.	1.9	1
972	Porous Alumina Ceramics with Multimodal Pore Size Distributions. Materials, 2021, 14, 3294.	2.9	18
973	Trabecular bone properties in the ilium of the Middle Paleolithic/Middle Stone Age Border Cave 3 Homo sapiens infant and the onset of independent gait. Journal of Human Evolution, 2021, 155, 102984.	2.6	3
974	Prediction of mechanical properties of trabecular bone in patients with type 2 diabetes using damage based finite element method. Journal of Biomechanics, 2021, 123, 110495.	2.1	15
975	Digital Surface Regularization With Guarantees. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 2896-2907.	4.4	2
976	Survivorship, Clinical and Radiographic Outcomes of a Novel Cementless Metal-Backed Patella Design. Journal of Arthroplasty, 2021, 36, S221-S226.	3.1	13
977	Bringing Mechanical Context to Image-Based Measurements of Bone Integrity. Current Osteoporosis Reports, 2021, 19, 542-552.	3.6	2
978	Three-dimensional cortical and trabecular bone microstructure of the proximal ulna. Archives of Orthopaedic and Trauma Surgery, 2021, , 1.	2.4	3
979	Size controls on the crossover from normal to self-inhibited sintering of ice spheres. Acta Materialia, 2021, 213, 116926.	7.9	1
980	Differences in bone mineral density and morphometry measurements by fixed versus relative offset methods in high-resolution peripheral quantitative computed tomography. Bone, 2021, 149, 115973.	2.9	4
981	In-vitro comparison of volumetric and areal bone mineral density measurements between ultrasound transit time spectroscopy and microcomputed tomography. Applied Acoustics, 2021, 179, 108072.	3.3	3
982	The local and global geometry of trabecular bone. Acta Biomaterialia, 2021, 130, 343-361.	8.3	31

#	Article	IF	CITATIONS
983	Characterization of the air void content of fine aggregate matrices within asphalt concrete mixtures. Construction and Building Materials, 2021, 300, 124214.	7.2	12
984	Scaffold Pore Geometry Guides Gene Regulation and Bone-like Tissue Formation in Dynamic Cultures. Tissue Engineering - Part A, 2021, 27, 1192-1204.	3.1	11
985	Determination of the representative volume-of-interest (REVOI) in ceramic replica foams. Open Ceramics, 2021, 7, 100154.	2.0	0
986	Large-scale quantification of human osteocyte lacunar morphological biomarkers as assessed by ultra-high-resolution desktop micro-computed tomography. Bone, 2021, 152, 116094.	2.9	19
987	Architectural bone parameters and the relationship to titanium lattice design for powder bed fusion additive manufacturing. Additive Manufacturing, 2021, 47, 102273.	3.0	16
988	Modified Quinoxalineâ€Fused Oleanolic Acid Derivatives as Inhibitors of Osteoclastogenesis and Potential Agent in Antiâ€Osteoporosis. ChemistrySelect, 2020, 5, 1526-1533.	1.5	7
990	Hierarchical Structure of Bone and Micro-Computed Tomography. Advances in Experimental Medicine and Biology, 2001, 496, 67-83.	1.6	27
991	Biomechanics of Bone. , 2010, , 157-179.		3
992	Microcomputed Tomography. Springer Handbooks, 2019, , 1205-1236.	0.6	4
993	Biomechanics of Bone. Contemporary Endocrinology, 2020, , 185-209.	0.1	1
994	Contrast-Enhanced Micro-CT Imaging of Soft Tissues. , 2007, , 239-256.		1
995	Calibration of Micro-CT Data for Quantifying Bone Mineral and Biomaterial Density and Microarchitecture. , 2007, , 79-84.		3
996	Anatomical Imaging and Post-Genomic Biology. , 2009, , 411-426.		3
997	Micro-modelling and Analysis of Actual and Idealised Cancellous Structure. IFMBE Proceedings, 2008, , 433-437.	0.3	3
998	A Validated Skeleton-based Finite Element Mesh for Parametric Analysis of Trabecular Bone Competence. IFMBE Proceedings, 2009, , 1777-1780.	0.3	1
999	Synchrotron X-Ray Phase Nanotomography for Bone Tissue Characterization. , 2016, , 1-42.		3
1000	Geometric modeling and analysis of bone micro–structures as a base for scaffold design. Computational Methods in Applied Sciences (Springer), 2011, , 91-109.	0.3	6
1001	ls Quantitative Ultrasound Dependent on Bone Structure? A Reflection. Osteoporosis International, 2001, 12, 1-15.	3.1	175

#	Article	IF	CITATIONS
1002	The Nature of Osteoporosis. , 2010, , 25-34.		2
1003	Autologous blood coagulum containing rhBMP6 induces new bone formation to promote anterior lumbar interbody fusion (ALIF) and posterolateral lumbar fusion (PLF) of spine in sheep. Bone, 2020, 138, 115448.	2.9	23
1006	Trabecular bone micro-architecture and bone mineral density in adolescent idiopathic and congenital scoliosis. Orthopaedic Surgery, 2009, 1, 78-83.	1.8	1
1007	Effects of strontium ranelate – results important but presentation muddled. IBMS BoneKEy, 2008, 5, 108-113.	0.0	1
1008	Circulating levels of IGF-1 directly regulate bone growth and density. Journal of Clinical Investigation, 2002, 110, 771-781.	8.2	640
1009	Circulating levels of IGF-1 directly regulate bone growth and density. Journal of Clinical Investigation, 2002, 110, 771-781.	8.2	469
1010	Bone Biomechanics. , 2012, , 3-48.		1
1011	Mutual associations among microstructural, physical and mechanical properties of human cancellous bone. Journal of Bone and Joint Surgery: British Volume, 2002, 84, 900-907.	3.4	82
1012	Pathogenesis of Age-Related Osteoporosis: Impaired Mechano-Responsiveness of Bone Is Not the Culprit. PLoS ONE, 2008, 3, e2540.	2.5	56
1013	Pharmacologic Inhibition of the TGF-β Type I Receptor Kinase Has Anabolic and Anti-Catabolic Effects on Bone. PLoS ONE, 2009, 4, e5275.	2.5	163
1014	Age-Related Skeletal Dynamics and Decrease in Bone Strength in DNA Repair Deficient Male Trichothiodystrophy Mice. PLoS ONE, 2012, 7, e35246.	2.5	15
1015	Antibody-Mediated Activation of FGFR1 Induces FGF23 Production and Hypophosphatemia. PLoS ONE, 2013, 8, e57322.	2.5	57
1016	Serine Protease HTRA1 Antagonizes Transforming Growth Factor-Î ² Signaling by Cleaving Its Receptors and Loss of HTRA1 In Vivo Enhances Bone Formation. PLoS ONE, 2013, 8, e74094.	2.5	61
1017	Microstructural, Densitometric and Metabolic Variations in Bones from Rats with Normal or Altered Skeletal States. PLoS ONE, 2013, 8, e82709.	2.5	9
1018	Three-Dimensional Quantitative Morphometric Analysis (QMA) for In Situ Joint and Tissue Assessment of Osteoarthritis in a Preclinical Rabbit Disease Model. PLoS ONE, 2016, 11, e0147564.	2.5	15
1019	Flow velocity-driven differentiation of human mesenchymal stromal cells in silk fibroin scaffolds: A combined experimental and computational approach. PLoS ONE, 2017, 12, e0180781.	2.5	59
1020	Differences in Trabecular Bone, Cortical Shell, and Endplate Microstructure Across the Lumbar Spine. International Journal of Spine Surgery, 2019, 13, 361-370.	1.5	13
1021	Gender-related changes in three-dimensional microstructure of trabecular bone at the human proximal tibia with aging. Histology and Histopathology, 2011, 26, 563-70.	0.7	20

#	Article	IF	CITATIONS
1022	Ectopic bone formation in bone marrow stem cell seeded calcium phosphate scaffolds as compared to autograft and (cell seeded) allograft. , 2007, 14, 30-39.		46
1023	Effect of grain size and microporosity on the in vivo behaviour of β-tricalcium phosphate scaffolds. , 2014, 28, 299-319.		53
1024	lmproving Bone Microarchitecture in Aging with Diosgenin Treatment: A Study in Senescence-Accelerated OXYS Rats. Chinese Journal of Physiology, 2015, éå^Šæ–‡ç«, 1-10.	1.0	8
1025	A quantitative analysis of the structure of human sternum. Journal of Medical Physics, 2009, 34, 80.	0.3	3
1026	Micro-computed tomography assessment of human femoral trabecular bone for two disease groups (fragility fracture and coxarthrosis): Age and gender related effects on the microstructure. Journal of Biomedical Science and Engineering, 2013, 06, 175-184.	0.4	6
1027	Variability of morphometric parameters of human trabecular tissue from coxo-arthritis and osteoporotic samples. Annali Dell'Istituto Superiore Di Sanita, 2012, 48, 19-25.	0.4	17
1028	Micro-CT examination of human bone: from biopsies towards the entire organ. Annali Dell'Istituto Superiore Di Sanita, 2012, 48, 75-82.	0.4	32
1029	Technique for bone volume measurement from human femur head samples by classification of micro-CT image histograms. Annali Dell'Istituto Superiore Di Sanita, 2013, 49, 300-5.	0.4	15
1030	The influence of water jet diameter and bone structural properties on the efficiency of pure water jet drilling in porcine bone. Mechanical Sciences, 2014, 5, 53-58.	1.0	9
1033	The Locally Adapted Scaling Vector Method: A New Tool for Quantifying Anisotropic Structures in Bone Images. , 0, , .		1
1034	Biomechanics of Physiological and Pathological Bone Structures. , 0, , .		1
1035	Irisin directly stimulates osteoclastogenesis and bone resorption in vitro and in vivo. ELife, 2020, 9, .	6.0	68
1036	Alkaline Phosphatase Activity Present in Serum Influences Osteogenic Differentiation Cultures. SSRN Electronic Journal, 0, , .	0.4	0
1037	Stochastic parametric skeletal dosimetry model for humans: General approach and application to active marrow exposure from bone-seeking beta-particle emitters. PLoS ONE, 2021, 16, e0257605.	2.5	11
1039	Macro- and Microimaging of Bone Architecture. , 2002, , 1599-XLVIII.		0
1041	Effect of Scaffold Design on Bone Morphologyin Vitro. Tissue Engineering, 2006, .	4.6	0
1042	MEASURING CHANGES OF 3D STRUCTURES IN HIGH-RESOLUTION $\hat{A}\mu CT$ IMAGES OF TRABECULAR BONE. , 2008, .	,	0
1043	VEGF Facilitates Periosteal Distraction–Induced Osteogenesis in Rabbits: A Micro-Computerized Tomography Study. Tissue Engineering, 0, , 110306233438005.	4.6	0

#	Article	IF	CITATIONS
1044	Experimental Design, Data Analysis, Visualization. , 2008, , 115-144.		0
1045	La struttura ossea valutata con RM. , 2009, , 445-453.		0
1046	Advanced Structural Assessment of Bone Using CT and MRI. , 2010, , 547-564.		0
1047	Magnetic Resonance of Bone Microstructure and Chemistry. , 2011, , 379-391.		0
1048	Scaling Index Method (SIM): A Novel Technique for Assessment of Local Topological Properties of Porous and Irregular Structures. , 0, , .		0
1049	Volumetric Analysis of Digital Objects Using Distance Transformation: Performance Issues and Extensions. Lecture Notes in Computer Science, 2012, , 82-92.	1.3	1
1050	MicroCT: An Essential Tool in Bone Metastasis Research. , 0, , .		0
1051	Structural analysis of trabecular bone using Automatic Segmentation in micro-CT images. Journal of Korea Multimedia Society, 2014, 17, 342-352.	0.2	3
1052	Bone Biomechanics and the Determinants of Skeletal Fragility. , 2015, , 65-80.		1
1053	Skeletal Biology. , 2015, , 35-93.		2
1054	Literature Review Fatigue Analysis in Trabecular Bone. SpringerBriefs in Applied Sciences and Technology, 2016, , 5-14.	0.4	0
1055	Use Case V: Imaging Biomarkers in Musculoskeletal Disorders. , 2017, , 259-277.		0
1058	Direct biomechanical modeling of trabecular bone using a nonlinear manifold-based volumetric representation. Proceedings of SPIE, 2017, , .	0.8	0
1059	Microstructure Characterization of Cancellous Bone Based on Ultrasonic C-Scan Imaging. IFMBE Proceedings, 2018, , 1-5.	0.3	0
1060	Characterizing three dimensional open cell structures without segmentation. , 2018, , .		0
1061	Methods for quantitative characterization of bone injury from computed-tomography images. , 2019, 10953, .		1
1062	A Methodology for Trabecular Bone Microstructure Modelling Agreed with Three-Dimensional Bone Properties. Advances in Intelligent Systems and Computing, 2020, , 217-228.	0.6	0
1063	Methodological approach to development of dosimetric models of the human skeleton for beta-emitting radionuclides. Radiacionnaâ Gigiena. 2019. 12. 66-75.	0.7	8

#	Article	IF	CITATIONS
1067	New Imaging Techniques for Bone. Contemporary Endocrinology, 2020, , 151-167.	0.1	0
1068	Tissue‑engineered bone used in a rabbit model of lumbar intertransverse process fusion: A comparison of osteogenic capacity between two different stem cells. Experimental and Therapeutic Medicine, 2020, 19, 2570-2578.	1.8	1
1070	Subchondral Bone Microarchitecture Changes in Animal Models of Arthritis. , 2007, , 629-640.		0
1071	MicroCT for Scanning and Analysis of Mouse Bones. Methods in Molecular Biology, 2021, 2230, 169-198.	0.9	13
1073	Morphometric comparison of the lumbar cancellous bone of sheep, deer, and humans. Comparative Medicine, 2010, 60, 374-9.	1.0	8
1074	Optimal sample volumes of human trabecular bone in μCT analysis within vertebral body and femoral head. International Journal of Clinical and Experimental Medicine, 2015, 8, 17868-79.	1.3	0
1075	Improved biphasic calcium phosphate combined with periodontal ligament stem cells may serve as a promising method for periodontal regeneration. American Journal of Translational Research (discontinued), 2018, 10, 4030-4041.	0.0	12
1076	Platelet TSP-1 controls prostate cancer-induced osteoclast differentiation and bone marrow-derived cell mobilization through TGFβ-1. American Journal of Clinical and Experimental Urology, 2021, 9, 18-31.	0.4	5
1078	Determination of anisotropic elastic parameters from morphological parameters of cancellous bone for osteoporotic lumbar spine. Medical and Biological Engineering and Computing, 2022, 60, 263-278.	2.8	1
1079	Fabrication and in vitro study of 3D novel porous hydroxyapatite/polyether ether ketone surface nanocomposite. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2021, , .	3.4	2
1080	Cellular and Molecular Biology in Bone Remodeling. , 2022, , 3-15.		0
1081	Investigation of distal femur microarchitecture and factors influencing its deterioration: An ex vivo higha€resolution peripheral quantitative computed tomography study. Journal of Orthopaedic Research, 2022, , .	2.3	1
1082	Branch Profiles for Shape Analysis. , 2020, , .		1
1083	SPHARM-PDM based image preprocessing pipeline for quantitative morphometric analysis (QMA) for in situ joint assessment in rabbit and rat models. Scientific Reports, 2022, 12, 1113.	3.3	2
1084	Metformin reduces chondrocyte pyroptosis in an osteoarthritis mouse model by inhibiting NLRP3 inflammasome activation. Experimental and Therapeutic Medicine, 2022, 23, 222.	1.8	15
1085	Assessment of trabecular and cortical parameters using high-resolution peripheral quantitative computed tomography, histomorphometry and microCT of iliac crest bone core in hemodialysis patients. Bone Reports, 2022, 16, 101173.	0.4	2
1087	Bone biomechanics. , 2022, , 97-120.		1
1088	Foam-Replicated Diopside/Fluorapatite/Wollastonite-Based Glass–Ceramic Scaffolds. Ceramics, 2022, 5, 120-130.	2.6	9

ARTICLE IF CITATIONS A Micro-computed Tomography Database and Reference Implementation for Parallel Computations of 1089 5.9 0 Trabecular Thickness and Spacing. Journal of Open Research Software, 2022, 10, 4. Alkaline Phosphatase Activity of Serum Affects Osteogenic Differentiation Cultures. ACS Omega, 2022, 1090 3.5 7, 12724-12733. Mechanical and morphometric characterization of custom-made trabecular bone surrogates. Journal 1091 3.13 of the Mechanical Behavior of Biomedical Materials, 2022, 129, 105146. Micro-CT Study of Mongolian Gerbil Humeral Bone After Prolonged Spaceflight Based on a New 1092 2.8 Algorithm for Delimitation of Long-Bone Regions. Frontiers in Physiology, 2021, 12, 752893. <i>Hmga2</i> deficiency is associated with allometric growth retardation, infertility, and behavioral 1093 1.8 12 abnormalities in mice. G3: Genes, Genomes, Genetics, 2022, 12, . A new bone adhesive candidate- does it work in human bone? An ex-vivo preclinical evaluation in fresh human osteoporotic femoral head bone. Injury, 2022, 53, 1858-1866. 1094 1.7 Large-scale osteocyte lacunar morphological analysis of transiliac bone in normal and osteoporotic 1095 2.9 11 premenopausal women. Bone, 2022, 160, 116424. The microbiome restrains melanoma bone growth by promoting intestinal NK and Th1 cell homing to 1100 8.2 bone. Journal of Clinical Investigation, 2022, 132, . Biomechanical structureâ€"function relations for human trabecular bone â€" comparison of calcaneus. 1101 femoral neck, greater trochanter, proximal tibia, and vertebra. Computer Methods in Biomechanics 1.6 0 and Biomedical Engineering, 2022, , 1-9. Dose-efficient assessment of trabecular microstructure using ultra-high-resolution photon-counting 1.5 CT. Zeitschrift Fur Medizinische Physik, 2022, 32, 403-416. Tomographic volumetric bioprinting of heterocellular bone-like tissues in seconds. Acta 1103 8.3 26 Biomaterialia, 2023, 156, 49-60. Ontogenetic Patterning of Human Subchondral Bone Microarchitecture in the Proximal Tibia. 2.8 Biology, 2022, 11, 1002. Fabrication of cancellous-bone-mimicking Î²-tricalcium phosphate bioceramic scaffolds with tunable architecture and mechanical strength by stereolithography 3D printing. Journal of the European 1105 5.7 25 Ceramic Society, 2022, 42, 6713-6720. Autophagy attenuates osteoarthritis in mice by inhibiting chondrocyte pyroptosis and improving subchondral bone remodeling. Bosnian Journal of Basic Medical Sciences, 0, , .1106 1.0 A case of a large pedunculated-type osteochondroma from late medieval llok, eastern Croatia: 1107 Bioarchaeological, paleoradiological and histological study. Journal of Archaeological Science: 0.50 Reports, 2022, 45, 103574. Fundamental Biomechanics in Bone Tissue Engineering. Synthesis Lectures on Tissue Engineering, 2010, 14 Systemic immune-inflammation index and bone mineral density in postmenopausal women: A 1109 cross-sectional study of the national health and nutrition examination survey (NHANES) 2007-2018. 4.8 44 Frontiers in Immunology, 0, 13, . Culture of 3D bioprinted bone constructs requires an increased fluid dynamic stimulation. Acta 8.3 Biomaterialia, 2022, 153, 374-385.

	CITATION RE	PORT	
#	Article	IF	Citations
1111	Bionic manufacturing strategy of hydroxyapatite-coated polyether ether ketone scaffolds for promoting mineralization and osseointegration. Materials and Design, 2022, 223, 111193.	7.0	5
1112	Multi-scale constitutive model of human trabecular bone. Continuum Mechanics and Thermodynamics, 0, , .	2.2	1
1114	Evaluation of Volumetric Bone Mineral Density, Bone Microarchitecture, and Bone Strength in Patients with Achondroplasia Caused by FGFR3 c.1138G > A Mutation. Calcified Tissue International, , .	03.1	1
1115	BES TESTâ,"¢ accuracy evaluation by means of 3D-printed phantoms. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 0, , 095440622211336.	2.1	0
1116	Topology Optimization-Based Localized Bone Microstructure Reconstruction for Image Resolution Enhancement: Accuracy and Efficiency. Bioengineering, 2022, 9, 644.	3.5	1
1117	Bone Composition and Structure. Synthesis Lectures on Tissue Engineering, 2010, , 15-41.	0.3	0
1118	Teriparatide Followed by Denosumab in Premenopausal Idiopathic Osteoporosis: Bone Microstructure and Strength by HR-pQCT. Journal of Bone and Mineral Research, 2020, 38, 35-47.	2.8	6
1120	A Review of Rat Models of Avascular Necrosis of the Femoral Head Treated with Natural Extracts. Journal of Acupuncture Research, 2022, 39, 239-248.	0.3	0
1121	Relationship among air void microstructural characteristics, stiffness, and fatigue of asphalt concrete mixtures. Road Materials and Pavement Design, 2023, 24, 2545-2560.	4.0	0
1122	Automatic segmentation of trabecular and cortical compartments in HR-pQCT images using an embedding-predicting U-Net and morphological post-processing. Scientific Reports, 2023, 13, .	3.3	2
1123	Comprehensive Associations between Acidosis and the Skeleton in Patients with Kidney Disease. Journal of the American Society of Nephrology: JASN, 2023, 34, 668-681.	6.1	5
1124	A Synthetic Dynamic Polyvinyl Alcohol Photoresin for Fast Volumetric Bioprinting of Functional Ultrasoft Hydrogel Constructs. Advanced Functional Materials, 2023, 33, .	14.9	14
1125	Trabecular bone remodeling in the aging mouse: A micro-multiphysics agent-based in silico model using single-cell mechanomics. Frontiers in Bioengineering and Biotechnology, 0, 11, .	4.1	4
1126	Quantitative morphometric analysis in tibiofemoral joint osteoarthritis imaging: A literature review. Osteoarthritis Imaging, 2023, 3, 100088.	0.4	0
1127	Biomechanical properties and clinical significance of cancellous bone in proximal femur: A review. Injury, 2023, 54, 1432-1438.	1.7	4
1128	Reduced angiogenesis and delayed endochondral ossification in CD163 ^{â^'/â^'} mice highlights a role of M2 macrophages during bone fracture repair. Journal of Orthopaedic Research, 2023, 41, 2384-2393.	2.3	1
1129	Taurine deficiency as a driver of aging. Science, 2023, 380, .	12.6	62
1130	Making foam-like bioactive glass scaffolds by vat photopolymerization. Open Ceramics, 2023, 15, 100392.	2.0	1

#	Article	IF	CITATIONS
1131	Evolution of posture in amniotes–Diving into the trabecular architecture of the femoral head. Journal of Evolutionary Biology, 2023, 36, 1150-1165.	1.7	0
1132	Three-dimensional micromorphology of human midpalatal suture and pterygomaxillary articular complex. Journal of the World Federation of Orthodontists, 2023, , .	2.3	1
1133	Enhancing bone formation using absorbable AZ31B magnesium alloy membranes during distraction osteogenesis: A new material study. Heliyon, 2023, 9, e18032.	3.2	0
1134	Hounsfield Unit for Evaluating Bone Mineral Density and Strength: Variations in Measurement Methods. World Neurosurgery, 2023, 180, e56-e68.	1.3	1
1135	Reverse Dynamization Accelerates Regenerate Bone Formation and Remodeling in a Goat Distraction Osteogenesis Model. Journal of Bone and Joint Surgery - Series A, 2023, 105, 1937-1946.	3.0	1
1136	Using Texture Analysis of Neck Computed Tomography Images to Differentiate Primary Hyperparathyroidism From Normal Controls. Journal of Computer Assisted Tomography, 0, , .	0.9	0
1137	Aurora Kinase A Regulates Cell Transitions in Glucocorticoid-Induced Bone Loss. Cells, 2023, 12, 2434.	4.1	0
1139	Surface-based anthropomorphic bone structures for use in high-resolution simulated medical imaging. Physics in Medicine and Biology, 0, , .	3.0	0
1140	Intramedullary implant stability affects patterns of fracture healing in mice with morphologically different bone phenotypes. Bone, 2024, 179, 116978.	2.9	0
1141	Adaptational Response of Individual Trabeculae Morphology to Loading at Different Directions. Key Engineering Materials, 0, 970, 95-100.	0.4	0
1142	High-resolution local trabecular strain within trabecular structure under cyclic loading. Journal of the Mechanical Behavior of Biomedical Materials, 2024, 152, 106318.	3.1	0
1143	Toughening and strengthening of visible light-cured hydroxyapatite thiol-ene resin composite intended as bone fixation using 2D textile. Journal of Materials Research and Technology, 2024, 29, 982-990.	5.8	0
1144	Build parameter influence on strut thickness and mechanical performance in additively manufactured titanium lattice structures. Journal of the Mechanical Behavior of Biomedical Materials, 2024, 151, 106369.	3.1	0
1145	Design, Stereolithographic 3D Printing, and Characterization of TPMS Scaffolds. Materials, 2024, 17, 654.	2.9	0
1146	Comparing lateral plantar process trabecular structure to other regions of the human calcaneus. Anatomical Record, 0, , .	1.4	0
1147	Open the pores $\hat{a} \in \hat{C}$ Polydimethylsiloxane influences the porous structure of cancellous bone surrogates for biomechanical testing of osteosyntheses. Journal of Biomechanics, 2024, 165, 112000.	2.1	0