

Bert van Rietbergen

List of Publications by Year in descending order

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Version: 2024-02-01

143
papers

7,692
citations

66234

42
h-index

54797

84
g-index

145
all docs

145
docs citations

145
times ranked

5459
citing authors

#	ARTICLE	IF	CITATIONS
1	A new method to determine trabecular bone elastic properties and loading using micromechanical finite-element models. <i>Journal of Biomechanics</i> , 1995, 28, 69-81.	0.9	769
2	Estimation of distal radius failure load with micro-finite element analysis models based on three-dimensional peripheral quantitative computed tomography images. <i>Bone</i> , 2002, 30, 842-848.	1.4	538
3	Finite Element Analysis Based on In Vivo HR-pQCT Images of the Distal Radius Is Associated With Wrist Fracture in Postmenopausal Women. <i>Journal of Bone and Mineral Research</i> , 2008, 23, 392-399.	3.1	414
4	Stresses in the local collagen network of articular cartilage: a poroviscoelastic fibril-reinforced finite element study. <i>Journal of Biomechanics</i> , 2004, 37, 357-366.	0.9	262
5	A three-dimensional digital image correlation technique for strain measurements in microstructures. <i>Journal of Biomechanics</i> , 2004, 37, 1313-1320.	0.9	253
6	A theoretical framework for strain-related trabecular bone maintenance and adaptation. <i>Journal of Biomechanics</i> , 2005, 38, 931-941.	0.9	250
7	Finite element analysis of trabecular bone structure: a comparison of image-based meshing techniques. <i>Journal of Biomechanics</i> , 1998, 31, 1187-1192.	0.9	246
8	Cortical and trabecular bone microarchitecture as an independent predictor of incident fracture risk in older women and men in the Bone Microarchitecture International Consortium (BoMIC): a prospective study. <i>Lancet Diabetes and Endocrinology</i> , 2019, 7, 34-43.	5.5	244
9	Bone remodelling in humans is load-driven but not lazy. <i>Nature Communications</i> , 2014, 5, 4855.	5.8	212
10	Trabecular Bone Tissue Strains in the Healthy and Osteoporotic Human Femur. <i>Journal of Bone and Mineral Research</i> , 2003, 18, 1781-1788.	3.1	197
11	Finite element analysis performed on radius and tibia HR-pQCT images and fragility fractures at all sites in postmenopausal women. <i>Bone</i> , 2010, 46, 1030-1037.	1.4	153
12	Bone micro-architecture and determinants of strength in the radius and tibia: age-related changes in a population-based study of normal adults measured with high-resolution pQCT. <i>Osteoporosis International</i> , 2009, 20, 1683-1694.	1.3	149
13	Load distribution in the healthy and osteoporotic human proximal femur during a fall to the side. <i>Bone</i> , 2008, 42, 30-35.	1.4	145
14	Finite element analysis performed on radius and tibia HR-pQCT images and fragility fractures at all sites in men. <i>Journal of Bone and Mineral Research</i> , 2011, 26, 965-973.	3.1	126
15	COMPUTATIONAL STRATEGIES FOR ITERATIVE SOLUTIONS OF LARGE FEM APPLICATIONS EMPLOYING VOXEL DATA. <i>International Journal for Numerical Methods in Engineering</i> , 1996, 39, 2743-2767.	1.5	117
16	Mechanical behavior of a soft hydrogel reinforced with three-dimensional printed microfibre scaffolds. <i>Scientific Reports</i> , 2018, 8, 1245.	1.6	116
17	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
18	Peripheral skeleton bone strength is positively correlated with total and dairy protein intakes in healthy postmenopausal women. <i>American Journal of Clinical Nutrition</i> , 2017, 105, 513-525.	2.2	107

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19	Comparison of micro-level and continuum-level voxel models of the proximal femur. <i>Journal of Biomechanics</i> , 2006, 39, 2951-2957.	0.9	96
20	Cortical and Trabecular Bone Microstructure Did Not Recover at Weight-Bearing Skeletal Sites and Progressively Deteriorated at Non-Weight-Bearing Sites During the Year Following International Space Station Missions. <i>Journal of Bone and Mineral Research</i> , 2017, 32, 2010-2021.	3.1	96
21	No effects of in vivo micro-CT radiation on structural parameters and bone marrow cells in proximal tibia of wistar rats detected after eight weekly scans. <i>Journal of Orthopaedic Research</i> , 2007, 25, 1325-1332.	1.2	95
22	Clinical Applications of S53P4 Bioactive Glass in Bone Healing and Osteomyelitic Treatment: A Literature Review. <i>BioMed Research International</i> , 2015, 2015, 1-12.	0.9	95
23	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
24	HR-pQCT Measures of Bone Microarchitecture Predict Fracture: Systematic Review and Meta-Analysis. <i>Journal of Bone and Mineral Research</i> , 2020, 35, 446-459.	3.1	92
25	Image-Based Micro-Finite-Element Modeling for Improved Distal Radius Strength Diagnosis. <i>Journal of Clinical Densitometry</i> , 2004, 7, 153-160.	0.5	91
26	Image-based goal-oriented adaptive isogeometric analysis with application to the micro-mechanical modeling of trabecular bone. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2015, 284, 138-164.	3.4	89
27	High-resolution MRI and micro-FE for the evaluation of changes in bone mechanical properties during longitudinal clinical trials: application to calcaneal bone in postmenopausal women after one year of idoxifene treatment. <i>Clinical Biomechanics</i> , 2002, 17, 81-88.	0.5	87
28	Evaluation of Radius Microstructure and Areal Bone Mineral Density Improves Fracture Prediction in Postmenopausal Women. <i>Journal of Bone and Mineral Research</i> , 2018, 33, 328-337.	3.1	81
29	Challenges in longitudinal measurements with HR-pQCT: Evaluation of a 3D registration method to improve bone microarchitecture and strength measurement reproducibility. <i>Bone</i> , 2014, 63, 147-157.	1.4	80
30	A survey of micro-finite element analysis for clinical assessment of bone strength: The first decade. <i>Journal of Biomechanics</i> , 2015, 48, 832-841.	0.9	77
31	Mechanical consequences of different scenarios for simulated bone atrophy and recovery in the distal radius. <i>Bone</i> , 2003, 33, 937-945.	1.4	76
32	Bone Degeneration and Recovery after Early and Late Bisphosphonate Treatment of Ovariectomized Wistar Rats Assessed by In Vivo Micro-Computed Tomography. <i>Calcified Tissue International</i> , 2008, 82, 202-211.	1.5	76
33	Effects of PTH treatment on tibial bone of ovariectomized rats assessed by in vivo micro-CT. <i>Osteoporosis International</i> , 2009, 20, 1823-1835.	1.3	73
34	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
35	Fractures during Childhood and Adolescence in Healthy Boys: Relation with Bone Mass, Microstructure, and Strength. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2011, 96, 3134-3142.	1.8	69
36	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

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37	Flow rates in perfusion bioreactors to maximise mineralisation in bone tissue engineering in vitro. <i>Journal of Biomechanics</i> , 2018, 79, 232-237.	0.9	62
38	Age-related changes in bone strength from HR-pQCT derived microarchitectural parameters with an emphasis on the role of cortical porosity. <i>Bone</i> , 2016, 83, 233-240.	1.4	57
39	FEA to Measure Bone Strength: A Review. <i>Clinical Reviews in Bone and Mineral Metabolism</i> , 2016, 14, 26-37.	1.3	56
40	Assessment of the healing process in distal radius fractures by high resolution peripheral quantitative computed tomography. <i>Bone</i> , 2014, 64, 65-74.	1.4	47
41	Fermented dairy products consumption is associated with attenuated cortical bone loss independently of total calcium, protein, and energy intakes in healthy postmenopausal women. <i>Osteoporosis International</i> , 2018, 29, 1771-1782.	1.3	46
42	Subject-specific bone loading estimation in the human distal radius. <i>Journal of Biomechanics</i> , 2013, 46, 759-766.	0.9	43
43	Fracture history of healthy premenopausal women is associated with a reduction of cortical microstructural components at the distal radius. <i>Bone</i> , 2013, 55, 377-383.	1.4	42
44	A novel approach to estimate trabecular bone anisotropy using a database approach. <i>Journal of Biomechanics</i> , 2013, 46, 2356-2362.	0.9	40
45	Effects of vibration treatment on tibial bone of ovariectomized rats analyzed by in vivo micro-CT. <i>Journal of Orthopaedic Research</i> , 2010, 28, 62-69.	1.2	38
46	Fast estimation of Colles' fracture load of the distal section of the radius by homogenized finite element analysis based on HR-pQCT. <i>Bone</i> , 2017, 97, 65-75.	1.4	34
47	A multiscale analytical approach for bone remodeling simulations: Linking scales from collagen to trabeculae. <i>Bone</i> , 2014, 64, 303-313.	1.4	33
48	Determination of hip-joint loading patterns of living and extinct mammals using an inverse Wolff's law approach. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 427-432.	1.4	33
49	A multiscale computational fluid dynamics approach to simulate the micro-fluidic environment within a tissue engineering scaffold with highly irregular pore geometry. <i>Biomechanics and Modeling in Mechanobiology</i> , 2019, 18, 1965-1977.	1.4	33
50	A new approach to determine the accuracy of morphology-elasticity relationships in continuum FE analyses of human proximal femur. <i>Journal of Biomechanics</i> , 2012, 45, 2884-2892.	0.9	32
51	Comparison of patient-specific computational models vs. clinical follow-up, for adjacent segment disc degeneration and bone remodelling after spinal fusion. <i>PLoS ONE</i> , 2018, 13, e0200899.	1.1	32
52	Fracture Repair in the Distal Radius in Postmenopausal Women: A Follow-Up 2 Years Postfracture Using HRpQCT. <i>Journal of Bone and Mineral Research</i> , 2016, 31, 1114-1122.	3.1	31
53	Technical Note: Cortical thickness and density estimation from clinical CT using a prior thickness-density relationship. <i>Medical Physics</i> , 2016, 43, 1945-1954.	1.6	31
54	A computational spinal motion segment model incorporating a matrix composition-based model of the intervertebral disc. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2016, 54, 194-204.	1.5	30

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55	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
56	Least-detectable and age-related local in vivo bone remodelling assessed by time-lapse HR-pQCT. <i>PLoS ONE</i> , 2018, 13, e0191369.	1.1	28
57	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
58	Validation of distal radius failure load predictions by homogenized- and micro-finite element analyses based on second-generation high-resolution peripheral quantitative CT images. <i>Osteoporosis International</i> , 2019, 30, 1433-1443.	1.3	27
59	Analysis of bone architecture sensitivity for changes in mechanical loading, cellular activity, mechanotransduction, and tissue properties. <i>Biomechanics and Modeling in Mechanobiology</i> , 2011, 10, 701-712.	1.4	25
60	Bone metastasis treatment using magnetic resonance-guided high intensity focused ultrasound. <i>Bone</i> , 2015, 81, 513-523.	1.4	25
61	Assessment of Cortical Interruptions in the Finger Joints of Patients With Rheumatoid Arthritis Using HR-pQCT, Radiography, and MRI. <i>Journal of Bone and Mineral Research</i> , 2018, 33, 1676-1685.	3.1	25
62	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. <i>Journal of Bone and Mineral Research</i> , 2014, 29, 2065-2073.	3.1	23
63	A novel approach to estimate trabecular bone anisotropy from stress tensors. <i>Biomechanics and Modeling in Mechanobiology</i> , 2015, 14, 39-48.	1.4	23
64	Vascular channels in metacarpophalangeal joints: a comparative histologic and high-resolution imaging study. <i>Scientific Reports</i> , 2017, 7, 8966.	1.6	23
65	Consensus approach for 3D joint space width of metacarpophalangeal joints of rheumatoid arthritis patients using high-resolution peripheral quantitative computed tomography. <i>Quantitative Imaging in Medicine and Surgery</i> , 2020, 10, 314-325.	1.1	23
66	A sclerostin-based theory for strain-induced bone formation. <i>Biomechanics and Modeling in Mechanobiology</i> , 2011, 10, 663-670.	1.4	22
67	Noise Exposure in TKA Surgery; Oscillating Tip Saw Systems vs Oscillating Blade Saw Systems. <i>Journal of Arthroplasty</i> , 2016, 31, 2773-2777.	1.5	22
68	Trabecular bone of precocials at birth; Are they prepared to run for the wolf(f)? <i>Journal of Morphology</i> , 2016, 277, 948-956.	0.6	22
69	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
70	Changes in scaffold porosity during bone tissue engineering in perfusion bioreactors considerably affect cellular mechanical stimulation for mineralization. <i>Bone Reports</i> , 2020, 12, 100265.	0.2	22
71	Bone stiffness and failure load are related with clinical parameters in men with chronic obstructive pulmonary disease. <i>Journal of Bone and Mineral Research</i> , 2013, 28, 2186-2193.	3.1	21
72	Inter-individual variability of bone density and morphology distribution in the proximal femur and T12 vertebra. <i>Bone</i> , 2014, 60, 213-220.	1.4	21

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73	Prospective Follow-Up of Cortical Interruptions, Bone Density, and Micro-structure Detected on HR-pQCT: A Study in Patients with Rheumatoid Arthritis and Healthy Subjects. <i>Calcified Tissue International</i> , 2019, 104, 571-581.	1.5	20
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	Statistical estimation of femur micro-architecture using optimal shape and density predictors. <i>Journal of Biomechanics</i> , 2015, 48, 598-603.	0.9	18
76	An automated algorithm for the detection of cortical interruptions and its underlying loss of trabecular bone; a reproducibility study. <i>BMC Medical Imaging</i> , 2018, 18, 13.	1.4	18
77	Locally measured microstructural parameters are better associated with vertebral strength than whole bone density. <i>Osteoporosis International</i> , 2014, 25, 1285-1296.	1.3	17
78	Fluid flow-induced cell stimulation in bone tissue engineering changes due to interstitial tissue formation in vitro. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2020, 36, e3342.	1.0	17
79	The Effectiveness of Percutaneous Vertebroplasty Is Determined by the Patient-Specific Bone Condition and the Treatment Strategy. <i>PLoS ONE</i> , 2016, 11, e0151680.	1.1	16
80	Distal radius plate of CFR-PEEK has minimal effect compared to titanium plates on bone parameters in high-resolution peripheral quantitative computed tomography: a pilot study. <i>BMC Medical Imaging</i> , 2017, 17, 18.	1.4	16
81	An automated algorithm for the detection of cortical interruptions on high resolution peripheral quantitative computed tomography images of finger joints. <i>PLoS ONE</i> , 2017, 12, e0175829.	1.1	16
82	Reference data and calculators for second-generation HR-pQCT measures of the radius and tibia at anatomically standardized regions in White adults. <i>Osteoporosis International</i> , 2022, 33, 791-806.	1.3	16
83	Effect of a Cast on Short-Term Reproducibility and Bone Parameters Obtained from HR-pQCT Measurements at the Distal End of the Radius. <i>Journal of Bone and Joint Surgery - Series A</i> , 2016, 98, 356-362.	1.4	15
84	Patient-Specific Biomechanical Modeling of Bone Strength Using Statistically-Derived Fabric Tensors. <i>Annals of Biomedical Engineering</i> , 2016, 44, 234-246.	1.3	15
85	Porous Geometry Guided Micro-mechanical Environment Within Scaffolds for Cell Mechanobiology Study in Bone Tissue Engineering. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 736489.	2.0	15
86	Effects of magnetic resonance-guided high-intensity focused ultrasound ablation on bone mechanical properties and modeling. <i>Journal of Therapeutic Ultrasound</i> , 2015, 3, 13.	2.2	14
87	Visual detection of cortical breaks in hand joints: reliability and validity of high-resolution peripheral quantitative CT compared to microCT. <i>BMC Musculoskeletal Disorders</i> , 2016, 17, 271.	0.8	14
88	Misaligned spinal rods can induce high internal forces consistent with those observed to cause screw pullout and disc degeneration. <i>Spine Journal</i> , 2021, 21, 528-537.	0.6	14
89	Feasibility of rigid 3D image registration of high-resolution peripheral quantitative computed tomography images of healing distal radius fractures. <i>PLoS ONE</i> , 2017, 12, e0179413.	1.1	14
90	The Reliability of a Semi-automated Algorithm for Detection of Cortical Interruptions in Finger Joints on High Resolution CT Compared to MicroCT. <i>Calcified Tissue International</i> , 2017, 101, 132-140.	1.5	12

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91	Reliability of HR-pQCT-Derived Cortical Bone Structural Parameters When Using Uncorrected Instead of Corrected Automatically Generated Endocortical Contours in a Cross-Sectional Study: The Maastricht Study. <i>Calcified Tissue International</i> , 2018, 103, 252-265.	1.5	12
92	Bone Phenotyping Approaches in Human, Mice and Zebrafish – Expert Overview of the EU Cost Action GEMSTONE (Genomics of MusculoSkeletal traits Translational Network). <i>Frontiers in Endocrinology</i> , 2021, 12, 720728.	1.5	12
93	Mechanical behaviour of Bioactive Glass granules and morselized cancellous bone allograft in load bearing defects. <i>Journal of Biomechanics</i> , 2016, 49, 1121-1127.	0.9	11
94	Composition dependent mechanical behaviour of S53P4 bioactive glass putty for bone defect grafting. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 69, 301-306.	1.5	11
95	Fracture Prospectively Recorded From Prepuberty to Young Adulthood: Are They Markers of Peak Bone Mass and Strength in Males?. <i>Journal of Bone and Mineral Research</i> , 2017, 32, 1963-1969.	3.1	11
96	Resorption of the calcium phosphate layer on S53P4 bioactive glass by osteoclasts. <i>Journal of Materials Science: Materials in Medicine</i> , 2019, 30, 94.	1.7	11
97	The Effect of Bolus Vitamin D3 Supplementation on Distal Radius Fracture Healing: A Randomized Controlled Trial Using HR-pQCT. <i>Journal of Bone and Mineral Research</i> , 2020, 36, 1492-1501.	3.1	11
98	Early bone ingrowth and segmental stability of a trussed titanium cage versus a polyether ether ketone cage in an ovine lumbar interbody fusion model. <i>Spine Journal</i> , 2022, 22, 174-182.	0.6	11
99	Improved Detection of Scaphoid Fractures with High-Resolution Peripheral Quantitative CT Compared with Conventional CT. <i>Journal of Bone and Joint Surgery - Series A</i> , 2020, 102, 2138-2145.	1.4	11
100	A potential mechanism for allometric trabecular bone scaling in terrestrial mammals. <i>Journal of Anatomy</i> , 2015, 226, 236-243.	0.9	10
101	Micro-Finite Element analysis will overestimate the compressive stiffness of fractured cancellous bone. <i>Journal of Biomechanics</i> , 2016, 49, 2613-2618.	0.9	10
102	The interobserver reliability of the diagnosis and classification of scaphoid fractures using high-resolution peripheral quantitative CT. <i>Bone and Joint Journal</i> , 2020, 102-B, 478-484.	1.9	10
103	Prepubertal Impact of Protein Intake and Physical Activity on Weight Bearing Peak Bone Mass and Strength in Males. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2017, 102, jc.2016-2449.	1.8	9
104	The association between prevalent vertebral fractures and bone quality of the distal radius and distal tibia as measured with HR-pQCT in postmenopausal women with a recent non-vertebral fracture at the Fracture Liaison Service. <i>Osteoporosis International</i> , 2019, 30, 1789-1797.	1.3	9
105	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. <i>Bone</i> , 2019, 127, 510-516.	1.4	9
106	Associations between age-related changes in bone microstructure and strength and dietary acid load in a cohort of community-dwelling, healthy men and postmenopausal women. <i>American Journal of Clinical Nutrition</i> , 2020, 112, 1120-1131.	2.2	9
107	Assessment of the healing of conservatively-treated scaphoid fractures using HR-pQCT. <i>Bone</i> , 2021, 153, 116161.	1.4	9
108	Moderately degenerated lumbar motion segments: Are they truly unstable?. <i>Biomechanics and Modeling in Mechanobiology</i> , 2017, 16, 537-547.	1.4	8

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109	Structural damage and inflammation on radiographs or magnetic resonance imaging are associated with cortical interruptions on high-resolution peripheral quantitative computed tomography: a study in finger joints of patients with rheumatoid arthritis and healthy subjects. <i>Scandinavian Journal of Rheumatology</i> , 2018, 47, 431-439.	0.6	8
110	Radiopaque UHMWPE sublaminar cables for spinal deformity correction: Preclinical mechanical and radiopacifier leaching assessment. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2018, 106, 771-779.	1.6	8
111	Finite element model of load adaptive remodelling induced by orthodontic forces. <i>Medical Engineering and Physics</i> , 2018, 62, 63-68.	0.8	8
112	Development of a scoring method to visually score cortical interruptions on high-resolution peripheral quantitative computed tomography in rheumatoid arthritis and healthy controls. <i>PLoS ONE</i> , 2018, 13, e0200331.	1.1	8
113	The Feasibility of High-Resolution Peripheral Quantitative Computed Tomography (HR-pQCT) in Patients with Suspected Scaphoid Fractures. <i>Journal of Clinical Densitometry</i> , 2020, 23, 432-442.	0.5	8
114	Trabecular and subchondral bone development of the talus and distal tibia from foal to adult in the warmblood horse. <i>Journal of Veterinary Medicine Series C: Anatomia Histologia Embryologia</i> , 2018, 47, 206-215.	0.3	7
115	The turnover of mineralized growth plate cartilage into bone may be regulated by osteocytes. <i>Journal of Biomechanics</i> , 2011, 44, 1765-1770.	0.9	6
116	An Analytical Approach to Investigate the Evolution of Bone Volume Fraction in Bone Remodeling Simulation at the Tissue and Cell Level. <i>Journal of Biomechanical Engineering</i> , 2014, 136, 031004.	0.6	6
117	Occupation-dependent loading increases bone strength in men. <i>Osteoporosis International</i> , 2016, 27, 1169-1179.	1.3	6
118	Bone Microarchitecture and Distal Radius Fracture Pattern Complexity. <i>Journal of Orthopaedic Research</i> , 2019, 37, 1690-1697.	1.2	6
119	Accuracy of beam theory for estimating bone tissue modulus and yield stress from 3-point bending tests on rat femora. <i>Journal of Biomechanics</i> , 2020, 101, 109654.	0.9	6
120	Validation of a finite element model of the thoracolumbar spine to study instrumentation level variations in early onset scoliosis correction. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021, 117, 104360.	1.5	6
121	Effect of Denosumab Compared With Risedronate on Bone Strength in Patients Initiating or Continuing Glucocorticoid Treatment. <i>Journal of Bone and Mineral Research</i> , 2020, 37, 1136-1146.	3.1	6
122	Contra-lateral bone loss at the distal radius in postmenopausal women after a distal radius fracture: A two-year follow-up HRpQCT study. <i>Bone</i> , 2017, 101, 245-251.	1.4	5
123	Effects of long-term use of the preferential COX-2 inhibitor meloxicam on growing pigs. <i>Veterinary Record</i> , 2017, 181, 564-564.	0.2	5
124	Quantifying joint stiffness in clubfoot patients. <i>Clinical Biomechanics</i> , 2018, 60, 185-190.	0.5	5
125	Impairment of Cyclo-oxygenase-2 Function Results in Abnormal Growth Plate Development and Bone Microarchitecture but Does Not Affect Longitudinal Growth of the Long Bones in Skeletally Immature Mice. <i>Cartilage</i> , 2019, 12, 194760351983314.	1.4	5
126	Association of secondary displacement of distal radius fractures with cortical bone quality at the distal radius. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2021, 141, 1909-1918.	1.3	5

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127	A Novel HR-pQCT Image Registration Approach Reveals Sex-Specific Changes in Cortical Bone Retraction With Aging. <i>Journal of Bone and Mineral Research</i> , 2020, 36, 1351-1363.	3.1	5
128	Subsidence after total lumbar disc replacement is predictable and related to clinical outcome. <i>European Spine Journal</i> , 2020, 29, 1544-1552.	1.0	5
129	A new semi-orthotopic bone defect model for cell and biomaterial testing in regenerative medicine. <i>Biomaterials</i> , 2021, 279, 121187.	5.7	5
130	Malalignment of the total ankle replacement increases peak contact stresses on the bone-implant interface: a finite element analysis. <i>BMC Musculoskeletal Disorders</i> , 2022, 23, 463.	0.8	5
131	Associations between bone attenuation and prevalent vertebral fractures on chest CT scans differ with vertebral fracture locations. <i>Osteoporosis International</i> , 2021, 32, 1869-1877.	1.3	4
132	Association between bone shape and the presence of a fracture in patients with a clinically suspected scaphoid fracture. <i>Journal of Biomechanics</i> , 2021, 128, 110726.	0.9	4
133	Peptide Enhanced Bone Graft Substitute Presents Improved Short-Term Increase in Bone Volume and Construct Stiffness Compared to Iliac Crest Autologous Bone in an Ovine Lumbar Interbody Fusion Model. <i>Global Spine Journal</i> , 2022, 12, 1330-1337.	1.2	3
134	Patient-Specific Variations in Local Strain Patterns on the Surface of a Trussed Titanium Interbody Cage. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 750246.	2.0	3
135	The Implantation of Bioactive Glass Granules Can Contribute the Load-Bearing Capacity of Bones Weakened by Large Cortical Defects. <i>Materials</i> , 2019, 12, 3481.	1.3	2
136	AB0747 Assessment of cortical discontinuities in interphalangeal joints with hrpqt in comparison with radiography and microct imaging.. <i>Annals of the Rheumatic Diseases</i> , 2013, 72, A1017.2-A1017.	0.5	1
137	A Case Report of Abnormal Fracture Healing as Detected With High-Resolution Peripheral Quantitative Computed Tomography. <i>Journal of Clinical Densitometry</i> , 2017, 20, 486-489.	0.5	1
138	Evaluation of impaired growth plate development of long bones in skeletally immature mice by antirheumatic agents. <i>Journal of Orthopaedic Research</i> , 2021, 39, 553-564.	1.2	1
139	Ultra-high-molecular-weight polyethylene sublaminar tape as semirigid fixation or pedicle screw augmentation to prevent failure in long-segment spine surgery: an ex vivo biomechanical study. <i>Journal of Neurosurgery: Spine</i> , 2021, 34, 236-244.	0.9	1
140	What Is the Diagnostic Performance of Conventional Radiographs and Clinical Reassessment Compared With HR-pQCT Scaphoid Fracture Diagnosis?. <i>Clinical Orthopaedics and Related Research</i> , 2022, Publish Ahead of Print, .	0.7	1
141	SAT0512 Fracture Healing of Distal Radius Fractures Assessed by High-Resolution Peripheral Quantitative Computed Tomography, Bone Strength Analysis and Biomarkers. <i>Annals of the Rheumatic Diseases</i> , 2013, 72, A755.1-A755.	0.5	0
142	Microarchitecture of Heterotopic Ossification in Fibrodysplasia Ossificans Progressiva: An HR-pQCT Case Series. <i>Frontiers in Cell and Developmental Biology</i> , 2021, 9, 627784.	1.8	0
143	Radiation Transport Model for Bone Marrow Dosimetry using GATE. <i>Nuklearmedizin - NuclearMedicine</i> , 2019, 58, .	0.3	0