

Mikko A J Finnilä

List of Publications by Year in descending order

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Version: 2024-02-01

81
papers

1,723
citations

318942

23
h-index

388640

36
g-index

87
all docs

87
docs citations

87
times ranked

2818
citing authors

#	ARTICLE	IF	CITATIONS
1	Preparation of filter by alkali activation of blast furnace slag and its application for dye removal. <i>Journal of Environmental Chemical Engineering</i> , 2022, 10, 107051.	3.3	17
2	Changes in subchondral bone structure and mechanical properties do not substantially affect cartilage mechanical responses – A finite element study. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 128, 105129.	1.5	4
3	Near infrared spectroscopic evaluation of biochemical and crimp properties of knee joint ligaments and patellar tendon. <i>PLoS ONE</i> , 2022, 17, e0263280.	1.1	2
4	Subchondral bone plate thickness is associated with micromechanical and microstructural changes in the bovine patella osteochondral junction with different levels of cartilage degeneration. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 129, 105158.	1.5	2
5	Reduced Bone Mass in Collagen Prolyl 4-Hydroxylase ^{P4ha1} ; ^{P4ha2} Compound Mutant Mice. <i>JBMR Plus</i> , 2022, 6, .	1.3	8
6	Comparison of material models for anterior cruciate ligament in tension: from poroelastic to a novel fibril-reinforced nonlinear composite model. <i>Journal of Biomechanics</i> , 2021, 114, 110141.	0.9	9
7	Design and development of poly-L/D-lactide copolymer and barium titanate nanoparticle 3D composite scaffolds using breath figure method for tissue engineering applications. <i>Colloids and Surfaces B: Biointerfaces</i> , 2021, 199, 111530.	2.5	10
8	Mineralization of dental tissues and caries lesions detailed with Raman microspectroscopic imaging. <i>Analyst</i> , 2021, 146, 1705-1713.	1.7	10
9	Integrin $\alpha 1 \beta 1$ is a receptor for collagen XIII. <i>Cell and Tissue Research</i> , 2021, 383, 1135-1153.	1.5	14
10	Structure, composition and fibril-reinforced poroviscoelastic properties of bovine knee ligaments and patellar tendon. <i>Journal of the Royal Society Interface</i> , 2021, 18, 20200737.	1.5	8
11	Early changes in osteochondral tissues in a rabbit model of post-traumatic osteoarthritis. <i>Journal of Orthopaedic Research</i> , 2021, 39, 2556-2567.	1.2	7
12	Automated analysis of rabbit knee calcified cartilage morphology using micro-computed tomography and deep learning. <i>Journal of Anatomy</i> , 2021, 239, 251-263.	0.9	10
13	A single intra-articular dose of vitamin D analog calcipotriol alleviates synovitis without adverse effects in rats. <i>PLoS ONE</i> , 2021, 16, e0250352.	1.1	2
14	Endocrine, metabolic and apical effects of in utero and lactational exposure to non-dioxin-like 2,2,3,4,4,5,5-heptachlorobiphenyl (PCB 180): A postnatal follow-up study in rats. <i>Reproductive Toxicology</i> , 2021, 102, 109-127.	1.3	8
15	Biomechanical, biochemical, and near infrared spectral data of bovine knee ligaments and patellar tendon. <i>Data in Brief</i> , 2021, 36, 106976.	0.5	1
16	High-resolution infrared microspectroscopic characterization of cartilage cell microenvironment. <i>Acta Biomaterialia</i> , 2021, 134, 252-260.	4.1	8
17	Synthesis and characterization of porous ceramics from spodumene tailings and waste glass wool. <i>Ceramics International</i> , 2021, 47, 33286-33297.	2.3	20
18	Elastic, Dynamic Viscoelastic and Model-Derived Fibril-Reinforced Poroelastic Mechanical Properties of Normal and Osteoarthritic Human Femoral Condyle Cartilage. <i>Annals of Biomedical Engineering</i> , 2021, 49, 2622-2634.	1.3	11

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19	Bone toxicity induced by 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) and the retinoid system: A causality analysis anchored in osteoblast gene expression and mouse data. <i>Reproductive Toxicology</i> , 2021, 105, 25-43.	1.3	12
20	Quantifying Subresolution 3D Morphology of Bone with Clinical Computed Tomography. <i>Annals of Biomedical Engineering</i> , 2020, 48, 595-605.	1.3	11
21	Anterior cruciate ligament transection of rabbits alters composition, structure and biomechanics of articular cartilage and chondrocyte deformation 2 weeks post-surgery in a site-specific manner. <i>Journal of Biomechanics</i> , 2020, 98, 109450.	0.9	17
22	Structure-Function Relationships of Healthy and Osteoarthritic Human Tibial Cartilage: Experimental and Numerical Investigation. <i>Annals of Biomedical Engineering</i> , 2020, 48, 2887-2900.	1.3	30
23	Ag- or Cu-modified geopolymer filters for water treatment manufactured by 3D printing, direct foaming, or granulation. <i>Scientific Reports</i> , 2020, 10, 7233.	1.6	49
24	Bright ultrashort echo time SWIFT MRI signal at the osteochondral junction is not located in the calcified cartilage. <i>Journal of Orthopaedic Research</i> , 2020, 38, 2649-2656.	1.2	6
25	Machine Learning Classification of Articular Cartilage Integrity Using Near Infrared Spectroscopy. <i>Cellular and Molecular Bioengineering</i> , 2020, 13, 219-228.	1.0	25
26	Raman microspectroscopic analysis of the tissue-specific composition of the human osteochondral junction in osteoarthritis: A pilot study. <i>Acta Biomaterialia</i> , 2020, 106, 145-155.	4.1	31
27	Deep-Learning for Tidemark Segmentation in Human Osteochondral Tissues Imaged with Micro-computed Tomography. <i>Lecture Notes in Computer Science</i> , 2020, , 131-138.	1.0	4
28	Comparison of water, hydroxyproline, uronic acid and elastin contents of bovine knee ligaments and patellar tendon and their relationships with biomechanical properties. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 104, 103639.	1.5	8
29	Automating three-dimensional osteoarthritis histopathological grading of human osteochondral tissue using machine learning on contrast-enhanced micro-computed tomography. <i>Osteoarthritis and Cartilage</i> , 2020, 28, 1133-1144.	0.6	11
30	Lack of collagen XVIII leads to lipodystrophy and perturbs hepatic glucose and lipid homeostasis. <i>Journal of Physiology</i> , 2020, 598, 3373-3393.	1.3	14
31	Mineral Crystal Thickness in Calcified Cartilage and Subchondral Bone in Healthy and Osteoarthritic Human Knees. <i>Journal of Bone and Mineral Research</i> , 2020, 37, 1700-1710.	3.1	8
32	Three-dimensional microstructure of human meniscus posterior horn in health and osteoarthritis. <i>Osteoarthritis and Cartilage</i> , 2019, 27, 1790-1799.	0.6	17
33	Histochemical quantification of collagen content in articular cartilage. <i>PLoS ONE</i> , 2019, 14, e0224839.	1.1	44
34	Chemical imaging of human teeth by a time-resolved Raman spectrometer based on a CMOS single-photon avalanche diode line sensor. <i>Analyst</i> , 2019, 144, 6089-6097.	1.7	17
35	Elastic, Viscoelastic and Fibril-Reinforced Poroelastic Material Properties of Healthy and Osteoarthritic Human Tibial Cartilage. <i>Annals of Biomedical Engineering</i> , 2019, 47, 953-966.	1.3	43
36	Anterior cruciate ligament transection alters the n-3/n-6 fatty acid balance in the lapine infrapatellar fat pad. <i>Lipids in Health and Disease</i> , 2019, 18, 67.	1.2	17

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37	Quantifying Complex Micro-Topography of Degenerated Articular Cartilage Surface by Contrast-Enhanced Micro-Computed Tomography and Parametric Analyses. <i>Journal of Orthopaedic Research</i> , 2019, 37, 855-866.	1.2	7
38	Localized delivery of compounds into articular cartilage by using high-intensity focused ultrasound. <i>Scientific Reports</i> , 2019, 9, 15937.	1.6	2
39	3D morphometric analysis of calcified cartilage properties using micro-computed tomography. <i>Osteoarthritis and Cartilage</i> , 2019, 27, 172-180.	0.6	19
40	Recent advances in understanding the phenotypes of osteoarthritis. <i>F1000Research</i> , 2019, 8, 2091.	0.8	103
41	Experimental mechanical strain measurement of tissues. <i>PeerJ</i> , 2019, 7, e6545.	0.9	16
42	Biodegradation of inorganic drug delivery systems in subcutaneous conditions. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2018, 122, 113-125.	2.0	9
43	Effects of tofacitinib in early arthritis-induced bone loss in an adjuvant-induced arthritis rat model. <i>Rheumatology</i> , 2018, 57, 1461-1471.	0.9	27
44	Delivery of Agents Into Articular Cartilage With Electric Spark-Induced Sound Waves. <i>Frontiers in Physics</i> , 2018, 6, .	1.0	2
45	Iterative and discrete reconstruction in the evaluation of the rabbit model of osteoarthritis. <i>Scientific Reports</i> , 2018, 8, 12051.	1.6	6
46	In-Vitro method for 3D morphometry of human articular cartilage chondrons based on micro-computed tomography. <i>Osteoarthritis and Cartilage</i> , 2018, 26, 1118-1126.	0.6	15
47	Site-specific glycosaminoglycan content is better maintained in the pericellular matrix than the extracellular matrix in early post-traumatic osteoarthritis. <i>PLoS ONE</i> , 2018, 13, e0196203.	1.1	18
48	Osteogenic Differentiation of Human Mesenchymal Stem cells in a 3D Woven Scaffold. <i>Scientific Reports</i> , 2018, 8, 10457.	1.6	83
49	Composition, structure and tensile biomechanical properties of equine articular cartilage during growth and maturation. <i>Scientific Reports</i> , 2018, 8, 11357.	1.6	31
50	Deep Learning Classification of Cartilage Integrity Using Near Infrared Spectroscopy. , 2018, , .		2
51	Early arthritis induces disturbances at bone nanostructural level reflected in decreased tissue hardness in an animal model of arthritis. <i>PLoS ONE</i> , 2018, 13, e0190920.	1.1	10
52	Raccoon dog model shows preservation of bone during prolonged catabolism and reduced physical activity. <i>Journal of Experimental Biology</i> , 2017, 220, 2196-2202.	0.8	2
53	Genetic modifications of <i>Mecr</i> reveal a role for mitochondrial 2-enoyl-CoA/ACP reductase in placental development in mice. <i>Human Molecular Genetics</i> , 2017, 26, 2104-2117.	1.4	31
54	Effect of celastrol on bone structure and mechanics in arthritic rats. <i>RMD Open</i> , 2017, 3, e000438.	1.8	22

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55	Correlations of low-field NMR and variable-field NMR parameters with osteoarthritis in human articular cartilage under load. <i>NMR in Biomedicine</i> , 2017, 30, e3738.	1.6	9
56	Association between subchondral bone structure and osteoarthritis histopathological grade. <i>Journal of Orthopaedic Research</i> , 2017, 35, 785-792.	1.2	81
57	Skeletal and dental effects on rats following in utero/lactational exposure to the non-dioxin-like polychlorinated biphenyl PCB 180. <i>PLoS ONE</i> , 2017, 12, e0185241.	1.1	13
58	Subchondral bone histology and grading in osteoarthritis. <i>PLoS ONE</i> , 2017, 12, e0173726.	1.1	75
59	Effects of Articular Cartilage Constituents on Phosphotungstic Acid Enhanced Micro-Computed Tomography. <i>PLoS ONE</i> , 2017, 12, e0171075.	1.1	32
60	Effects of developmental exposure to perfluorooctanoic acid (PFOA) on long bone morphology and bone cell differentiation. <i>Toxicology and Applied Pharmacology</i> , 2016, 301, 14-21.	1.3	55
61	Imaging of Osteoarthritic Human Articular Cartilage using Fourier Transform Infrared Microspectroscopy Combined with Multivariate and Univariate Analysis. <i>Scientific Reports</i> , 2016, 6, 30008.	1.6	29
62	Correlation of Subchondral Bone Density and Structure from Plain Radiographs with Micro Computed Tomography Ex Vivo. <i>Annals of Biomedical Engineering</i> , 2016, 44, 1698-1709.	1.3	19
63	Micro-CT Analysis of Bone Healing in Rabbit Calvarial Critical-Sized Defects with Solid Bioactive Glass, Tricalcium Phosphate Granules or Autogenous Bone. <i>Journal of Oral & Maxillofacial Research</i> , 2016, 7, e4.	0.3	18
64	Overexpression of spermidine/spermine N 1-acetyltransferase impairs osteoblastogenesis and alters mouse bone phenotype. <i>Transgenic Research</i> , 2015, 24, 253-265.	1.3	8
65	Severe Extracellular Matrix Abnormalities and Chondrodysplasia in Mice Lacking Collagen Prolyl 4-Hydroxylase Isoenzyme II in Combination with a Reduced Amount of Isoenzyme I. <i>Journal of Biological Chemistry</i> , 2015, 290, 16964-16978.	1.6	43
66	Determining collagen distribution in articular cartilage using contrast-enhanced micro-computed tomography. <i>Osteoarthritis and Cartilage</i> , 2015, 23, 1613-1621.	0.6	54
67	Physiological condition of bank voles (<i>Myodes glareolus</i>) during the increase and decline phases of the population cycle. <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2015, 187, 141-149.	0.8	4
68	Multiparametric MRI assessment of human articular cartilage degeneration: Correlation with quantitative histology and mechanical properties. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 249-259.	1.9	59
69	Local Binary Patterns to Evaluate Trabecular Bone Structure from Micro-CT Data: Application to Studies of Human Osteoarthritis. <i>Lecture Notes in Computer Science</i> , 2015, , 63-79.	1.0	4
70	Toxicological Profile of Ultrapure 2,2,3,4,4,5,5-Heptachlorbiphenyl (PCB 180) in Adult Rats. <i>PLoS ONE</i> , 2014, 9, e104639.	1.1	25
71	The effect of fatty acid positioning in dietary triacylglycerols and intake of long-chain n-3 polyunsaturated fatty acids on bone mineral accretion in growing piglets. <i>Prostaglandins Leukotrienes and Essential Fatty Acids</i> , 2013, 89, 235-240.	1.0	6
72	New insights to the role of aryl hydrocarbon receptor in bone phenotype and in dioxin-induced modulation of bone microarchitecture and material properties. <i>Toxicology and Applied Pharmacology</i> , 2013, 273, 219-226.	1.3	36

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73	Trabecular Homogeneity Index Derived From Plain Radiograph to Evaluate Bone Quality. Journal of Bone and Mineral Research, 2013, 28, 2584-2591.	3.1	15
74	Preservation of bone mass and biomechanical properties during winter sleep in the raccoon dog (Nyctereutes procyonoides) as a novel model species. Bone, 2011, 48, 878-884.	1.4	7
75	PHOSPHO1 is essential for mechanically competent mineralization and the avoidance of spontaneous fractures. Bone, 2011, 48, 1066-1074.	1.4	71
76	In utero and lactational exposure to Aroclor 1254 affects bone geometry, mineral density and biomechanical properties of rat offspring. Toxicology Letters, 2011, 207, 82-88.	0.4	17
77	Effects of 2,3,7,8-tetrachlorodibenzo-p-dioxin exposure on bone material properties. Journal of Biomechanics, 2010, 43, 1097-1103.	0.9	47
78	Long-term voluntary exercise of male mice induces more beneficial effects on cancellous and cortical bone than on the collagenous matrix. Experimental Gerontology, 2009, 44, 708-717.	1.2	23
79	Physical Exercise Improves Properties of Bone and Its Collagen Network in Growing and Maturing Mice. Calcified Tissue International, 2009, 85, 247-256.	1.5	45
80	The role of AhR in doxin-induced modulation of bone microarchitecture and mechanical strength. Toxicology Letters, 2009, 189, S197-S198.	0.4	1
81	Assessment of Ligament Viscoelastic Properties Using Raman Spectroscopy. Annals of Biomedical Engineering, 0, , .	1.3	0