Bert van Rietbergen

List of Publications by Year in descending order

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66234 54797 7,692 143 42 84 citations h-index g-index papers 145 145 145 5459 docs citations times ranked citing authors all docs

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | 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. Global Spine Journal, 2022, 12, 1330-1337. | 1.2 | 3 |
| 2 | Early bone ingrowth and segmental stability of a trussed titanium cage versus a polyether ether ketone cage in an ovine lumbar interbody fusion model. Spine Journal, 2022, 22, 174-182. | 0.6 | 11 |
| 3 | Reference data and calculators for second-generation HR-pQCT measures of the radius and tibia at anatomically standardized regions in White adults. Osteoporosis International, 2022, 33, 791-806. | 1.3 | 16 |
| 4 | Malalignment of the total ankle replacement increases peak contact stresses on the bone-implant interface: a finite element analysis. BMC Musculoskeletal Disorders, 2022, 23, 463. | 0.8 | 5 |
| 5 | What Is the Diagnostic Performance of Conventional Radiographs and Clinical Reassessment Compared With HR-pQCT Scaphoid Fracture Diagnosis?. Clinical Orthopaedics and Related Research, 2022, Publish Ahead of Print, . | 0.7 | 1 |
| 6 | Association of secondary displacement of distal radius fractures with cortical bone quality at the distal radius. Archives of Orthopaedic and Trauma Surgery, 2021, 141, 1909-1918. | 1.3 | 5 |
| 7 | Evaluation of impaired growth plate development of long bones in skeletally immature mice by antirheumatic agents. Journal of Orthopaedic Research, 2021, 39, 553-564. | 1.2 | 1 |
| 8 | Misaligned spinal rods can induce high internal forces consistent with those observed to cause screw pullout and disc degeneration. Spine Journal, 2021, 21, 528-537. | 0.6 | 14 |
| 9 | Associations between bone attenuation and prevalent vertebral fractures on chest CT scans differ with vertebral fracture locations. Osteoporosis International, 2021, 32, 1869-1877. | 1.3 | 4 |
| 10 | 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. Journal of Neurosurgery: Spine, 2021, 34, 236-244. | 0.9 | 1 |
| 11 | Microarchitecture of Heterotopic Ossification in Fibrodysplasia Ossificans Progressiva: An HR-pQCT Case Series. Frontiers in Cell and Developmental Biology, 2021, 9, 627784. | 1.8 | o |
| 12 | Validation of a finite element model of the thoracolumbar spine to study instrumentation level variations in early onset scoliosis correction. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 117, 104360. | 1.5 | 6 |
| 13 | Porous Geometry Guided Micro-mechanical Environment Within Scaffolds for Cell Mechanobiology Study in Bone Tissue Engineering. Frontiers in Bioengineering and Biotechnology, 2021, 9, 736489. | 2.0 | 15 |
| 14 | Association between bone shape and the presence of a fracture in patients with a clinically suspected scaphoid fracture. Journal of Biomechanics, 2021, 128, 110726. | 0.9 | 4 |
| 15 | Assessment of the healing of conservatively-treated scaphoid fractures using HR-pQCT. Bone, 2021, 153, 116161. | 1.4 | 9 |
| 16 | A new semi-orthotopic bone defect model for cell and biomaterial testing in regenerative medicine. Biomaterials, 2021, 279, 121187. | 5.7 | 5 |
| 17 | Bone Phenotyping Approaches in Human, Mice and Zebrafish – Expert Overview of the EU Cost Action GEMSTONE ("GEnomics of MusculoSkeletal traits TranslatiOnal NEtworkâ€). Frontiers in Endocrinology, 2021, 12, 720728. | 1.5 | 12 |
| 18 | Patient-Specific Variations in Local Strain Patterns on the Surface of a Trussed Titanium Interbody Cage. Frontiers in Bioengineering and Biotechnology, 2021, 9, 750246. | 2.0 | 3 |

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|----|--|-----|-----------|
| 19 | HRâ€pQCT Measures of Bone Microarchitecture Predict Fracture: Systematic Review and Metaâ€Analysis. Journal of Bone and Mineral Research, 2020, 35, 446-459. | 3.1 | 92 |
| 20 | The Feasibility of High-Resolution Peripheral Quantitative Computed Tomography (HR-pQCT) in Patients with Suspected Scaphoid Fractures. Journal of Clinical Densitometry, 2020, 23, 432-442. | 0.5 | 8 |
| 21 | 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. American Journal of Clinical Nutrition, 2020, 112, 1120-1131. | 2.2 | 9 |
| 22 | The interobserver reliability of the diagnosis and classification of scaphoid fractures using high-resolution peripheral quantitative CT. Bone and Joint Journal, 2020, 102-B, 478-484. | 1.9 | 10 |
| 23 | Consensus approach for 3D joint space width of metacarpophalangeal joints of rheumatoid arthritis patients using high-resolution peripheral quantitative computed tomography. Quantitative Imaging in Medicine and Surgery, 2020, 10, 314-325. | 1.1 | 23 |
| 24 | Accuracy of beam theory for estimating bone tissue modulus and yield stress from 3-point bending tests on rat femora. Journal of Biomechanics, 2020, 101, 109654. | 0.9 | 6 |
| 25 | Changes in scaffold porosity during bone tissue engineering in perfusion bioreactors considerably affect cellular mechanical stimulation for mineralization. Bone Reports, 2020, 12, 100265. | 0.2 | 22 |
| 26 | Fluid flowâ€induced cell stimulation in bone tissue engineering changes due to interstitial tissue formation in vitro. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3342. | 1.0 | 17 |
| 27 | A Novel HR-pQCT Image Registration Approach Reveals Sex-Specific Changes in Cortical Bone Retraction With Aging. Journal of Bone and Mineral Research, 2020, 36, 1351-1363. | 3.1 | 5 |
| 28 | The Effect of Bolus Vitamin D3 Supplementation on Distal Radius Fracture Healing: A Randomized Controlled Trial Using HR-pQCT. Journal of Bone and Mineral Research, 2020, 36, 1492-1501. | 3.1 | 11 |
| 29 | Subsidence after total lumbar disc replacement is predictable and related to clinical outcome. European Spine Journal, 2020, 29, 1544-1552. | 1.0 | 5 |
| 30 | Improved Detection of Scaphoid Fractures with High-Resolution Peripheral Quantitative CT Compared with Conventional CT. Journal of Bone and Joint Surgery - Series A, 2020, 102, 2138-2145. | 1.4 | 11 |
| 31 | Effect of Denosumab Compared With Risedronate on Bone Strength in Patients Initiating or Continuing Glucocorticoid Treatment. Journal of Bone and Mineral Research, 2020, 37, 1136-1146. | 3.1 | 6 |
| 32 | Resorption of the calcium phosphate layer on S53P4 bioactive glass by osteoclasts. Journal of Materials Science: Materials in Medicine, 2019, 30, 94. | 1.7 | 11 |
| 33 | 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. Osteoporosis International, 2019, 30, 1789-1797. | 1.3 | 9 |
| 34 | The Implantation of Bioactive Glass Granules Can Contribute the Load-Bearing Capacity of Bones Weakened by Large Cortical Defects. Materials, 2019, 12, 3481. | 1.3 | 2 |
| 35 | 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. Calcified Tissue International, 2019, 104, 571-581. | 1.5 | 20 |
| 36 | Long-term functional outcome of distal radius fractures is associated with early post-fracture bone stiffness of the fracture region: An HR-pQCT exploratory study. Bone, 2019, 127, 510-516. | 1.4 | 9 |

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|----|--|-----|-----------|
| 37 | A multiscale computational fluid dynamics approach to simulate the micro-fluidic environment within a tissue engineering scaffold with highly irregular pore geometry. Biomechanics and Modeling in Mechanobiology, 2019, 18, 1965-1977. | 1.4 | 33 |
| 38 | Bone Microarchitecture and Distal Radius Fracture Pattern Complexity. Journal of Orthopaedic Research, 2019, 37, 1690-1697. | 1.2 | 6 |
| 39 | Validation of distal radius failure load predictions by homogenized- and micro-finite element analyses based on second-generation high-resolution peripheral quantitative CT images. Osteoporosis International, 2019, 30, 1433-1443. | 1.3 | 27 |
| 40 | 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. Cartilage, 2019, 12, 194760351983314. | 1.4 | 5 |
| 41 | Cortical and trabecular bone microarchitecture as an independent predictor of incident fracture risk in older women and men in the Bone Microarchitecture International Consortium (BoMIC): a prospective study. Lancet Diabetes and Endocrinology,the, 2019, 7, 34-43. | 5.5 | 244 |
| 42 | Radiation Transport Model for Bone Marrow Dosimetry using GATE. Nuklearmedizin - NuclearMedicine, 2019, 58, . | 0.3 | 0 |
| 43 | 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. Scandinavian lournal of Rheumatology, 2018, 47, 431-439. | 0.6 | 8 |
| 44 | Trabecular and subchondral bone development of the talus and distal tibia from foal to adult in the warmblood horse. Journal of Veterinary Medicine Series C: Anatomia Histologia Embryologia, 2018, 47, 206-215. | 0.3 | 7 |
| 45 | Mechanical behavior of a soft hydrogel reinforced with three-dimensional printed microfibre scaffolds. Scientific Reports, 2018, 8, 1245. | 1.6 | 116 |
| 46 | Reliability of HR-pQCTÂDerived Cortical Bone Structural Parameters When Using Uncorrected Instead of Corrected Automatically Generated Endocortical Contours in a Cross-Sectional Study: The Maastricht Study. Calcified Tissue International, 2018, 103, 252-265. | 1.5 | 12 |
| 47 | Radiopaque UHMWPE sublaminar cables for spinal deformity correction: Preclinical mechanical and radiopacifier leaching assessment. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2018, 106, 771-779. | 1.6 | 8 |
| 48 | Evaluation of Radius Microstructure and Areal Bone Mineral Density Improves Fracture Prediction in Postmenopausal Women. Journal of Bone and Mineral Research, 2018, 33, 328-337. | 3.1 | 81 |
| 49 | Quantifying joint stiffness in clubfoot patients. Clinical Biomechanics, 2018, 60, 185-190. | 0.5 | 5 |
| 50 | Finite element model of load adaptive remodelling induced by orthodontic forces. Medical Engineering and Physics, 2018, 62, 63-68. | 0.8 | 8 |
| 51 | Comparison of patient-specific computational models vs. clinical follow-up, for adjacent segment disc degeneration and bone remodelling after spinal fusion. PLoS ONE, 2018, 13, e0200899. | 1.1 | 32 |
| 52 | An automated algorithm for the detection of cortical interruptions and its underlying loss of trabecular bone; a reproducibility study. BMC Medical Imaging, 2018, 18, 13. | 1.4 | 18 |
| 53 | Development of a scoring method to visually score cortical interruptions on high-resolution peripheral quantitative computed tomography in rheumatoid arthritis and healthy controls. PLoS ONE, 2018, 13, e0200331. | 1.1 | 8 |
| 54 | Fermented dairy products consumption is associated with attenuated cortical bone loss independently of total calcium, protein, and energy intakes in healthy postmenopausal women. Osteoporosis International, 2018, 29, 1771-1782. | 1.3 | 46 |

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| 55 | Assessment of Cortical Interruptions in the Finger Joints of Patients With Rheumatoid Arthritis Using HR-pQCT, Radiography, and MRI. Journal of Bone and Mineral Research, 2018, 33, 1676-1685. | 3.1 | 25 |
| 56 | Flow rates in perfusion bioreactors to maximise mineralisation in bone tissue engineering in vitro. Journal of Biomechanics, 2018, 79, 232-237. | 0.9 | 62 |
| 57 | Least-detectable and age-related local in vivo bone remodelling assessed by time-lapse HR-pQCT. PLoS ONE, 2018, 13, e0191369. | 1.1 | 28 |
| 58 | Prepubertal Impact of Protein Intake and Physical Activity on Weight Bearing Peak Bone Mass and Strength in Males. Journal of Clinical Endocrinology and Metabolism, 2017, 102, jc.2016-2449. | 1.8 | 9 |
| 59 | Composition dependent mechanical behaviour of S53P4 bioactive glass putty for bone defect grafting. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 69, 301-306. | 1.5 | 11 |
| 60 | Peripheral skeleton bone strength is positively correlated with total and dairy protein intakes in healthy postmenopausal women. American Journal of Clinical Nutrition, 2017, 105, 513-525. | 2.2 | 107 |
| 61 | Fast estimation of Colles' fracture load of the distal section of the radius by homogenized finite element analysis based on HR-pQCT. Bone, 2017, 97, 65-75. | 1.4 | 34 |
| 62 | Contra-lateral bone loss at the distal radius in postmenopausal women after a distal radius fracture: A two-year follow-up HRpQCT study. Bone, 2017, 101, 245-251. | 1.4 | 5 |
| 63 | Fracture Prospectively Recorded From Prepuberty to Young Adulthood: Are They Markers of Peak Bone Mass and Strength in Males?. Journal of Bone and Mineral Research, 2017, 32, 1963-1969. | 3.1 | 11 |
| 64 | 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. Journal of Bone and Mineral Research, 2017, 32, 2010-2021. | 3.1 | 96 |
| 65 | Effects of longâ€term use of the preferential COXâ€2 inhibitor meloxicam on growing pigs. Veterinary Record, 2017, 181, 564-564. | 0.2 | 5 |
| 66 | Vascular channels in metacarpophalangeal joints: a comparative histologic and high-resolution imaging study. Scientific Reports, 2017, 7, 8966. | 1.6 | 23 |
| 67 | The Reliability of a Semi-automated Algorithm for Detection of Cortical Interruptions in Finger Joints on High Resolution CT Compared to MicroCT. Calcified Tissue International, 2017, 101, 132-140. | 1.5 | 12 |
| 68 | A Case Report of Abnormal Fracture Healing as Detected With High-Resolution Peripheral Quantitative Computed Tomography. Journal of Clinical Densitometry, 2017, 20, 486-489. | 0.5 | 1 |
| 69 | 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. BMC Medical Imaging, 2017, 17, 18. | 1.4 | 16 |
| 70 | Moderately degenerated lumbar motion segments: Are they truly unstable?. Biomechanics and Modeling in Mechanobiology, 2017, 16, 537-547. | 1.4 | 8 |
| 71 | An automated algorithm for the detection of cortical interruptions on high resolution peripheral quantitative computed tomography images of finger joints. PLoS ONE, 2017, 12, e0175829. | 1.1 | 16 |
| 72 | 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 |

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| 73 | The Effectiveness of Percutaneous Vertebroplasty Is Determined by the Patient-Specific Bone Condition and the Treatment Strategy. PLoS ONE, 2016, 11, e0151680. | 1.1 | 16 |
| 74 | Fracture Repair in the Distal Radius in Postmenopausal Women: A Follow-Up 2 Years Postfracture Using HRpQCT. Journal of Bone and Mineral Research, 2016, 31, 1114-1122. | 3.1 | 31 |
| 75 | Technical Note: Cortical thickness and density estimation from clinical CT using a prior thicknessâ€density relationship. Medical Physics, 2016, 43, 1945-1954. | 1.6 | 31 |
| 76 | Micro-Finite Element analysis will overestimate the compressive stiffness of fractured cancellous bone. Journal of Biomechanics, 2016, 49, 2613-2618. | 0.9 | 10 |
| 77 | Effect of a Cast on Short-Term Reproducibility and Bone Parameters Obtained from HR-pQCT Measurements at the Distal End of the Radius. Journal of Bone and Joint Surgery - Series A, 2016, 98, 356-362. | 1.4 | 15 |
| 78 | Noise Exposure in TKA Surgery; Oscillating Tip Saw Systems vs Oscillating Blade Saw Systems. Journal of Arthroplasty, 2016, 31, 2773-2777. | 1,5 | 22 |
| 79 | Visual detection of cortical breaks in hand joints: reliability and validity of high-resolution peripheral quantitative CT compared to microCT. BMC Musculoskeletal Disorders, 2016, 17, 271. | 0.8 | 14 |
| 80 | Age-related changes in bone strength from HR-pQCT derived microarchitectural parameters with an emphasis on the role of cortical porosity. Bone, 2016, 83, 233-240. | 1.4 | 57 |
| 81 | Trabecular bone of precocials at birth; Are they prepared to run for the wolf(f)?. Journal of Morphology, 2016, 277, 948-956. | 0.6 | 22 |
| 82 | Voxel size dependency, reproducibility and sensitivity of an <i>in vivo</i> bone loading estimation algorithm. Journal of the Royal Society Interface, 2016, 13, 20150991. | 1,5 | 22 |
| 83 | Occupation-dependent loading increases bone strength in men. Osteoporosis International, 2016, 27, 1169-1179. | 1.3 | 6 |
| 84 | Patient-Specific Biomechanical Modeling of Bone Strength Using Statistically-Derived Fabric Tensors. Annals of Biomedical Engineering, 2016, 44, 234-246. | 1.3 | 15 |
| 85 | FEA to Measure Bone Strength: A Review. Clinical Reviews in Bone and Mineral Metabolism, 2016, 14, 26-37. | 1.3 | 56 |
| 86 | Mechanical behaviour of Bioactive Glass granules and morselized cancellous bone allograft in load bearing defects. Journal of Biomechanics, 2016, 49, 1121-1127. | 0.9 | 11 |
| 87 | A computational spinal motion segment model incorporating a matrix composition-based model of the intervertebral disc. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 54, 194-204. | 1.5 | 30 |
| 88 | Large-scale microstructural simulation of load-adaptive bone remodeling in whole human vertebrae. Biomechanics and Modeling in Mechanobiology, 2016, 15, 83-95. | 1,4 | 19 |
| 89 | Effects of magnetic resonance-guided high-intensity focused ultrasound ablation on bone mechanical properties and modeling. Journal of Therapeutic Ultrasound, 2015, 3, 13. | 2.2 | 14 |
| 90 | Clinical Applications of S53P4 Bioactive Glass in Bone Healing and Osteomyelitic Treatment: A Literature Review. BioMed Research International, 2015, 2015, 1-12. | 0.9 | 95 |

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| 91 | A survey of micro-finite element analysis for clinical assessment of bone strength: The first decade. Journal of Biomechanics, 2015, 48, 832-841. | 0.9 | 77 |
| 92 | Statistical estimation of femur micro-architecture using optimal shape and density predictors. Journal of Biomechanics, 2015, 48, 598-603. | 0.9 | 18 |
| 93 | A potential mechanism for allometric trabecular bone scaling in terrestrial mammals. Journal of Anatomy, 2015, 226, 236-243. | 0.9 | 10 |
| 94 | Bone metastasis treatment using magnetic resonance-guided high intensity focused ultrasound. Bone, 2015, 81, 513-523. | 1.4 | 25 |
| 95 | Image-based goal-oriented adaptive isogeometric analysis with application to the micro-mechanical modeling of trabecular bone. Computer Methods in Applied Mechanics and Engineering, 2015, 284, 138-164. | 3.4 | 89 |
| 96 | A novel approach to estimate trabecular bone anisotropy from stress tensors. Biomechanics and Modeling in Mechanobiology, 2015, 14, 39-48. | 1.4 | 23 |
| 97 | Determination of hip-joint loading patterns of living and extinct mammals using an inverse Wolff's law approach. Biomechanics and Modeling in Mechanobiology, 2015, 14, 427-432. | 1.4 | 33 |
| 98 | An Analytical Approach to Investigate the Evolution of Bone Volume Fraction in Bone Remodeling Simulation at the Tissue and Cell Level. Journal of Biomechanical Engineering, 2014, 136, 031004. | 0.6 | 6 |
| 99 | Early Changes in Bone Density, Microarchitecture, Bone Resorption, and Inflammation Predict the Clinical Outcome 12 Weeks After Conservatively Treated Distal Radius Fractures: An Exploratory Study. Journal of Bone and Mineral Research, 2014, 29, 2065-2073. | 3.1 | 23 |
| 100 | Assessment of the healing process in distal radius fractures by high resolution peripheral quantitative computed tomography. Bone, 2014, 64, 65-74. | 1.4 | 47 |
| 101 | Inter-individual variability of bone density and morphology distribution in the proximal femur and T12 vertebra. Bone, 2014, 60, 213-220. | 1.4 | 21 |
| 102 | Challenges in longitudinal measurements with HR-pQCT: Evaluation of a 3D registration method to improve bone microarchitecture and strength measurement reproducibility. Bone, 2014, 63, 147-157. | 1.4 | 80 |
| 103 | Bone remodelling in humans is load-driven but not lazy. Nature Communications, 2014, 5, 4855. | 5.8 | 212 |
| 104 | Locally measured microstructural parameters are better associated with vertebral strength than whole bone density. Osteoporosis International, 2014, 25, 1285-1296. | 1.3 | 17 |
| 105 | A multiscale analytical approach for bone remodeling simulations: Linking scales from collagen to trabeculae. Bone, 2014, 64, 303-313. | 1.4 | 33 |
| 106 | Validation of a bone loading estimation algorithm for patient-specific bone remodelling simulations. Journal of Biomechanics, 2013, 46, 941-948. | 0.9 | 29 |
| 107 | A novel approach to estimate trabecular bone anisotropy using a database approach. Journal of Biomechanics, 2013, 46, 2356-2362. | 0.9 | 40 |
| 108 | Subject-specific bone loading estimation in the human distal radius. Journal of Biomechanics, 2013, 46, 759-766. | 0.9 | 43 |

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| 109 | Fracture history of healthy premenopausal women is associated with a reduction of cortical microstructural components at the distal radius. Bone, 2013, 55, 377-383. | 1.4 | 42 |
| 110 | SAT0512â€Fracture Healing of Distal Radius Fractures Assessed by High-Resolution Peripheral Quantitative Computed Tomography, Bone Strength Analysis and Biomarkers. Annals of the Rheumatic Diseases, 2013, 72, A755.1-A755. | 0.5 | 0 |
| 111 | Bone stiffness and failure load are related with clinical parameters in men with chronic obstructive pulmonary disease. Journal of Bone and Mineral Research, 2013, 28, 2186-2193. | 3.1 | 21 |
| 112 | AB0747â€Assessment of cortical discontinuities in interphalangeal joints with hrpqct in comparison with radiography and microct imaging Annals of the Rheumatic Diseases, 2013, 72, A1017.2-A1017. | 0.5 | 1 |
| 113 | A new approach to determine the accuracy of morphology–elasticity relationships in continuum FE analyses of human proximal femur. Journal of Biomechanics, 2012, 45, 2884-2892. | 0.9 | 32 |
| 114 | Patient-specific bone modelling and remodelling simulation of hypoparathyroidism based on human iliac crest biopsies. Journal of Biomechanics, 2012, 45, 2411-2416. | 0.9 | 27 |
| 115 | Bone morphology allows estimation of loading history in a murine model of bone adaptation. Biomechanics and Modeling in Mechanobiology, 2012, 11, 483-492. | 1.4 | 73 |
| 116 | Computational finite element bone mechanics accurately predicts mechanical competence in the human radius of an elderly population. Bone, 2011, 48, 1232-1238. | 1.4 | 109 |
| 117 | A sclerostin-based theory for strain-induced bone formation. Biomechanics and Modeling in Mechanobiology, 2011, 10, 663-670. | 1.4 | 22 |
| 118 | Analysis of bone architecture sensitivity for changes in mechanical loading, cellular activity, mechanotransduction, and tissue properties. Biomechanics and Modeling in Mechanobiology, 2011, 10, 701-712. | 1.4 | 25 |
| 119 | Finite element analysis performed on radius and tibia HR-pQCT images and fragility fractures at all sites in men. Journal of Bone and Mineral Research, 2011, 26, 965-973. | 3.1 | 126 |
| 120 | The turnover of mineralized growth plate cartilage into bone may be regulated by osteocytes. Journal of Biomechanics, 2011, 44, 1765-1770. | 0.9 | 6 |
| 121 | Fractures during Childhood and Adolescence in Healthy Boys: Relation with Bone Mass, Microstructure, and Strength. Journal of Clinical Endocrinology and Metabolism, 2011, 96, 3134-3142. | 1.8 | 69 |
| 122 | Effects of vibration treatment on tibial bone of ovariectomized rats analyzed by in vivo micro T. Journal of Orthopaedic Research, 2010, 28, 62-69. | 1.2 | 38 |
| 123 | Finite element analysis performed on radius and tibia HR-pQCT images and fragility fractures at all sites in postmenopausal women. Bone, 2010, 46, 1030-1037. | 1.4 | 153 |
| 124 | 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. Osteoporosis International, 2009, 20, 1683-1694. | 1.3 | 149 |
| 125 | Effects of PTH treatment on tibial bone of ovariectomized rats assessed by in vivo micro-CT. Osteoporosis International, 2009, 20, 1823-1835. | 1.3 | 7 3 |
| 126 | Finite Element Analysis Based on In Vivo HR-pQCT Images of the Distal Radius Is Associated With Wrist Fracture in Postmenopausal Women. Journal of Bone and Mineral Research, 2008, 23, 392-399. | 3.1 | 414 |

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| 127 | Indirect determination of trabecular bone effective tissue failure properties using micro-finite element simulations. Journal of Biomechanics, 2008, 41, 1479-1485. | 0.9 | 94 |
| 128 | Bone Degeneration and Recovery after Early and Late Bisphosphonate Treatment of Ovariectomized Wistar Rats Assessed by InÂVivo Micro-Computed Tomography. Calcified Tissue International, 2008, 82, 202-211. | 1.5 | 76 |
| 129 | Load distribution in the healthy and osteoporotic human proximal femur during a fall to the side. Bone, 2008, 42, 30-35. | 1.4 | 145 |
| 130 | Micro-finite element simulation of trabecular-bone post-yield behaviour – effects of material model, element size and type. Computer Methods in Biomechanics and Biomedical Engineering, 2008, 11, 389-395. | 0.9 | 68 |
| 131 | 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. Journal of Orthopaedic Research, 2007, 25, 1325-1332. | 1.2 | 95 |
| 132 | Comparison of micro-level and continuum-level voxel models of the proximal femur. Journal of Biomechanics, 2006, 39, 2951-2957. | 0.9 | 96 |
| 133 | A theoretical framework for strain-related trabecular bone maintenance and adaptation. Journal of Biomechanics, 2005, 38, 931-941. | 0.9 | 250 |
| 134 | A three-dimensional digital image correlation technique for strain measurements in microstructures. Journal of Biomechanics, 2004, 37, 1313-1320. | 0.9 | 253 |
| 135 | Stresses in the local collagen network of articular cartilage: a poroviscoelastic fibril-reinforced finite element study. Journal of Biomechanics, 2004, 37, 357-366. | 0.9 | 262 |
| 136 | Image-Based Micro-Finite-Element Modeling for Improved Distal Radius Strength Diagnosis. Journal of Clinical Densitometry, 2004, 7, 153-160. | 0.5 | 91 |
| 137 | Trabecular Bone Tissue Strains in the Healthy and Osteoporotic Human Femur. Journal of Bone and Mineral Research, 2003, 18, 1781-1788. | 3.1 | 197 |
| 138 | Mechanical consequences of different scenarios for simulated bone atrophy and recovery in the distal radius. Bone, 2003, 33, 937-945. | 1.4 | 76 |
| 139 | Estimation of distal radius failure load with micro-finite element analysis models based on three-dimensional peripheral quantitative computed tomography images. Bone, 2002, 30, 842-848. | 1.4 | 538 |
| 140 | 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. Clinical Biomechanics, 2002, 17, 81-88. | 0.5 | 87 |
| 141 | Finite element analysis of trabecular bone structure: a comparison of image-based meshing techniques. Journal of Biomechanics, 1998, 31, 1187-1192. | 0.9 | 246 |
| 142 | COMPUTATIONAL STRATEGIES FOR ITERATIVE SOLUTIONS OF LARGE FEM APPLICATIONS EMPLOYING VOXEL DATA. International Journal for Numerical Methods in Engineering, 1996, 39, 2743-2767. | 1.5 | 117 |
| 143 | A new method to determine trabecular bone elastic properties and loading using micromechanical finite-element models. Journal of Biomechanics, 1995, 28, 69-81. | 0.9 | 769 |