

Ralph MÃ¼ller

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5177597/publications.pdf>

Version: 2024-02-01

393
papers

32,545
citations

4103

90
h-index

6872

160
g-index

429
all docs

429
docs citations

429
times ranked

31436
citing authors

#	ARTICLE	IF	CITATIONS
1	Tomographic volumetric bioprinting of heterocellular bone-like tissues in seconds. <i>Acta Biomaterialia</i> , 2023, 156, 49-60.	4.1	26
2	Bone fragility in diabetes: novel concepts and clinical implications. <i>Lancet Diabetes and Endocrinology</i> , 2022, 10, 207-220.	5.5	123
3	Optimizing Barium Titanate Nanocomposite Bone Scaffolds for Biomineralization in Dynamic Compression Bioreactors Using Time-Lapsed Microstructural Imaging and Smart Thresholding. <i>Frontiers in Materials</i> , 2022, 8, .	1.2	5
4	Biodegradable Hydrogel Scaffolds Based on 2-Hydroxyethyl Methacrylate, Gelatin, Poly(β -amino esters), and Hydroxyapatite. <i>Polymers</i> , 2022, 14, 18.	2.0	10
5	Large-scale osteocyte lacunar morphological analysis of transiliac bone in normal and osteoporotic premenopausal women. <i>Bone</i> , 2022, 160, 116424.	1.4	11
6	Tissue-Level Regeneration and Remodeling Dynamics are Driven by Mechanical Stimuli in the Microenvironment in a Post-Bridging Loaded Femur Defect Healing Model in Mice. <i>Frontiers in Cell and Developmental Biology</i> , 2022, 10, .	1.8	3
7	Long-term mechanical loading is required for the formation of 3D bioprinted functional osteocyte bone organoids. <i>Biofabrication</i> , 2022, 14, 035018.	3.7	17
8	Association of higher bone turnover with risk of curve progression in adolescent idiopathic scoliosis. <i>Bone</i> , 2021, 143, 115655.	1.4	12
9	3D bioprinting of graphene oxide-incorporated cell-laden bone mimicking scaffolds for promoting scaffold fidelity, osteogenic differentiation and mineralization. <i>Acta Biomaterialia</i> , 2021, 121, 637-652.	4.1	104
10	Time-lapsed imaging of nanocomposite scaffolds reveals increased bone formation in dynamic compression bioreactors. <i>Communications Biology</i> , 2021, 4, 110.	2.0	17
11	Simulating Metaphyseal Fracture Healing in the Distal Radius. <i>Biomechanics</i> , 2021, 1, 29-42.	0.5	5
12	Tenâ€Year Simulation of the Effects of Denosumab on Bone Remodeling in Human Biopsies. <i>JBMR Plus</i> , 2021, 5, e10494.	1.3	10
13	3D Bioprinting of Human Tissues: Biofabrication, Bioinks, and Bioreactors. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3971.	1.8	83
14	Spatio-temporal characterization of fracture healing patterns and assessment of biomaterials by time-lapsed in vivo micro-computed tomography. <i>Scientific Reports</i> , 2021, 11, 8660.	1.6	3
15	CRISPR/Cas9 mediated dual fluorescent reporter mice to study spatial bone genomics of osteoblasts and osteoclasts in the local in vivo environment. <i>Bone Reports</i> , 2021, 14, 100871.	0.2	0
16	Formation Dominates Resorption With Increasing Mineralized Density and Time Postfracture in Cortical but Not Trabecular Bone: A Longitudinal μ HRpQCT Imaging Study in the Distal Radius. <i>JBMR Plus</i> , 2021, 5, e10493.	1.3	6
17	TRPV4 mediates cell damage induced by hyperphysiological compression and regulates COX2 / PGE2 in intervertebral discs. <i>JOR Spine</i> , 2021, 4, e1149.	1.5	8
18	Nanoâ€3Dâ€Printed Photochromic Microâ€Objects. <i>Small</i> , 2021, 17, e2101337.	5.2	20

#	ARTICLE	IF	CITATIONS
19	Quantitative measures of bone shape, cartilage morphometry and joint alignment are associated with disease in an ACLT and MMx rat model of osteoarthritis. <i>Bone</i> , 2021, 146, 115903.	1.4	8
20	Real-time finite element analysis allows homogenization of tissue scale strains and reduces variance in a mouse defect healing model. <i>Scientific Reports</i> , 2021, 11, 13511.	1.6	9
21	Automated segmentation of fractured distal radii by 3D geodesic active contouring of in vivo HR-pQCT images. <i>Bone</i> , 2021, 147, 115930.	1.4	9
22	Bone Mechanoregulation Allows Subject-Specific Load Estimation Based on Time-Lapsed Micro-CT and HR-pQCT in Vivo. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 677985.	2.0	14
23	Photochromic 3D Micro-Objects: Nano-Printed Photochromic Micro-Objects (Small 26/2021). <i>Small</i> , 2021, 17, 2170132.	5.2	0
24	Characterization of the Developing Lacunocanalicular Network During Fracture Repair. <i>JBMR Plus</i> , 2021, 5, e10525.	1.3	6
25	The local and global geometry of trabecular bone. <i>Acta Biomaterialia</i> , 2021, 130, 343-361.	4.1	31
26	Scaffold Pore Geometry Guides Gene Regulation and Bone-like Tissue Formation in Dynamic Cultures. <i>Tissue Engineering - Part A</i> , 2021, 27, 1192-1204.	1.6	11
27	Large-scale quantification of human osteocyte lacunar morphological biomarkers as assessed by ultra-high-resolution desktop micro-computed tomography. <i>Bone</i> , 2021, 152, 116094.	1.4	19
28	Application of subject-specific adaptive mechanical loading for bone healing in a mouse tail vertebral defect. <i>Scientific Reports</i> , 2021, 11, 1861.	1.6	613
29	Individualized cyclic mechanical loading improves callus properties during the remodelling phase of fracture healing in mice as assessed from time-lapsed in vivo imaging. <i>Scientific Reports</i> , 2021, 11, 23037.	1.6	8
30	Microimaging. , 2020, , 1833-1856.		1
31	Growth factors with enhanced syndecan binding generate tonic signalling and promote tissue healing. <i>Nature Biomedical Engineering</i> , 2020, 4, 463-475.	11.6	53
32	Optimization of mechanical stiffness and cell density of 3D bioprinted cell-laden scaffolds improves extracellular matrix mineralization and cellular organization for bone tissue engineering. <i>Acta Biomaterialia</i> , 2020, 114, 307-322.	4.1	89
33	The Musculoskeletal Knowledge Portal: Making Omics Data Useful to the Broader Scientific Community. <i>Journal of Bone and Mineral Research</i> , 2020, 35, 1626-1633.	3.1	25
34	Effects of long-term in vivo micro-CT imaging on hallmarks of osteopenia and frailty in aging mice. <i>PLoS ONE</i> , 2020, 15, e0239534.	1.1	6
35	Effects of Early Life Stress on Bone Homeostasis in Mice and Humans. <i>International Journal of Molecular Sciences</i> , 2020, 21, 6634.	1.8	8
36	Mechano-Regulation of Trabecular Bone Adaptation Is Controlled by the Local in vivo Environment and Logarithmically Dependent on Loading Frequency. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 566346.	2.0	34

#	ARTICLE	IF	CITATIONS
37	Enhancing the regenerative effectiveness of growth factors by local inhibition of interleukin-1 receptor signaling. <i>Science Advances</i> , 2020, 6, eaba7602.	4.7	16
38	SWI and phase imaging reveal intracranial calcifications in the P301L mouse model of human tauopathy. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2020, 33, 769-781.	1.1	16
39	Hallmarks of frailty and osteosarcopenia in prematurely aged PolgA ^(D257A/D257A) mice. <i>Journal of Cachexia, Sarcopenia and Muscle</i> , 2020, 11, 1121-1140.	2.9	17
40	The association between mineralised tissue formation and the mechanical local in vivo environment: Time-lapsed quantification of a mouse defect healing model. <i>Scientific Reports</i> , 2020, 10, 1100.	1.6	29
41	Alginate dependent changes of physical properties in 3D bioprinted cell-laden porous scaffolds affect cell viability and cell morphology. <i>Biomedical Materials (Bristol)</i> , 2019, 14, 065009.	1.7	53
42	Magnetolectric 3D scaffolds for enhanced bone cell proliferation. <i>Applied Materials Today</i> , 2019, 16, 290-300.	2.3	49
43	Women With Pregnancy and Lactationâ€‘Associated Osteoporosis (PLO) Have Low Bone Remodeling Rates at the Tissue Level. <i>Journal of Bone and Mineral Research</i> , 2019, 34, 1552-1561.	3.1	32
44	Mechanical regulation of bone formation and resorption around implants in a mouse model of osteopenic bone. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20180667.	1.5	25
45	Sirt1 Promotes a Thermogenic Gene Program in Bone Marrow Adipocytes: From Mice to (Wo)Men. <i>Frontiers in Endocrinology</i> , 2019, 10, 126.	1.5	14
46	Virtual supersampling as post-processing step preserves the trabecular bone morphometry in human peripheral quantitative computed tomography scans. <i>PLoS ONE</i> , 2019, 14, e0212280.	1.1	0
47	Evaluation of longitudinal time-lapsed in vivo micro-CT for monitoring fracture healing in mouse femur defect models. <i>Scientific Reports</i> , 2019, 9, 17445.	1.6	38
48	<i>In silico&i> reproduction of bone adaptation to cyclic loading in mouse caudal vertebrae. <i>The Proceedings of the JSME Conference on Frontiers in Bioengineering</i> , 2019, 2019.30, 2B21.	0.0	0
49	Bone remodeling and mechanobiology around implants: Insights from small animal imaging. <i>Journal of Orthopaedic Research</i> , 2018, 36, 584-593.	1.2	41
50	A doxycycline inducible, adenoviral bone morphogenetic protein-2 gene delivery system to bone. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, e106-e118.	1.3	18
51	An Automated Step-Wise Micro-Compression Device for 3D Dynamic Image-Guided Failure Assessment of Bone Tissue on a Microstructural Level Using Time-Lapsed Tomography. <i>Frontiers in Materials</i> , 2018, 5, .	1.2	10
52	Mechanical Stimuli in the Local In Vivo Environment in Bone: Computational Approaches Linking Organ-Scale Loads to Cellular Signals. <i>Current Osteoporosis Reports</i> , 2018, 16, 395-403.	1.5	25
53	Effect of short-term formaldehyde fixation on Raman spectral parameters of bone quality. <i>Journal of Biomedical Optics</i> , 2018, 23, 1.	1.4	25
54	Computational modeling of long-term effects of prophylactic vertebroplasty on bone adaptation. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2017, 231, 423-431.	1.0	8

#	ARTICLE	IF	CITATIONS
55	Nanoindentation analysis of the micromechanical anisotropy in mouse cortical bone. Royal Society Open Science, 2017, 4, 160971.	1.1	32
56	Bone mechanobiology in mice: toward single-cell in vivo mechanomics. Biomechanics and Modeling in Mechanobiology, 2017, 16, 2017-2034.	1.4	9
57	In vivo Visualisation and Quantification of Bone Resorption and Bone Formation from Time-Lapse Imaging. Current Osteoporosis Reports, 2017, 15, 311-317.	1.5	34
58	Silk fibroin scaffolds with inverse opal structure for bone tissue engineering. , 2017, 105, 2074-2084.		39
59	Feasibility of rigid 3D image registration of high-resolution peripheral quantitative computed tomography images of healing distal radius fractures. PLoS ONE, 2017, 12, e0179413.	1.1	14
60	Flow velocity-driven differentiation of human mesenchymal stromal cells in silk fibroin scaffolds: A combined experimental and computational approach. PLoS ONE, 2017, 12, e0180781.	1.1	59
61	Impaired bone formation in ovariectomized mice reduces implant integration as indicated by longitudinal in vivo micro-computed tomography. PLoS ONE, 2017, 12, e0184835.	1.1	12
62	Ultrastructure Organization of Human Trabeculae Assessed by 3D sSAXS and Relation to Bone Microarchitecture. PLoS ONE, 2016, 11, e0159838.	1.1	21
63	Effects of Parathyroid Hormone Administration on Bone Strength in Hypoparathyroidism. Journal of Bone and Mineral Research, 2016, 31, 1082-1088.	3.1	18
64	Tissue composition regulates distinct viscoelastic responses in auricular and articular cartilage. Journal of Biomechanics, 2016, 49, 344-352.	0.9	41
65	Load-adaptive bone remodeling simulations reveal osteoporotic microstructural and mechanical changes in whole human vertebrae. Journal of Biomechanics, 2016, 49, 3770-3779.	0.9	19
66	Effect of combined treatment with zoledronic acid and parathyroid hormone on mouse bone callus structure and composition. Bone, 2016, 92, 70-78.	1.4	17
67	Longitudinal imaging of the ageing mouse. Mechanisms of Ageing and Development, 2016, 160, 93-116.	2.2	47
68	Inhibition of IL-1R1/MyD88 signalling promotes mesenchymal stem cell-driven tissue regeneration. Nature Communications, 2016, 7, 11051.	5.8	104
69	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.	1.5	24
70	3D Local in vivo Environment (LiVE) imaging for single cell protein analysis of bone tissue. Current Directions in Biomedical Engineering, 2016, 2, 449-453.	0.2	5
71	Towards <i>in silico</i> prognosis using big data. Current Directions in Biomedical Engineering, 2016, 2, 57-60.	0.2	5
72	Techniques to assess bone ultrastructure organization: orientation and arrangement of mineralized collagen fibrils. Journal of the Royal Society Interface, 2016, 13, 20160088.	1.5	104

#	ARTICLE	IF	CITATIONS
73	Voxel size dependency, reproducibility and sensitivity of an <i>in vivo</i> bone loading estimation algorithm. <i>Journal of the Royal Society Interface</i> , 2016, 13, 20150991.	1.5	22
74	Large-scale microstructural simulation of load-adaptive bone remodeling in whole human vertebrae. <i>Biomechanics and Modeling in Mechanobiology</i> , 2016, 15, 83-95.	1.4	19
75	Three-Dimensional Quantitative Morphometric Analysis (QMA) for In Situ Joint and Tissue Assessment of Osteoarthritis in a Preclinical Rabbit Disease Model. <i>PLoS ONE</i> , 2016, 11, e0147564.	1.1	15
76	A surprisingly poor correlation between <i>in vitro</i> and <i>in vivo</i> testing of biomaterials for bone regeneration: results of a multicentre analysis. , 2016, 31, 312-322.		103
77	Computational modelling of bone augmentation in the spine. <i>Journal of Orthopaedic Translation</i> , 2015, 3, 185-196.	1.9	8
78	Response to Letter to the Editor Concerning "Quantitative Evaluation of Mechanical Properties in Tissue-Engineered Auricular Cartilage". <i>Tissue Engineering - Part B: Reviews</i> , 2015, 21, 244-245.	2.5	1
79	Prediction of Local Ultimate Strain and Toughness of Trabecular Bone Tissue by Raman Material Composition Analysis. <i>BioMed Research International</i> , 2015, 2015, 1-9.	0.9	12
80	Effect of fetal bovine serum on mineralization in silk fibroin scaffolds. <i>Acta Biomaterialia</i> , 2015, 13, 277-285.	4.1	53
81	The evolution of simulation techniques for dynamic bone tissue engineering in bioreactors. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015, 9, 903-917.	1.3	38
82	Strain energy density gradients in bone marrow predict osteoblast and osteoclast activity: A finite element study. <i>Journal of Biomechanics</i> , 2015, 48, 866-874.	0.9	38
83	Novel bilayer bacterial nanocellulose scaffold supports neocartilage formation <i>in vitro</i> and <i>in vivo</i> . <i>Biomaterials</i> , 2015, 44, 122-133.	5.7	130
84	Does mechanical stimulation really protect the architecture of trabecular bone? A simulation study. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 795-805.	1.4	4
85	Mechanical and biochemical mapping of human auricular cartilage for reliable assessment of tissue-engineered constructs. <i>Journal of Biomechanics</i> , 2015, 48, 1721-1729.	0.9	30
86	Inverse Finite Element Modeling for Characterization of Local Elastic Properties in Image-Guided Failure Assessment of Human Trabecular Bone. <i>Journal of Biomechanical Engineering</i> , 2015, 137, .	0.6	13
87	Bone adaptation to cyclic loading in murine caudal vertebrae is maintained with age and directly correlated to the local micromechanical environment. <i>Journal of Biomechanics</i> , 2015, 48, 1179-1187.	0.9	51
88	Hierarchical analysis and multi-scale modelling of rat cortical and trabecular bone. <i>Journal of the Royal Society Interface</i> , 2015, 12, 20150070.	1.5	15
89	Cannabidiol, a Major Non-Psychotropic Cannabis Constituent Enhances Fracture Healing and Stimulates Lysyl Hydroxylase Activity in Osteoblasts. <i>Journal of Bone and Mineral Research</i> , 2015, 30, 1905-1913.	3.1	72
90	Reproducibility of compartmental subchondral bone morphometry in the mouse tibiofemoral joint. <i>Bone</i> , 2015, 81, 649-653.	1.4	6

#	ARTICLE	IF	CITATIONS
91	In vivo monitoring of bone architecture and remodeling after implant insertion: The different responses of cortical and trabecular bone. <i>Bone</i> , 2015, 81, 468-477.	1.4	45
92	High-throughput phenotyping and genetic linkage of cortical bone microstructure in the mouse. <i>BMC Genomics</i> , 2015, 16, 493.	1.2	5
93	3D bioprinting of complex channels—Effects of material, orientation, geometry, and cell embedding. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 2558-2570.	2.1	52
94	3D scanning SAXS: A novel method for the assessment of bone ultrastructure orientation. <i>Bone</i> , 2015, 71, 42-52.	1.4	61
95	Magnetic Resonance Imaging of the Ear for Patient-Specific Reconstructive Surgery. <i>PLoS ONE</i> , 2014, 9, e104975.	1.1	10
96	A Novel In Vivo Vascular Imaging Approach for Hierarchical Quantification of Vasculature Using Contrast Enhanced Micro-Computed Tomography. <i>PLoS ONE</i> , 2014, 9, e86562.	1.1	34
97	Influence of the Mechanical Environment on the Engineering of Mineralised Tissues Using Human Dental Pulp Stem Cells and Silk Fibroin Scaffolds. <i>PLoS ONE</i> , 2014, 9, e111010.	1.1	43
98	Mechanical Regulation of Bone Regeneration: Theories, Models, and Experiments. <i>Frontiers in Endocrinology</i> , 2014, 5, 211.	1.5	54
99	Bone Strength and Structural Deficits in Children and Adolescents With a Distal Forearm Fracture Resulting From Mild Trauma. <i>Journal of Bone and Mineral Research</i> , 2014, 29, 590-599.	3.1	60
100	Image interpolation allows accurate quantitative bone morphometry in registered micro-computed tomography scans. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2014, 17, 539-548.	0.9	28
101	Quantitative phenotyping of bone fracture repair: a review. <i>BoneKey Reports</i> , 2014, 3, 550.	2.7	24
102	Limitations of Global Morphometry in Predicting Trabecular Bone Failure. <i>Journal of Bone and Mineral Research</i> , 2014, 29, 134-141.	3.1	10
103	The Role of the Renal Ammonia Transporter Rhcg in Metabolic Responses to Dietary Protein. <i>Journal of the American Society of Nephrology: JASN</i> , 2014, 25, 2040-2052.	3.0	18
104	Controlled release of BMP-2 from a sintered polymer scaffold enhances bone repair in a mouse calvarial defect model. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2014, 8, 59-66.	1.3	86
105	Effect of sterilization on structural and material properties of 3-D silk fibroin scaffolds. <i>Acta Biomaterialia</i> , 2014, 10, 308-317.	4.1	60
106	Growth Factors Engineered for Super-Affinity to the Extracellular Matrix Enhance Tissue Healing. <i>Science</i> , 2014, 343, 885-888.	6.0	406
107	Hemodynamics in coronary arteries with overlapping stents. <i>Journal of Biomechanics</i> , 2014, 47, 505-511.	0.9	48
108	Micro-Computed Tomography Based Computational Fluid Dynamics for the Determination of Shear Stresses in Scaffolds Within a Perfusion Bioreactor. <i>Annals of Biomedical Engineering</i> , 2014, 42, 1085-1094.	1.3	46

#	ARTICLE	IF	CITATIONS
109	The Clinical Biomechanics Award 2012 – Presented by the European Society of Biomechanics: Large scale simulations of trabecular bone adaptation to loading and treatment. <i>Clinical Biomechanics</i> , 2014, 29, 355-362.	0.5	49
110	Reproducibility for linear and nonlinear micro-finite element simulations with density derived material properties of the human radius. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 29, 500-507.	1.5	8
111	Injectable and porous PLGA microspheres that form highly porous scaffolds at body temperature. <i>Acta Biomaterialia</i> , 2014, 10, 5090-5098.	4.1	94
112	Modeling microdamage behavior of cortical bone. <i>Biomechanics and Modeling in Mechanobiology</i> , 2014, 13, 1227-1242.	1.4	23
113	Altered lacunar and vascular porosity in osteogenesis imperfecta mouse bone as revealed by synchrotron tomography contributes to bone fragility. <i>Bone</i> , 2014, 61, 116-124.	1.4	72
114	Tunable hydrogel composite with two-step processing in combination with innovative hardware upgrade for cell-based three-dimensional bioprinting. <i>Acta Biomaterialia</i> , 2014, 10, 630-640.	4.1	305
115	Bioluminescent and micro-computed tomography imaging of bone repair induced by fibrin-binding growth factors. <i>Acta Biomaterialia</i> , 2014, 10, 4377-4389.	4.1	21
116	Therapeutic potential of adipose-derived stromal cells in age-related osteoporosis. <i>Biomaterials</i> , 2014, 35, 7326-7335.	5.7	55
117	Quantitative Evaluation of Mechanical Properties in Tissue-Engineered Auricular Cartilage. <i>Tissue Engineering - Part B: Reviews</i> , 2014, 20, 17-27.	2.5	33
118	Within subject heterogeneity in tissue-level post-yield mechanical and material properties in human trabecular bone. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013, 24, 64-73.	1.5	37
119	Mechanical evaluation of bacterial nanocellulose as an implant material for ear cartilage replacement. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013, 22, 12-21.	1.5	188
120	Osteocyte-derived insulin-like growth factor I is essential for determining bone mechanosensitivity. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2013, 305, E271-E281.	1.8	79
121	In Vitro Ceramic Scaffold Mineralization: Comparison Between Histological and Micro-Computed Tomographical Analysis. <i>Annals of Biomedical Engineering</i> , 2013, 41, 2666-2675.	1.3	16
122	Towards patient-specific material modeling of trabecular bone's post-yield behavior. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2013, 29, 250-272.	1.0	21
123	Validation of a bone loading estimation algorithm for patient-specific bone remodelling simulations. <i>Journal of Biomechanics</i> , 2013, 46, 941-948.	0.9	29
124	Trabecular bone adapts to long-term cyclic loading by increasing stiffness and normalization of dynamic morphometric rates. <i>Bone</i> , 2013, 55, 325-334.	1.4	47
125	Tendon glycosaminoglycan proteoglycan sidechains promote collagen fibril sliding – AFM observations at the nanoscale. <i>Journal of Biomechanics</i> , 2013, 46, 813-818.	0.9	102
126	Time-lapsed imaging of implant fixation failure in human femoral heads. <i>Medical Engineering and Physics</i> , 2013, 35, 636-643.	0.8	26

#	ARTICLE	IF	CITATIONS
127	Novel method to analyze post-yield mechanical properties at trabecular bone tissue level. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2013, 20, 6-18.	1.5	36
128	Subject-specific bone loading estimation in the human distal radius. <i>Journal of Biomechanics</i> , 2013, 46, 759-766.	0.9	43
129	Prediction of trabecular bone qualitative properties using scanning quantitative ultrasound. <i>Acta Astronautica</i> , 2013, 92, 79-88.	1.7	22
130	A quantitative framework for the 3D characterization of the osteocyte lacunar system. <i>Bone</i> , 2013, 57, 142-154.	1.4	95
131	The importance of the intracortical canal network for murine bone mechanics. <i>Bone</i> , 2013, 53, 120-128.	1.4	29
132	Peri-implant bone microstructure determines dynamic implant cut-out. <i>Medical Engineering and Physics</i> , 2013, 35, 1442-1449.	0.8	22
133	New depowdering-friendly designs for three-dimensional printing of calcium phosphate bone substitutes. <i>Acta Biomaterialia</i> , 2013, 9, 9149-9158.	4.1	90
134	High-throughput quantification of the mechanical competence of murine femora – A highly automated approach for large-scale genetic studies. <i>Bone</i> , 2013, 55, 216-221.	1.4	11
135	Remodeling of tissue-engineered bone structures in vivo. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2013, 85, 119-129.	2.0	52
136	Differential load-regulated global gene expression in mouse trabecular osteocytes. <i>Bone</i> , 2013, 53, 14-23.	1.4	23
137	Mineralization kinetics in murine trabecular bone quantified by time-lapsed in vivo micro-computed tomography. <i>Bone</i> , 2013, 56, 55-60.	1.4	39
138	A Comparative Analysis of Water-Soluble and Blood-Pool Contrast Agents for in Vivo Vascular Imaging with Micro-CT. <i>Academic Radiology</i> , 2013, 20, 1247-1255.	1.3	44
139	Studying osteocytes within their environment. <i>Bone</i> , 2013, 54, 285-295.	1.4	51
140	Moisture based three-dimensional printing of calcium phosphate structures for scaffold engineering. <i>Acta Biomaterialia</i> , 2013, 9, 5369-5378.	4.1	73
141	Teriparatide for Idiopathic Osteoporosis in Premenopausal Women: A Pilot Study. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2013, 98, 1971-1981.	1.8	72
142	PLGA/PEG hydrogel composite scaffolds with controllable mechanical properties. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2013, 101B, 648-655.	1.6	49
143	Low dose BMP-2 treatment for bone repair using a PEGylated fibrinogen hydrogel matrix. <i>Biomaterials</i> , 2013, 34, 2902-2910.	5.7	96
144	In Vivo Validation of Predictive Models for Bone Remodeling and Mechanobiology. , 2013, , 383-394.		0

#	ARTICLE	IF	CITATIONS
145	Strain-adaptive in silico modeling of bone adaptation – A computer simulation validated by in vivo micro-computed tomography data. <i>Bone</i> , 2013, 52, 485-492.	1.4	75
146	Longitudinal in vivo imaging of bone formation and resorption using fluorescence molecular tomography. <i>Bone</i> , 2013, 52, 587-595.	1.4	15
147	Abdominal Fat Is Associated With Lower Bone Formation and Inferior Bone Quality in Healthy Premenopausal Women: A Transiliac Bone Biopsy Study. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2013, 98, 2562-2572.	1.8	165
148	Improved Fracture Risk Assessment Based on Nonlinear Micro-Finite Element Simulations From HRpQCT Images at the Distal Radius. <i>Journal of Bone and Mineral Research</i> , 2013, 28, 2601-2608.	3.1	39
149	Prevention of cartilage dehydration in imaging studies with a customized humidity chamber. <i>Review of Scientific Instruments</i> , 2013, 84, 093703.	0.6	5
150	Compound Ex Vivo and In Silico Method for Hemodynamic Analysis of Stented Arteries. <i>PLoS ONE</i> , 2013, 8, e58147.	1.1	27
151	Local Mechanical Stimuli Regulate Bone Formation and Resorption in Mice at the Tissue Level. <i>PLoS ONE</i> , 2013, 8, e62172.	1.1	185
152	Correction of Metabolic Acidosis with Potassium Citrate in Renal Transplant Patients and its Effect on Bone Quality. <i>Clinical Journal of the American Society of Nephrology: CJASN</i> , 2012, 7, 1461-1472.	2.2	37
153	Increased Marrow Adiposity in Premenopausal Women with Idiopathic Osteoporosis. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2012, 97, 2782-2791.	1.8	88
154	Lentiviral-Mediated Integrin $\alpha 5$ Expression in Human Adult Mesenchymal Stromal Cells Promotes Bone Repair in Mouse Cranial and Long-Bone Defects. <i>Human Gene Therapy</i> , 2012, 23, 167-172.	1.4	34
155	Imaging of Cellular Spread on a Three-Dimensional Scaffold by Means of a Novel Cell-Labeling Technique for High-Resolution Computed Tomography. <i>Tissue Engineering - Part C: Methods</i> , 2012, 18, 167-175.	1.1	5
156	Toward Mechanical Systems Biology in Bone. <i>Annals of Biomedical Engineering</i> , 2012, 40, 2475-2487.	1.3	23
157	The discrete nature of trabecular bone microarchitecture affects implant stability. <i>Journal of Biomechanics</i> , 2012, 45, 1060-1067.	0.9	41
158	Patient-specific bone modelling and remodelling simulation of hypoparathyroidism based on human iliac crest biopsies. <i>Journal of Biomechanics</i> , 2012, 45, 2411-2416.	0.9	27
159	Further improvements on the factors affecting bone mineral density measured by quantitative micro-computed tomography. <i>Bone</i> , 2012, 50, 611-618.	1.4	11
160	The different contributions of cortical and trabecular bone to implant anchorage in a human vertebra. <i>Bone</i> , 2012, 50, 733-738.	1.4	39
161	Minimally invasive mandibular bone augmentation using injectable hydrogels. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2012, 6, s15-s23.	1.3	46
162	Advances in multimodality molecular imaging of bone structure and function. <i>BoneKey Reports</i> , 2012, 1, 37.	2.7	11

#	ARTICLE	IF	CITATIONS
163	The influence of matrix elasticity on chondrocyte behavior in 3D. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2012, 6, e31-e42.	1.3	44
164	Smad8/BMP2-engineered mesenchymal stem cells induce accelerated recovery of the biomechanical properties of the achilles tendon. <i>Journal of Orthopaedic Research</i> , 2012, 30, 1932-1939.	1.2	37
165	The Effect of Level and Downhill Running on Cortical and Trabecular Bone in Growing Rats. <i>Calcified Tissue International</i> , 2012, 90, 429-437.	1.5	20
166	Mechanisms of reduced implant stability in osteoporotic bone. <i>Biomechanics and Modeling in Mechanobiology</i> , 2012, 11, 313-323.	1.4	20
167	Bone morphology allows estimation of loading history in a murine model of bone adaptation. <i>Biomechanics and Modeling in Mechanobiology</i> , 2012, 11, 483-492.	1.4	73
168	Printability of calcium phosphate powders for three-dimensional printing of tissue engineering scaffolds. <i>Acta Biomaterialia</i> , 2012, 8, 373-385.	4.1	193
169	Deformable image registration and 3D strain mapping for the quantitative assessment of cortical bone microdamage. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012, 8, 184-193.	1.5	61
170	Chondrocyte redifferentiation in 3D: The effect of adhesion site density and substrate elasticity. <i>Journal of Biomedical Materials Research - Part A</i> , 2012, 100A, 38-47.	2.1	93
171	A non-linear homogeneous model for bone-like materials under compressive load. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2012, 28, 273-287.	1.0	6
172	Augmentation of peri-implant bone improves implant stability: Quantification using simulated bone loss. <i>Journal of Orthopaedic Research</i> , 2012, 30, 178-184.	1.2	11
173	Longitudinal Assessment of In Vivo Bone Dynamics in a Mouse Tail Model of Postmenopausal Osteoporosis. <i>Calcified Tissue International</i> , 2012, 90, 108-119.	1.5	43
174	Experimental and finite element analysis of the mouse caudal vertebrae loading model: prediction of cortical and trabecular bone adaptation. <i>Biomechanics and Modeling in Mechanobiology</i> , 2012, 11, 221-230.	1.4	28
175	Massively Parallel Graph Partitioning. <i>Chapman & Hall/CRC Computational Science</i> , 2012, , 407-425.	0.5	0
176	Cell-scaffold transplant of hydrogel seeded with rat bone marrow progenitors for bone regeneration. <i>Journal of Cranio-Maxillo-Facial Surgery</i> , 2011, 39, 364-371.	0.7	63
177	Engineering the Growth Factor Microenvironment with Fibronectin Domains to Promote Wound and Bone Tissue Healing. <i>Science Translational Medicine</i> , 2011, 3, 100ra89.	5.8	391
178	A Model for Tissue Engineering Applications: Femoral Critical Size Defect in Immunodeficient Mice. <i>Tissue Engineering - Part C: Methods</i> , 2011, 17, 597-606.	1.1	30
179	Controlled Positioning of Cells in Biomaterials—Approaches Towards 3D Tissue Printing. <i>Journal of Functional Biomaterials</i> , 2011, 2, 119-154.	1.8	187
180	Two-layer membranes of calcium phosphate/collagen/PLGA nanofibres: in vitro biomineralisation and osteogenic differentiation of human mesenchymal stem cells. <i>Nanoscale</i> , 2011, 3, 401-409.	2.8	61

#	ARTICLE	IF	CITATIONS
181	In vivo micro-computed tomography allows direct three-dimensional quantification of both bone formation and bone resorption parameters using time-lapsed imaging. <i>Bone</i> , 2011, 48, 433-442.	1.4	153
182	Serial FIB/SEM imaging for quantitative 3D assessment of the osteocyte lacuno-canalicular network. <i>Bone</i> , 2011, 49, 304-311.	1.4	123
183	Implant stability is affected by local bone microstructural quality. <i>Bone</i> , 2011, 49, 473-478.	1.4	83
184	The importance of murine cortical bone microstructure for microcrack initiation and propagation. <i>Bone</i> , 2011, 49, 1186-1193.	1.4	41
185	In vivo validation of a computational bone adaptation model using open-loop control and time-lapsed micro-computed tomography. <i>Bone</i> , 2011, 49, 1166-1172.	1.4	27
186	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 morphometry. <i>Bone</i> , 2011, 49, 1340-1350.	1.4	101
187	In vivo loading increases mechanical properties of scaffold by affecting bone formation and bone resorption rates. <i>Bone</i> , 2011, 49, 1357-1364.	1.4	39
188	Computerized Reconstruction of Prenatal Growth Trajectories in the Dentition: Implications for the Taxonomic Status of Neandertals. <i>Vertebrate Paleobiology and Paleoanthropology</i> , 2011, , 165-173.	0.1	2
189	Mechanical response of individual collagen fibrils in loaded tendon as measured by atomic force microscopy. <i>Journal of Structural Biology</i> , 2011, 176, 9-15.	1.3	52
190	Computational finite element bone mechanics accurately predicts mechanical competence in the human radius of an elderly population. <i>Bone</i> , 2011, 48, 1232-1238.	1.4	109
191	A new device and method for measuring the elastic modulus of single trabeculae. <i>Medical Engineering and Physics</i> , 2011, 33, 993-1000.	0.8	13
192	Multimodal imaging demonstrates concomitant changes in bone and cartilage after destabilisation of the medial meniscus and increased joint laxity. <i>Osteoarthritis and Cartilage</i> , 2011, 19, 163-170.	0.6	47
193	Initial cell pre-cultivation can maximize ECM mineralization by human mesenchymal stem cells on silk fibroin scaffolds. <i>Acta Biomaterialia</i> , 2011, 7, 2218-2228.	4.1	32
194	Mechanical stability in a human radius fracture treated with a novel tissue-engineered bone substitute: a non-invasive, longitudinal assessment using high-resolution pQCT in combination with finite element analysis. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2011, 5, 415-420.	1.3	15
195	<i>In silico</i> models of bone remodeling from macro to nano— from organ to cell. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2011, 3, 241-251.	6.6	37
196	Osteal macrophages promote in vivo intramembranous bone healing in a mouse tibial injury model. <i>Journal of Bone and Mineral Research</i> , 2011, 26, 1517-1532.	3.1	394
197	Structural and material approaches to bone tissue engineering in powder-based three-dimensional printing. <i>Acta Biomaterialia</i> , 2011, 7, 907-920.	4.1	396
198	Abnormal Bone Microarchitecture and Evidence of Osteoblast Dysfunction in Premenopausal Women with Idiopathic Osteoporosis. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2011, 96, 3095-3105.	1.8	72

#	ARTICLE	IF	CITATIONS
199	Towards validation of computational analyses of peri-implant displacements by means of experimentally obtained displacement maps. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011, 14, 165-174.	0.9	16
200	Mechano-functional assessment of human mesenchymal stem cells grown in three-dimensional hyaluronan-based scaffolds for cartilage tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , 2010, 93A, 37-45.	2.1	22
201	Multiscale modelling and nonlinear finite element analysis as clinical tools for the assessment of fracture risk. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2010, 368, 2653-2668.	1.6	45
202	Endosseous implant anchorage is critically dependent on mechanostructural determinants of peri-implant bone trabeculae. <i>Journal of Bone and Mineral Research</i> , 2010, 25, 575-583.	3.1	62
203	Assessment of trabecular and cortical architecture and mechanical competence of bone by high-resolution peripheral computed tomography: comparison with transiliac bone biopsy. <i>Osteoporosis International</i> , 2010, 21, 263-273.	1.3	148
204	Assessing forearm fracture risk in postmenopausal women. <i>Osteoporosis International</i> , 2010, 21, 1161-1169.	1.3	109
205	Mechanical competence of bone-implant systems can accurately be determined by image-based micro-finite element analyses. <i>Archive of Applied Mechanics</i> , 2010, 80, 513-525.	1.2	33
206	Mechanical loading of mouse caudal vertebrae increases trabecular and cortical bone mass-dependence on dose and genotype. <i>Biomechanics and Modeling in Mechanobiology</i> , 2010, 9, 737-747.	1.4	35
207	Extreme scalability challenges in micro-finite element simulations of human bone. <i>Concurrency Computation Practice and Experience</i> , 2010, 22, 2282-2296.	1.4	15
208	A new route to produce starch-based fiber mesh scaffolds by wet spinning and subsequent surface modification as a way to improve cell attachment and proliferation. <i>Journal of Biomedical Materials Research - Part A</i> , 2010, 92A, 369-377.	2.1	58
209	Guidelines for assessment of bone microstructure in rodents using micro-computed tomography. <i>Journal of Bone and Mineral Research</i> , 2010, 25, 1468-1486.	3.1	3,449
210	Compressive axial mechanical properties of rat bone as functions of bone volume fraction, apparent density and micro-ct based mineral density. <i>Journal of Biomechanics</i> , 2010, 43, 953-960.	0.9	80
211	Quantitative, structural, and image-based mechanical analysis of nonunion fracture repaired by genetically engineered mesenchymal stem cells. <i>Journal of Biomechanics</i> , 2010, 43, 2315-2320.	0.9	25
212	Quantitative imaging of cartilage and bone for functional assessment of gene therapy approaches in experimental arthritis. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2010, 4, 387-394.	1.3	8
213	Effects of γ CT radiation on tissue engineered bone-like constructs. <i>Biomedizinische Technik</i> , 2010, 55, 245-250.	0.9	8
214	Design and validation of a novel bioreactor principle to combine online micro-computed tomography monitoring and mechanical loading in bone tissue engineering. <i>Review of Scientific Instruments</i> , 2010, 81, 014303.	0.6	28
215	Collagen-embedded hydroxylapatite-beta-tricalcium phosphate-silicon dioxide bone substitute granules assist rapid vascularization and promote cell growth. <i>Biomedical Materials (Bristol)</i> , 2010, 5, 025004.	1.7	33
216	Three dimensional cancellous bone structure in hypoparathyroidism. <i>Bone</i> , 2010, 46, 190-195.	1.4	84

#	ARTICLE	IF	CITATIONS
217	Towards quantitative 3D imaging of the osteocyte lacuno-canalicular network. <i>Bone</i> , 2010, 47, 848-858.	1.4	139
218	Effect of Matrix Elasticity on the Maintenance of the Chondrogenic Phenotype. <i>Tissue Engineering - Part A</i> , 2010, 16, 1281-1290.	1.6	109
219	Automated, High-Throughput, Multi-scale Assessment of Bone Morphology and Bone Competence. <i>IFMBE Proceedings</i> , 2010, , 841-843.	0.2	0
220	Lef1 Haploinsufficient Mice Display a Low Turnover and Low Bone Mass Phenotype in a Gender- and Age-Specific Manner. <i>PLoS ONE</i> , 2009, 4, e5438.	1.1	58
221	An Analytical Model for Elucidating Tendon Tissue Structure and Biomechanical Function from in vivo Cellular Confocal Microscopy Images. <i>Cells Tissues Organs</i> , 2009, 190, 111-119.	1.3	19
222	Post-processing technique for improved assessment of hard tissues in the submicrometer domain using local synchrotron radiation-based computed tomography / Nachbearbeitungstechnik für eine verbesserte Erfassung harten Gewebes im Submikrometerbereich mittels lokaler synchrotronstrahlungsbasierter Computertomographie. <i>Biomedizinische Technik</i> , 2009, 54, 48-54.	0.9	12
223	N-Cadherin Interacts with Axin and LRP5 To Negatively Regulate Wnt/ β -Catenin Signaling, Osteoblast Function, and Bone Formation. <i>Molecular and Cellular Biology</i> , 2009, 29, 953-964.	1.1	133
224	Interaction of Osteoblasts with Macroporous Scaffolds Made of PLLA/PCL Blends Modified with Collagen and Hydroxyapatite. <i>Advanced Engineering Materials</i> , 2009, 11, B83.	1.6	17
225	Inhibition of osteoclast formation and function by bicarbonate: Role of soluble adenylyl cyclase. <i>Journal of Cellular Physiology</i> , 2009, 220, 332-340.	2.0	43
226	Functional dependence of cancellous bone shear properties on trabecular microstructure evaluated using time-lapsed micro-computed tomographic imaging and torsion testing. <i>Journal of Orthopaedic Research</i> , 2009, 27, 1667-1674.	1.2	15
227	Morphometric characterization of murine articular cartilage – Novel application of confocal laser scanning microscopy. <i>Microscopy Research and Technique</i> , 2009, 72, 650-658.	1.2	14
228	Simultaneous 3D visualization and quantification of murine bone and bone vasculature using micro-computed tomography and vascular replica. <i>Microscopy Research and Technique</i> , 2009, 72, 690-701.	1.2	58
229	An improved method to assess torsional properties of rodent long bones. <i>Journal of Biomechanics</i> , 2009, 42, 1720-1725.	0.9	14
230	Local strain measurement reveals a varied regional dependence of tensile tendon mechanics on glycosaminoglycan content. <i>Journal of Biomechanics</i> , 2009, 42, 1547-1552.	0.9	101
231	Magnet-guided transduction of mammalian cells and mice using engineered magnetic lentiviral particles. <i>Journal of Biotechnology</i> , 2009, 141, 118-122.	1.9	23
232	Bone Structure at the Distal Radius During Adolescent Growth. <i>Journal of Bone and Mineral Research</i> , 2009, 24, 1033-1042.	3.1	240
233	Non-invasive bone competence analysis by high-resolution pQCT: An in vitro reproducibility study on structural and mechanical properties at the human radius. <i>Bone</i> , 2009, 44, 364-371.	1.4	88
234	Time-lapsed assessment of microcrack initiation and propagation in murine cortical bone at submicrometer resolution. <i>Bone</i> , 2009, 45, 164-173.	1.4	78

#	ARTICLE	IF	CITATIONS
235	Revealing the interplay of bone and cartilage in osteoarthritis through multimodal imaging of murine joints. <i>Bone</i> , 2009, 45, 414-422.	1.4	31
236	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. <i>Bone</i> , 2009, 45, 882-891.	1.4	80
237	Hydroxyapatite particles maintain peri-implant bone mantle during osseointegration in osteoporotic bone. <i>Bone</i> , 2009, 45, 1117-1124.	1.4	27
238	Dentin sialoprotein and dentin phosphoprotein have distinct roles in dentin mineralization. <i>Matrix Biology</i> , 2009, 28, 221-229.	1.5	183
239	Hierarchical microimaging of bone structure and function. <i>Nature Reviews Rheumatology</i> , 2009, 5, 373-381.	3.5	132
240	<i>In silico</i> biology of bone modelling and remodelling: adaptation. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2009, 367, 2011-2030.	1.6	50
241	Trabecular Bone Gradient in Rat Long Bone Metaphyses: Mathematical Modeling and Application to Morphometric Measurements and Correction of Implant Positioning. <i>Journal of Bone and Mineral Research</i> , 2008, 23, 48-57.	3.1	37
242	Indirect determination of trabecular bone effective tissue failure properties using micro-finite element simulations. <i>Journal of Biomechanics</i> , 2008, 41, 1479-1485.	0.9	94
243	Design and validation of a testing system to assess torsional cancellous bone failure in conjunction with time-lapsed micro-computed tomographic imaging. <i>Journal of Biomechanics</i> , 2008, 41, 3496-3501.	0.9	13
244	Differential Effects of Bone Structural and Material Properties on Bone Competence in C57BL/6 and C3H/He Inbred Strains of Mice. <i>Calcified Tissue International</i> , 2008, 83, 61-69.	1.5	15
245	Bone Volume Fraction Explains the Variation in Strength and Stiffness of Cancellous Bone Affected by Metastatic Cancer and Osteoporosis. <i>Calcified Tissue International</i> , 2008, 83, 368-379.	1.5	174
246	Microstructural adaptation in trapezial bone due to subluxation of the thumb. <i>Journal of Orthopaedic Research</i> , 2008, 26, 208-216.	1.2	13
247	A scalable multi-level preconditioner for matrix-free μ -finite element analysis of human bone structures. <i>International Journal for Numerical Methods in Engineering</i> , 2008, 73, 927-947.	1.5	117
248	Bone substitute: Transforming β -tricalcium phosphate porous scaffolds into α -monetite. <i>Biomaterials</i> , 2008, 29, 3400-3407.	5.7	50
249	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. <i>Stem Cells</i> , 2008, 26, 2981-2990.	1.4	40
250	Bone Morphometry Strongly Predicts Cortical Bone Stiffness and Strength, but Not Toughness, in Inbred Mouse Models of High and Low Bone Mass. <i>Journal of Bone and Mineral Research</i> , 2008, 23, 1194-1203.	3.1	39
251	Site-Specific Deterioration of Trabecular Bone Architecture in Men and Women With Advancing Age. <i>Journal of Bone and Mineral Research</i> , 2008, 23, 1964-1973.	3.1	63
252	METHOD FOR DIFFERENTIAL ISOLATION OF RNA FROM MOUSE CAUDAL TRABECULAR OSTEOBLASTS AND OSTEOCYTES. <i>Journal of Biomechanics</i> , 2008, 41, S131.	0.9	2

#	ARTICLE	IF	CITATIONS
253	CONTROL OF TISSUE-ENGINEERED BONE-LIKE STRUCTURES ON SILK FIBROIN SCAFFOLDS. <i>Journal of Biomechanics</i> , 2008, 41, S163.	0.9	0
254	CT-based visualization and quantification of bone microstructure in vivo. <i>IBMS BoneKEy</i> , 2008, 5, 410-425.	0.1	16
255	Quantitative micro-computed tomography: A non-invasive method to assess equivalent bone mineral density. <i>Bone</i> , 2008, 43, 302-311.	1.4	113
256	Tissue modulus calculated from beam theory is biased by bone size and geometry: Implications for the use of three-point bending tests to determine bone tissue modulus. <i>Bone</i> , 2008, 43, 717-723.	1.4	61
257	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. <i>NeuroImage</i> , 2008, 39, 1549-1558.	2.1	69
258	INVESTIGATION OF MICRODAMAGE IN MURINE BONE UNDER DYNAMIC LOAD. <i>Journal of Biomechanics</i> , 2008, 41, S76.	0.9	6
259	Micro-Computed Tomography: A Method for the Non-Destructive Evaluation of the Three-Dimensional Structure of Biological Specimens. <i>Methods in Molecular Biology</i> , 2008, 455, 273-292.	0.4	83
260	Femoral stiffness and strength critically depend on loading angle: a parametric study in a mouse-inbred strain. <i>Biomedizinische Technik</i> , 2008, 53, 122-129.	0.9	15
261	Synchrotron radiation CT methods for 3D quantitative assessment of mechanically relevant ultrastructural properties in murine bone. <i>Proceedings of SPIE</i> , 2008, , .	0.8	0
262	A novel <i>in vivo</i> mouse model for mechanically stimulated bone adaptation – a combined experimental and computational validation study. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2008, 11, 435-441.	0.9	76
263	Micro-finite element simulation of trabecular-bone post-yield behaviour – effects of material model, element size and type. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2008, 11, 389-395.	0.9	68
264	Quantification of Bone Structural Parameters and Mechanical Competence at the Distal Radius. <i>Journal of Orthopaedic Trauma</i> , 2008, 22, S66-S72.	0.7	14
265	A sensitivity analysis of the volumetric spatial decomposition algorithm. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2007, 10, 25-37.	0.9	5
266	Effects of Thresholding Techniques on μ CT-Based Finite Element Models of Trabecular Bone. <i>Journal of Biomechanical Engineering</i> , 2007, 129, 481-486.	0.6	37
267	Computer-based analysis of microvascular alterations in a mouse model for Alzheimer's disease. , 2007, , .		0
268	Micro-CT combined with bioluminescence imaging: A dynamic approach to detect early tumor–bone interaction in a tumor osteolysis murine model. <i>Bone</i> , 2007, 40, 1032-1040.	1.4	46
269	Preserved three-dimensional cancellous bone structure in mild primary hyperparathyroidism. <i>Bone</i> , 2007, 41, 19-24.	1.4	116
270	Automated compartmental analysis for high-throughput skeletal phenotyping in femora of genetic mouse models. <i>Bone</i> , 2007, 41, 659-667.	1.4	63

#	ARTICLE	IF	CITATIONS
271	Bisphosphonate action on bone structure and strength: Preclinical and clinical evidence for ibandronate. <i>Bone</i> , 2007, 41, S16-S23.	1.4	6
272	Preparation and characterization of calibration standards for bone density determination by micro-computed tomography. <i>Analyst, The</i> , 2007, 132, 1040.	1.7	33
273	Nonhuman anthropoid primate femoral neck trabecular architecture and its relationship to locomotor mode. <i>Anatomical Record</i> , 2007, 290, 422-436.	0.8	87
274	Diagnostic value of micro-CT in comparison with histology in the qualitative assessment of historical human skull bone pathologies. <i>American Journal of Physical Anthropology</i> , 2007, 133, 1099-1111.	2.1	67
275	Fluoxetine treatment increases trabecular bone formation in mice. <i>Journal of Cellular Biochemistry</i> , 2007, 100, 1387-1394.	1.2	59
276	Control of in vitro tissue-engineered bone-like structures using human mesenchymal stem cells and porous silk scaffolds. <i>Biomaterials</i> , 2007, 28, 1152-1162.	5.7	335
277	Densitometric, morphometric and mechanical distributions in the human proximal femur. <i>Journal of Biomechanics</i> , 2007, 40, 2573-2579.	0.9	74
278	Changes in the macro-pore structure of restored soil caused by compaction beneath heavy agricultural machinery: a morphometric study. <i>European Journal of Soil Science</i> , 2007, 58, 1062-1073.	1.8	66
279	Inhibition of tooth movement by osteoprotegerin vs. pamidronate under conditions of constant orthodontic force. <i>European Journal of Oral Sciences</i> , 2007, 115, 131-136.	0.7	47
280	Diagnostic value of micro-CT in comparison with histology in the qualitative assessment of historical human postcranial bone pathologies. <i>HOMO- Journal of Comparative Human Biology</i> , 2007, 58, 97-115.	0.3	27
281	Sex Differences of Human Trabecular Bone Microstructure in Aging Are Site-Dependent. <i>Journal of Bone and Mineral Research</i> , 2007, 22, 817-824.	3.1	129
282	Contribution of In Vivo Structural Measurements and Load/Strength Ratios to the Determination of Forearm Fracture Risk in Postmenopausal Women. <i>Journal of Bone and Mineral Research</i> , 2007, 22, 1442-1448.	3.1	167
283	Ultrastructural Properties in Cortical Bone Vary Greatly in Two Inbred Strains of Mice as Assessed by Synchrotron Light Based Micro- and Nano-CT. <i>Journal of Bone and Mineral Research</i> , 2007, 22, 1557-1570.	3.1	166
284	Non-Invasive Time-Lapsed Monitoring and Quantification of Engineered Bone-Like Tissue. <i>Annals of Biomedical Engineering</i> , 2007, 35, 1657-1667.	1.3	54
285	Preventative ibandronate treatment has the most beneficial effect on the microstructure of bone in experimental tumor osteolysis. <i>Journal of Bone and Mineral Metabolism</i> , 2007, 25, 86-92.	1.3	5
286	Nondestructive micro-computed tomography for biological imaging and quantification of scaffold-bone interaction in vivo. <i>Biomaterials</i> , 2007, 28, 2479-2490.	5.7	186
287	Micro-Tomographic Atlas of the Mouse Skeleton. , 2007, , .		45
288	A computerized model for reconstruction of dental ontogeny: A new tool for studying evolutionary trends in the dentition. <i>Vertebrate Paleobiology and Paleoanthropology</i> , 2007, , 275-288.	0.1	2

#	ARTICLE	IF	CITATIONS
289	Recombinant Protein-co-PEG Networks as Cell-Adhesive and Proteolytically Degradable Hydrogel Matrixes. Part II: Biofunctional Characteristics. <i>Biomacromolecules</i> , 2006, 7, 3019-3029.	2.6	176
290	Effect of Scaffold Design on Bone Morphology In Vitro. <i>Tissue Engineering</i> , 2006, 12, 3417-3429.	4.9	126
291	Hierarchical microimaging for multiscale analysis of large vascular networks. <i>NeuroImage</i> , 2006, 32, 626-636.	2.1	161
292	Prediction of failure load using micro-finite element analysis models: Toward in vivo strength assessment. <i>Drug Discovery Today: Technologies</i> , 2006, 3, 221-229.	4.0	30
293	Volumetric spatial decomposition of trabecular bone into rods and plates—A new method for local bone morphometry. <i>Bone</i> , 2006, 38, 475-484.	1.4	153
294	Time-lapsed investigation of three-dimensional failure and damage accumulation in trabecular bone using synchrotron light. <i>Bone</i> , 2006, 39, 289-299.	1.4	112
295	Parathyroid hormone 1 ³⁴ enhances titanium implant anchorage in low-density trabecular bone: A correlative micro-computed tomographic and biomechanical analysis. <i>Bone</i> , 2006, 39, 276-282.	1.4	106
296	Monitoring individual morphological changes over time in ovariectomized rats by in vivo micro-computed tomography. <i>Bone</i> , 2006, 39, 854-862.	1.4	189
297	The interaction of microstructure and volume fraction in predicting failure in cancellous bone. <i>Bone</i> , 2006, 39, 1196-1202.	1.4	93
298	Specimen-specific beam models for fast and accurate prediction of human trabecular bone mechanical properties. <i>Bone</i> , 2006, 39, 1182-1189.	1.4	71
299	Functional microimaging: an integrated approach for advanced bone biomechanics and failure analysis. , 2006, , .		1
300	Assessment of murine bone ultrastructure using synchrotron light: towards nano-computed tomography. , 2006, 6318, 86.		1
301	The influence of surface coatings of dicalcium phosphate (DCPD) and growth and differentiation factor-5 (GDF-5) on the stability of titanium implants in vivo. <i>Biomaterials</i> , 2006, 27, 3988-3994.	5.7	32
302	In vivo behavior of calcium phosphate scaffolds with four different pore sizes. <i>Biomaterials</i> , 2006, 27, 5186-5198.	5.7	252
303	Micro-computed tomography determination of glass fibre reinforced polymer meso-structure. <i>Composites Science and Technology</i> , 2006, 66, 2016-2022.	3.8	101
304	Smooth surface meshing for automated finite element model generation from 3D image data. <i>Journal of Biomechanics</i> , 2006, 39, 1287-1295.	0.9	87
305	Importance of Individual Rods and Plates in the Assessment of Bone Quality and Their Contribution to Bone Stiffness. <i>Journal of Bone and Mineral Research</i> , 2006, 21, 586-595.	3.1	121
306	Evaluation of Three-dimensional Image Registration Methodologies for In Vivo Micro-computed Tomography. <i>Annals of Biomedical Engineering</i> , 2006, 34, 1587-1599.	1.3	56

#	ARTICLE	IF	CITATIONS
307	Age-related changes in trabecular bone microstructures: global and local morphometry. <i>Osteoporosis International</i> , 2006, 17, 616-626.	1.3	112
308	Architecture and properties of anisotropic polymer composite scaffolds for bone tissue engineering. <i>Biomaterials</i> , 2006, 27, 905-916.	5.7	305
309	Microstructural insight into pedestrian pelvic fracture as assessed by high-resolution computed tomography. <i>Journal of Biomechanics</i> , 2006, 39, 2709-2713.	0.9	9
310	Trabecular bone failure at the microstructural level. <i>Current Osteoporosis Reports</i> , 2006, 4, 80-86.	1.5	19
311	Local delivery of bisphosphonate from coated orthopedic implants increases implants mechanical stability in osteoporotic rats. <i>Journal of Biomedical Materials Research - Part A</i> , 2006, 76A, 133-143.	2.1	153
312	Heparanase is expressed in osteoblastic cells and stimulates bone formation and bone mass. <i>Journal of Cellular Physiology</i> , 2006, 207, 784-792.	2.0	53
313	Endoscopic cellular microscopy for in vivo biomechanical assessment of tendon function. <i>Journal of Biomedical Optics</i> , 2006, 11, 064010.	1.4	21
314	Phase contrast tomography: An alternative approach. <i>Applied Physics Letters</i> , 2006, 88, 214104.	1.5	62
315	Involvement of Neuronal Cannabinoid Receptor CB1 in Regulation of Bone Mass and Bone Remodeling. <i>Molecular Pharmacology</i> , 2006, 70, 786-792.	1.0	143
316	Effect of Scaffold Design on Bone Morphology in Vitro. <i>Tissue Engineering</i> , 2006, .	4.9	0
317	Novel techniques for high-resolution functional imaging of trabecular bone. , 2005, , .		8
318	Leaky ribosomal scanning in mammalian genomes: significance of histone H4 alternative translation in vivo. <i>Nucleic Acids Research</i> , 2005, 33, 1298-1308.	6.5	31
319	In vivo bone regeneration with injectable calcium phosphate biomaterial: A three-dimensional micro-computed tomographic, biomechanical and SEM study. <i>Biomaterials</i> , 2005, 26, 5444-5453.	5.7	175
320	Synthesis and characterization of porous β -tricalcium phosphate blocks. <i>Biomaterials</i> , 2005, 26, 6099-6105.	5.7	143
321	Engineering craniofacial scaffolds. <i>Orthodontics and Craniofacial Research</i> , 2005, 8, 162-173.	1.2	257
322	Long-term periarticular bone adaptation in a feline knee injury model for post-traumatic experimental osteoarthritis. <i>Osteoarthritis and Cartilage</i> , 2005, 13, 235-242.	0.6	63
323	Design and implementation of a novel mechanical testing system for cellular solids. , 2005, 73B, 400-411.		36
324	3D morphology of cell cultures: A quantitative approach using micrometer synchrotron light tomography. <i>Microscopy Research and Technique</i> , 2005, 66, 289-298.	1.2	32

#	ARTICLE	IF	CITATIONS
325	Compartmental Bone Morphometry in the Mouse Femur: Reproducibility and Resolution Dependence of Microtomographic Measurements. <i>Calcified Tissue International</i> , 2005, 77, 281-290.	1.5	73
326	Long-term prediction of three-dimensional bone architecture in simulations of pre-, peri- and post-menopausal microstructural bone remodeling. <i>Osteoporosis International</i> , 2005, 16, S25-S35.	1.3	57
327	Intermittently administered parathyroid hormone 1 α 34 reverses bone loss and structural impairment in orchietomized adult rats. <i>Osteoporosis International</i> , 2005, 16, 1436-1443.	1.3	30
328	Sample handler for x-ray tomographic microscopy and image-guided failure assessment. <i>Review of Scientific Instruments</i> , 2005, 76, 076106.	0.6	4
329	Prediction of fracture callus mechanical properties using micro-CT images and voxel-based finite element analysis. <i>Bone</i> , 2005, 36, 480-488.	1.4	152
330	Testing Two Predictions for Fracture Load Using Computer Models of Trabecular Bone. <i>Biophysical Journal</i> , 2005, 89, 759-767.	0.2	13
331	Eine antiosteoklastische Therapie bewahrt die Mikrostruktur des Knochens in experimentellen Tumorosteolysen. <i>Osteologie</i> , 2005, 14, 21-28.	0.1	0
332	Bone healing in the rat and dog with nonglycosylated BMP-2 demonstrating low solubility in fibrin matrices. <i>Journal of Orthopaedic Research</i> , 2004, 22, 376-381.	1.2	106
333	Intermittent Ibandronate Preserves Bone Quality and Bone Strength in the Lumbar Spine After 16 Months of Treatment in the Ovariectomized Cynomolgus Monkey. <i>Journal of Bone and Mineral Research</i> , 2004, 19, 1787-1796.	3.1	83
334	Technical Considerations for Microstructural Analysis of Human Trabecular Bone from Specimens Excised from Various Skeletal Sites. <i>Calcified Tissue International</i> , 2004, 75, 15-22.	1.5	39
335	Synthetic extracellular matrices for in situ tissue engineering. <i>Biotechnology and Bioengineering</i> , 2004, 86, 27-36.	1.7	213
336	Differential transcriptional effects of PTH and estrogen during anabolic bone formation. <i>Journal of Cellular Biochemistry</i> , 2004, 93, 476-490.	1.2	27
337	New approach to quantifying developmental variation in the dentition using serial microtomographic imaging. <i>Microscopy Research and Technique</i> , 2004, 65, 263-269.	1.2	31
338	Time-lapsed microstructural imaging of bone failure behavior. <i>Journal of Biomechanics</i> , 2004, 37, 55-65.	0.9	155
339	Experimental and finite element analysis of the rat ulnar loading model correlations between strain and bone formation following fatigue loading. <i>Journal of Biomechanics</i> , 2004, 37, 541-548.	0.9	92
340	A Finite Element Beam-model for Efficient Simulation of Large-scale Porous Structures. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2004, 7, 9-16.	0.9	15
341	Osteogenic growth peptide modulates fracture callus structural and mechanical properties. <i>Bone</i> , 2004, 35, 65-73.	1.4	103
342	Hierarchical bioimaging and quantification of vasculature in disease models using corrosion casts and microcomputed tomography. , 2004, , .		2

#	ARTICLE	IF	CITATIONS
343	Functional micro-imaging of soft and hard tissue using synchrotron light. , 2004, , .		4
344	Soft-tissue and phase-contrast imaging at the Swiss Light Source. , 2004, , .		2
345	Mapping Quantitative Trait Loci for Vertebral Trabecular Bone Volume Fraction and Microarchitecture in Mice. Journal of Bone and Mineral Research, 2003, 19, 587-599.	3.1	98
346	Trabecular Bone Response to Mechanical and Parathyroid Hormone Stimulation: The Role of Mechanical Microenvironment. Journal of Bone and Mineral Research, 2003, 18, 2116-2125.	3.1	107
347	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.	3.1	83
348	Precision and Accuracy of Peripheral Quantitative Computed Tomography (pQCT) in the Mouse Skeleton Compared With Histology and Microcomputed Tomography (μ CT). Journal of Bone and Mineral Research, 2003, 18, 1486-1496.	3.1	92
349	Combining high-resolution micro-computed tomography with material composition to define the quality of bone tissue. Current Osteoporosis Reports, 2003, 1, 11-19.	1.5	76
350	Bone microarchitecture assessment: current and future trends. Osteoporosis International, 2003, 14, 89-99.	1.3	75
351	No bias of ignored bilaterality when analysing the revision risk of knee prostheses: Analysis of a population based sample of 44,590 patients with 55,298 knee prostheses from the national Swedish Knee Arthroplasty Register. BMC Musculoskeletal Disorders, 2003, 4, 1.	0.8	144
352	Does simvastatin stimulate bone formation in vivo?. BMC Musculoskeletal Disorders, 2003, 4, 8.	0.8	48
353	Tomography studies of human foreskin fibroblasts on polymer yarns. Nuclear Instruments & Methods in Physics Research B, 2003, 200, 397-405.	0.6	24
354	Physiologic weight-bearing increases new vessel formation during distraction osteogenesis: A micro-tomographic imaging study. Journal of Orthopaedic Research, 2003, 21, 489-496.	1.2	53
355	Repair of bone defects using synthetic mimetics of collagenous extracellular matrices. Nature Biotechnology, 2003, 21, 513-518.	9.4	797
356	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.	1.3	84
357	Three-Dimensional Quantitation of Periradicular Bone Destruction by Micro-Computed Tomography. Journal of Endodontics, 2003, 29, 252-256.	1.4	62
358	Intermittent intravenous administration of the bisphosphonate ibandronate prevents bone loss and maintains bone strength and quality in ovariectomized cynomolgus monkeys. Bone, 2003, 32, 45-55.	1.4	105
359	Bone Formation on Tissue-Engineered Cartilage Constructs in Vivo: Effects of Chondrocyte Viability and Mechanical Loading. Tissue Engineering, 2003, 9, 587-596.	4.9	28
360	Changes in Bone Architecture During Spinal Fusion: Three Years Follow-up and the Role of Cage Stiffness. Spine, 2003, 28, 1802-1808.	1.0	63

#	ARTICLE	IF	CITATIONS
361	The ZÄrich Experience: One Decade of Three-Dimensional High-Resolution Computed Tomography. Topics in Magnetic Resonance Imaging, 2002, 13, 307-322.	0.7	54
362	A mouse model of inflammatory root resorption induced by pulpal infection. Oral Surgery Oral Medicine Oral Pathology Oral Radiology and Endodontics, 2002, 93, 461-468.	1.6	28
363	Mechanical strength of the thoracolumbar spine in the elderly: prediction from in situ dual-energy X-ray absorptiometry, quantitative computed tomography (QCT), upper and lower limb peripheral QCT, and quantitative ultrasound. Bone, 2002, 31, 77-84.	1.4	105
364	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.	1.3	91
365	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.	3.1	93
366	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.	3.1	266
367	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.	3.1	73
368	Mechanical and Architectural Bone Adaptation in Early Stage Experimental Osteoarthritis. Journal of Bone and Mineral Research, 2002, 17, 687-694.	3.1	104
369	Effect of Pore Size and Void Fraction on Cellular Adhesion, Proliferation, and Matrix Deposition. Tissue Engineering, 2001, 7, 557-572.	4.9	723
370	TRANCE/RANKL Knockout Mice Are Protected from Bone Erosion in a Serum Transfer Model of Arthritis. American Journal of Pathology, 2001, 159, 1689-1699.	1.9	745
371	Measurement of cancellous bone strain during mechanical tests using a new extensometer device. Medical Engineering and Physics, 2001, 23, 411-416.	0.8	11
372	Engineered human mesenchymal stem cells: a novel platform for skeletal cell mediated gene therapy. Journal of Gene Medicine, 2001, 3, 240-251.	1.4	208
373	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.	3.1	580
374	Quantitative Ultrasound and Trabecular Architecture in the Human Calcaneus*. Journal of Bone and Mineral Research, 2001, 16, 1886-1892.	3.1	101
375	Variation in Bone Biomechanical Properties, Microstructure, and Density in BXH Recombinant Inbred Mice. Journal of Bone and Mineral Research, 2001, 16, 206-213.	3.1	100
376	Human Parathyroid Hormone 1-34 Reverses Bone Loss in Ovariectomized Mice. Journal of Bone and Mineral Research, 2001, 16, 1665-1673.	3.1	145
377	Exogenously Regulated Stem Cell-Mediated Gene Therapy for Bone Regeneration. Molecular Therapy, 2001, 3, 449-461.	3.7	240
378	Time-lapse nondestructive assessment of shock wave damage to kidney stones in vitro using micro-computed tomography. Journal of the Acoustical Society of America, 2001, 110, 1733-1736.	0.5	18

#	ARTICLE	IF	CITATIONS
379	Engineered human mesenchymal stem cells: a novel platform for skeletal cell mediated gene therapy. <i>Journal of Gene Medicine</i> , 2001, 3, 240-251.	1.4	3
380	Genetic Regulation of Cortical and Trabecular Bone Strength and Microstructure in Inbred Strains of Mice. <i>Journal of Bone and Mineral Research</i> , 2000, 15, 1126-1131.	3.1	181
381	IL-10, But Not IL-4, Suppresses Infection-Stimulated Bone Resorption In Vivo. <i>Journal of Immunology</i> , 2000, 165, 3626-3630.	0.4	162
382	Early morphometric and anisotropic change in periarticular cancellous bone in a model of experimental knee osteoarthritis quantified using microcomputed tomography. <i>Clinical Biomechanics</i> , 2000, 15, 624-631.	0.5	57
383	Tissue stresses and strain in trabeculae of a canine proximal femur can be quantified from computer reconstructions. <i>Journal of Biomechanics</i> , 1999, 32, 165-173.	0.9	133
384	Direct Three-Dimensional Morphometric Analysis of Human Cancellous Bone: Microstructural Data from Spine, Femur, Iliac Crest, and Calcaneus. <i>Journal of Bone and Mineral Research</i> , 1999, 14, 1167-1174.	3.1	1,148
385	Morphometric Analysis of Human Bone Biopsies: A Quantitative Structural Comparison of Histological Sections and Micro-Computed Tomography. <i>Bone</i> , 1998, 23, 59-66.	1.4	575
386	Do quantitative ultrasound measurements reflect structure independently of density in human vertebral cancellous bone?. <i>Bone</i> , 1998, 23, 425-431.	1.4	166
387	Morphometric analysis of noninvasively assessed bone biopsies: Comparison of high-resolution computed tomography and histologic sections. <i>Bone</i> , 1996, 18, 215-220.	1.4	206
388	Analysis of mechanical properties of cancellous bone under conditions of simulated bone atrophy. <i>Journal of Biomechanics</i> , 1996, 29, 1053-1060.	0.9	73
389	In vivo reproducibility of three-dimensional structural properties of noninvasive bone biopsies using 3D-pQCT. <i>Journal of Bone and Mineral Research</i> , 1996, 11, 1745-1750.	3.1	147
390	Three-dimensional finite element modelling of non-invasively assessed trabecular bone structures. <i>Medical Engineering and Physics</i> , 1995, 17, 126-133.	0.8	216
391	Magnetic resonance angiography: methods and its applications to the coronary arteries. <i>Technology and Health Care</i> , 1994, 2, 255-265.	0.5	22
392	Optimization of Mechanical Stiffness and Cell Density of 3D Bioprinted Cell-Laden Scaffolds Improves Extracellular Matrix Mineralization and Osteocyte-Like Cell Organization for Bone Tissue Engineering. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
393	Clinical Data for Parametrization of In Silico Bone Models Incorporating Cell-Cytokine Dynamics: A Systematic Review of Literature. <i>Frontiers in Bioengineering and Biotechnology</i> , 0, 10, .	2.0	0