Juha Töyräs

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/6240598/publications.pdf

Version: 2024-02-01

291 papers 9,208 citations

41344 49 h-index 78 g-index

299 all docs

299 docs citations

times ranked

299

5638 citing authors

#	Article	IF	CITATIONS
1	T2relaxation reveals spatial collagen architecture in articular cartilage: A comparative quantitative MRI and polarized light microscopic study. Magnetic Resonance in Medicine, 2001, 46, 487-493.	3.0	392
2	Comparison of the equilibrium response of articular cartilage in unconfined compression, confined compression and indentation. Journal of Biomechanics, 2002, 35, 903-909.	2.1	375
3	Fibril reinforced poroelastic model predicts specifically mechanical behavior of normal, proteoglycan depleted and collagen degraded articular cartilage. Journal of Biomechanics, 2003, 36, 1373-1379.	2.1	243
4	Quantitative MR microscopy of enzymatically degraded articular cartilage. Magnetic Resonance in Medicine, 2000, 43, 676-681.	3.0	201
5	Proteoglycan and collagen sensitive MRI evaluation of normal and degenerated articular cartilage. Journal of Orthopaedic Research, 2004, 22, 557-564.	2.3	147
6	Characterization of enzymatically induced degradation of articular cartilage using high frequency ultrasound. Physics in Medicine and Biology, 1999, 44, 2723-2733.	3.0	143
7	Spatial assessment of articular cartilage proteoglycans with Gd-DTPA-enhancedT1imaging. Magnetic Resonance in Medicine, 2002, 48, 640-648.	3.0	139
8	Collagen network primarily controls Poisson's ratio of bovine articular cartilage in compression. Journal of Orthopaedic Research, 2006, 24, 690-699.	2.3	126
9	Estimation of the Young's modulus of articular cartilage using an arthroscopic indentation instrument and ultrasonic measurement of tissue thickness. Journal of Biomechanics, 2001, 34, 251-256.	2.1	123
10	Prediction of biomechanical properties of articular cartilage with quantitative magnetic resonance imaging. Journal of Biomechanics, 2004, 37, 321-328.	2.1	123
11	Structure-Function Relationships in Enzymatically Modified Articular Cartilage. Cells Tissues Organs, 2003, 175, 121-132.	2.3	117
12	Ultrasonic quantitation of superficial degradation of articular cartilage. Ultrasound in Medicine and Biology, 2004, 30, 783-792.	1.5	105
13	Speed of sound in normal and degenerated bovine articular cartilage. Ultrasound in Medicine and Biology, 2003, 29, 447-454.	1.5	104
14	Novel mechano-acoustic technique and instrument for diagnosis of cartilage degeneration. Physiological Measurement, 2002, 23, 491-503.	2.1	103
15	T2 relaxation time mapping reveals age- and species-related diversity of collagen network architecture in articular cartilage. Osteoarthritis and Cartilage, 2006, 14, 1265-1271.	1.3	100
16	Novel parameters indicate significant differences in severity of obstructive sleep apnea with patients having similar apnea–hypopnea index. Medical and Biological Engineering and Computing, 2013, 51, 697-708.	2.8	96
17	Deformation of articular cartilage during static loading of a knee joint – Experimental and finite element analysis. Journal of Biomechanics, 2014, 47, 2467-2474.	2.1	92
18	Real-time ultrasound analysis of articular cartilage degradation in vitro. Ultrasound in Medicine and Biology, 2002, 28, 519-525.	1.5	91

#	Article	IF	Citations
19	Bone mineral density, ultrasound velocity, and broadband attenuation predict mechanical properties of trabecular bone differently. Bone, 2002, 31, 503-507.	2.9	87
20	Prediction of density and mechanical properties of human trabecular bonein vitroby using ultrasound transmission and backscattering measurements at 0.2–6.7 MHz frequency range. Physics in Medicine and Biology, 2005, 50, 1629-1642.	3.0	86
21	Indentation diagnostics of cartilage degeneration. Osteoarthritis and Cartilage, 2008, 16, 796-804.	1.3	86
22	Ultrasonic characterization of human trabecular bone microstructure. Physics in Medicine and Biology, 2006, 51, 1633-1648.	3.0	85
23	Estimation of mechanical properties of articular cartilage with MRI – dGEMRIC, T2 and T1 imaging in different species with variable stages of maturation. Osteoarthritis and Cartilage, 2007, 15, 1141-1148.	1.3	80
24	Importance of depth-wise distribution of collagen and proteoglycans in articular cartilage—A 3D finite element study of stresses and strains in human knee joint. Journal of Biomechanics, 2013, 46, 1184-1192.	2.1	80
25	Characterization of site-specific biomechanical properties of human meniscusâ€"Importance of collagen and fluid on mechanical nonlinearities. Journal of Biomechanics, 2015, 48, 1499-1507.	2.1	80
26	Quantitative ultrasound imaging detects degenerative changes in articular cartilage surface and subchondral bone. Physics in Medicine and Biology, 2006, 51, 5333-5346.	3.0	79
27	Longitudinal elastic properties and porosity of cortical bone tissue vary with age in human proximal femur. Bone, 2013, 53, 451-458.	2.9	78
28	pQCT study on diffusion and equilibrium distribution of iodinated anionic contrast agent in human articular cartilage $\hat{a} \in \hat{a}$ associations to matrix composition and integrity. Osteoarthritis and Cartilage, 2009, 17, 26-32.	1.3	76
29	Ability of ultrasound backscattering to predict mechanical properties of bovine trabecular bone. Ultrasound in Medicine and Biology, 2004, 30, 919-927.	1.5	7 5
30	Ultrasound Backscatter Imaging Provides Frequency-Dependent Information on Structure, Composition and Mechanical Properties of Human Trabecular Bone. Ultrasound in Medicine and Biology, 2009, 35, 1376-1384.	1.5	75
31	The severity of individual obstruction events is related to increased mortality rate in severe obstructive sleep apnea. Journal of Sleep Research, 2013, 22, 663-669.	3.2	7 5
32	Contrast agent enhanced pQCT of articular cartilage. Physics in Medicine and Biology, 2007, 52, 1209-1219.	3.0	74
33	Deep learning enables sleep staging from photoplethysmogram for patients with suspected sleep apnea. Sleep, 2020, 43, .	1.1	73
34	Multi-site bone ultrasound measurements in elderly women with and without previous hip fractures. Osteoporosis International, 2012, 23, 1287-1295.	3.1	72
35	Ultrasound attenuation in normal and spontaneously degenerated articular cartilage. Ultrasound in Medicine and Biology, 2004, 30, 493-500.	1.5	71
36	Ultrasound indentation of normal and spontaneously degenerated bovine articular cartilage. Osteoarthritis and Cartilage, 2003, 11, 697-705.	1.3	70

#	Article	IF	CITATIONS
37	Severity of Desaturations Reflects OSA-Related Daytime Sleepiness Better Than AHI. Journal of Clinical Sleep Medicine, 2019, 15, 1135-1142.	2.6	69
38	Contrast agent-enhanced computed tomography of articular cartilage: Association with tissue composition and properties. Acta Radiologica, 2009, 50, 78-85.	1.1	65
39	Detection of mechanical injury of articular cartilage using contrast enhanced computed tomography. Osteoarthritis and Cartilage, 2011, 19, 295-301.	1.3	65
40	Accurate Deep Learning-Based Sleep Staging in a Clinical Population with Suspected Obstructive Sleep Apnea. IEEE Journal of Biomedical and Health Informatics, 2019, 24, 1-1.	6.3	64
41	Diffusion and near-equilibrium distribution of MRI and CT contrast agents in articular cartilage. Physics in Medicine and Biology, 2009, 54, 6823-6836.	3.0	61
42	Quantitative Evaluation of the Mechanical Risks Caused by Focal Cartilage Defects in the Knee. Scientific Reports, 2016, 6, 37538.	3.3	59
43	Alterations in structure and properties of collagen network of osteoarthritic and repaired cartilage modify knee joint stresses. Biomechanics and Modeling in Mechanobiology, 2011, 10, 357-369.	2.8	56
44	Adjustment of apnea-hypopnea index with severity of obstruction events enhances detection of sleep apnea patients with the highest risk of severe health consequences. Sleep and Breathing, 2014, 18, 641-647.	1.7	54
45	In vivo diagnostics of human knee cartilage lesions using delayed CBCT arthrography. Journal of Orthopaedic Research, 2014, 32, 403-412.	2.3	52
46	Diffusion coefficients of articular cartilage for different CT and MRI contrast agents. Medical Engineering and Physics, 2010, 32, 878-882.	1.7	51
47	Optimization of the arthroscopic indentation instrument for the measurement of thin cartilage stiffness. Physics in Medicine and Biology, 1999, 44, 2511-2524.	3.0	50
48	Bone properties as estimated by mineral density, ultrasound attenuation, and velocity. Bone, 1999, 25, 725-731.	2.9	50
49	Minimally Invasive Ultrasound Method for Intra-Articular Diagnostics of Cartilage Degeneration. Ultrasound in Medicine and Biology, 2009, 35, 1546-1554.	1.5	50
50	Electrical and dielectric properties of bovine trabecular boneÂrelationships with mechanical properties and mineral density. Physics in Medicine and Biology, 2003, 48, 775-786.	3.0	48
51	Prediction of mechanical properties of human trabecular bone by electrical measurements. Physiological Measurement, 2005, 26, S119-S131.	2.1	48
52	Ultrasound indentation of bovine knee articular cartilage in situ. Journal of Biomechanics, 2003, 36, 1259-1267.	2.1	47
53	Assessment of the suitability of using a forehead <scp>EEG</scp> electrode set and chin <scp>EMG</scp> electrodes for sleep staging in polysomnography. Journal of Sleep Research, 2016, 25, 636-645.	3.2	47
54	Inactivation of one allele of the type II collagen gene alters the collagen network in murine articular cartilage and makes cartilage softer. Annals of the Rheumatic Diseases, 2001, 60, 262-268.	0.9	46

#	Article	IF	CITATIONS
55	Computed tomography detects changes in contrast agent diffusion after collagen cross-linking typical to natural aging of articular cartilage. Osteoarthritis and Cartilage, 2011, 19, 1190-1198.	1.3	46
56	Structural parameters of normal and osteoporotic human trabecular bone are affected differently by microCT image resolution. Osteoporosis International, 2011, 22, 167-177.	3.1	46
57	Characterization of connective tissues using near-infrared spectroscopy and imaging. Nature Protocols, 2021, 16, 1297-1329.	12.0	45
58	Severity of desaturation events differs between hypopnea and obstructive apnea events and is modulated by their duration in obstructive sleep apnea. Sleep and Breathing, 2017, 21, 829-835.	1.7	44
59	Influence of overlying soft tissues on trabecular bone acoustic measurement at various ultrasound frequencies. Ultrasound in Medicine and Biology, 2006, 32, 1073-1083.	1.5	43
60	New method for point-of-care osteoporosis screening and diagnostics. Osteoporosis International, 2016, 27, 971-977.	3.1	43
61	Vibrational spectroscopy of articular cartilage. Applied Spectroscopy Reviews, 2017, 52, 249-266.	6.7	43
62	Quantitative MRI of parallel changes of articular cartilage and underlying trabecular bone in degeneration. Osteoarthritis and Cartilage, 2007, 15, 1149-1157.	1.3	42
63	Optimal graft stiffness and pre-strain restore normal joint motion and cartilage responses in ACL reconstructed knee. Journal of Biomechanics, 2016, 49, 2566-2576.	2.1	42
64	Structure-function relationships of human meniscus. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 67, 51-60.	3.1	42
65	Severity of individual obstruction events increases with age in patients with obstructive sleep apnea. Sleep Medicine, 2017, 37, 32-37.	1.6	42
66	Artificial neural network analysis of the oxygen saturation signal enables accurate diagnostics of sleep apnea. Scientific Reports, 2019, 9, 13200.	3.3	42
67	Effect of human trabecular bone composition on its electrical properties. Medical Engineering and Physics, 2007, 29, 845-852.	1.7	40
68	Simultaneous computed tomography of articular cartilage and subchondral bone. Osteoarthritis and Cartilage, 2009, 17, 1583-1588.	1.3	40
69	Ultrasonic assessment of cortical bone thickness in vitro and in vivo. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2008, 55, 2191-2197.	3.0	39
70	Diffusion of Gd-DTPA2â^' into articular cartilage. Osteoarthritis and Cartilage, 2012, 20, 117-126.	1.3	39
71	InÂvivo comparison of delayed gadolinium-enhanced MRI of cartilage and delayed quantitative CT arthrography in imaging of articular cartilage. Osteoarthritis and Cartilage, 2013, 21, 434-442.	1.3	39
72	Repair of osteochondral defects with recombinant human type II collagen gel and autologous chondrocytes in rabbit. Osteoarthritis and Cartilage, 2013, 21, 481-490.	1.3	39

#	Article	IF	CITATIONS
73	Comparison of novel clinically applicable methodology for sensitive diagnostics of cartilage degeneration., 2007, 13, 46-55.		39
74	Acoustic Properties of Trabecular Boneâ€"Relationships to Tissue Composition. Ultrasound in Medicine and Biology, 2007, 33, 1438-1444.	1.5	38
75	Open-source python module for automated preprocessing of near infrared spectroscopic data. Analytica Chimica Acta, 2020, 1108, 1-9.	5.4	37
76	Quantitative ultrasound imaging of spontaneous repair of porcine cartilage. Osteoarthritis and Cartilage, 2006, 14, 258-263.	1.3	36
77	Fabrication and testing of polyimide-based microelectrode arrays for cortical mapping of evoked potentials. Biosensors and Bioelectronics, 2009, 24, 3067-3072.	10.1	36
78	Delayed Computed Tomography Arthrography of Human Knee Cartilage <i>In Vivo</i> . Cartilage, 2012, 3, 334-341.	2.7	36
79	Screen-printed EEG electrode set for emergency use. Sensors and Actuators A: Physical, 2014, 213, 19-26.	4.1	36
80	Effect of Sweating on Electrode-Skin Contact Impedances and Artifacts in EEG Recordings With Various Screen-Printed Ag/Agcl Electrodes. IEEE Access, 2020, 8, 50934-50943.	4.2	36
81	Dual energy x-ray laser measurement of calcaneal bone mineral density. Physics in Medicine and Biology, 2003, 48, 1741-1752.	3.0	35
82	Arthroscopic Ultrasound Assessment of Articular Cartilage in the Human Knee Joint. Cartilage, 2011, 2, 246-253.	2.7	35
83	Severe desaturations increase psychomotor vigilance task-based median reaction time and number of lapses in obstructive sleep apnoea patients. European Respiratory Journal, 2020, 55, 1901849.	6.7	35
84	Interrelationships between electrical properties and microstructure of human trabecular bone. Physics in Medicine and Biology, 2006, 51, 5289-5303.	3.0	34
85	Spatial variation of acoustic properties is related with mechanical properties of trabecular bone. Physics in Medicine and Biology, 2007, 52, 6961-6968.	3.0	34
86	Comparison of ultrasound and optical coherence tomography techniques for evaluation of integrity of spontaneously repaired horse cartilage. Journal of Medical Engineering and Technology, 2012, 36, 185-192.	1.4	34
87	Severity of individual obstruction events is gender dependent in sleep apnea. Sleep and Breathing, 2017, 21, 397-404.	1.7	34
88	Quantitative Evaluation of Spontaneously and Surgically Repaired Rabbit Articular Cartilage Using Intra-Articular Ultrasound Method in situ. Ultrasound in Medicine and Biology, 2010, 36, 833-839.	1.5	33
89	Importance of Patella, Quadriceps Forces, and Depthwise Cartilage Structure on Knee Joint Motion and Cartilage Response During Gait. Journal of Biomechanical Engineering, 2016, 138, .	1.3	33
90	Home Polysomnography Reveals a First-Night Effect in Patients With Low Sleep Bruxism Activity. Journal of Clinical Sleep Medicine, 2018, 14, 1377-1386.	2.6	33

#	Article	IF	Citations
91	Arthroscopic near infrared spectroscopy enables simultaneous quantitative evaluation of articular cartilage and subchondral bone in vivo. Scientific Reports, 2018, 8, 13409.	3.3	33
92	MECHANO-ACOUSTIC DIAGNOSIS OF CARTILAGE DEGENERATION AND REPAIR. Journal of Bone and Joint Surgery - Series A, 2003, 85, 78-84.	3.0	33
93	Ultrasound Arthroscopy of Human Knee Cartilage and Subchondral Bone inÂVivo. Ultrasound in Medicine and Biology, 2014, 40, 2039-2047.	1.5	32
94	Arthroscopic Determination of Cartilage Proteoglycan Content and Collagen Network Structure with Near-Infrared Spectroscopy. Annals of Biomedical Engineering, 2019, 47, 1815-1826.	2.5	32
95	Dual-Frequency Ultrasound—New Pulse–Echo Technique for Bone Densitometry. Ultrasound in Medicine and Biology, 2008, 34, 1703-1708.	1.5	31
96	Effect of Bone Marrow on Acoustic Properties of Trabecular Bone - 3D Finite Difference Modeling Study. Ultrasound in Medicine and Biology, 2009, 35, 308-318.	1.5	31
97	Length of Individual Apnea Events Is Increased by Supine Position and Modulated by Severity of Obstructive Sleep Apnea. Sleep Disorders, 2016, 2016, 1-13.	1.4	31
98	In Vivo Contrast-Enhanced Cone Beam CT Provides Quantitative Information on Articular Cartilage and Subchondral Bone. Annals of Biomedical Engineering, 2017, 45, 811-818.	2.5	31
99	Site-specific ultrasound reflection properties and superficial collagen content of bovine knee articular cartilage. Physics in Medicine and Biology, 2005, 50, 3221-3233.	3.0	30
100	Ultrasound Speed in Articular Cartilage Under Mechanical Compression. Ultrasound in Medicine and Biology, 2007, 33, 1755-1766.	1.5	30
101	The zonal architecture of human articular cartilage described by T2 relaxation time in the presence of Gd-DTPA2â^3. Magnetic Resonance Imaging, 2008, 26, 602-607.	1.8	30
102	Evaluation of a Novel Ambulatory Device for Screening of Sleep Apnea. Telemedicine Journal and E-Health, 2009, 15, 283-289.	2.8	30
103	Ultrasound backscatter measurements of intact human proximal femursâ€"Relationships of ultrasound parameters with tissue structure and mineral density. Bone, 2014, 64, 240-245.	2.9	30
104	Optical absorption spectra of human articular cartilage correlate with biomechanical properties, histological score and biochemical composition. Physiological Measurement, 2015, 36, 1913-1928.	2.1	29
105	Comparison between kinetic and kinetic-kinematic driven knee joint finite element models. Scientific Reports, 2018, 8, 17351.	3.3	29
106	Simultaneous ultrasound measurement of articular cartilage and subchondral bone. Osteoarthritis and Cartilage, 2010, 18, 1570-1576.	1.3	28
107	Arthroscopic Ultrasound Technique for Simultaneous Quantitative Assessment of Articular Cartilage and Subchondral Bone: An InÂVitro and InÂVivo Feasibility Study. Ultrasound in Medicine and Biology, 2013, 39, 1460-1468.	1.5	28
108	Forehead EEG electrode set versus full-head scalp EEG in 100 patients with altered mental state. Epilepsy and Behavior, 2015, 49, 245-249.	1.7	28

#	Article	IF	Citations
109	Articular cartilage repair with recombinant human type II collagen/polylactide scaffold in a preliminary porcine study. Journal of Orthopaedic Research, 2016, 34, 745-753.	2.3	28
110	Effect of bone inhomogeneity on tibiofemoral contact mechanics during physiological loading. Journal of Biomechanics, 2016, 49, 1111-1120.	2.1	28
111	Arthroscopic optical coherence tomography provides detailed information on articular cartilage lesions in horses. Veterinary Journal, 2013, 197, 589-595.	1.7	27
112	Dual-frequency ultrasound technique minimizes errors induced by soft tissue in ultrasound bone densitometry. Acta Radiologica, 2008, 49, 1038-1041.	1.1	26
113	Ultrasound evaluation of mechanical injury of bovine knee articular cartilage under arthroscopic control. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 148-155.	3.0	26
114	Relationships between tissue composition and viscoelastic properties in human trabecular bone. Journal of Biomechanics, 2015, 48, 269-275.	2.1	26
115	Experimental and numerical validation for the novel configuration of an arthroscopic indentation instrument. Physics in Medicine and Biology, 2003, 48, 1565-1576.	3.0	25
116	Success Rate and Technical Quality of Home Polysomnography With Self-Applicable Electrode Set in Subjects With Possible Sleep Bruxism. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 1124-1132.	6.3	25
117	Near-infrared spectroscopy enables quantitative evaluation of human cartilage biomechanical properties during arthroscopy. Osteoarthritis and Cartilage, 2019, 27, 1235-1243.	1.3	25
118	Prevalence and characteristics of positional obstructive sleep apnea (POSA) in patients with severe OSA. Sleep and Breathing, 2020, 24, 551-559.	1.7	25
119	Longer apneas and hypopneas are associated with greater ultra-short-term HRV in obstructive sleep apnea. Scientific Reports, 2020, 10, 21556.	3.3	25
120	Machine Learning Classification of Articular Cartilage Integrity Using Near Infrared Spectroscopy. Cellular and Molecular Bioengineering, 2020, 13, 219-228.	2.1	25
121	Effects of Ultrasound Beam Angle and Surface Roughness on the Quantitative Ultrasound Parameters of Articular Cartilage. Ultrasound in Medicine and Biology, 2009, 35, 1344-1351.	1.5	24
122	New disposable forehead electrode set with excellent signal quality and imaging compatibility. Journal of Neuroscience Methods, 2013, 215, 103-109.	2.5	24
123	Bath Concentration of Anionic Contrast Agents Does Not Affect Their Diffusion and Distribution in Articular Cartilage <i>In Vitro</i> Cartilage, 2013, 4, 42-51.	2.7	24
124	Near Infrared Spectroscopic Mapping of Functional Properties of Equine Articular Cartilage. Annals of Biomedical Engineering, 2016, 44, 3335-3345.	2.5	24
125	Increase in Body Mass Index Decreases Duration of Apneas and Hypopneas in Obstructive Sleep Apnea. Respiratory Care, 2019, 64, 77-84.	1.6	24
126	Neural network analysis of nocturnal SpO2 signal enables easy screening of sleep apnea in patients with acute cerebrovascular disease. Sleep Medicine, 2021, 79, 71-78.	1.6	24

#	Article	IF	CITATIONS
127	Automatic Respiratory Event Scoring in Obstructive Sleep Apnea Using a Long Short-Term Memory Neural Network. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 2917-2927.	6.3	24
128	The Sleep Revolution project: the concept and objectives. Journal of Sleep Research, 2022, 31, .	3.2	24
129	In-Vitro Comparison of Time-Domain, Frequency-Domain and Wavelet Ultrasound Parameters in Diagnostics of Cartilage Degeneration. Ultrasound in Medicine and Biology, 2008, 34, 155-159.	1.5	23
130	Diffusion of ionic and non-ionic contrast agents in articular cartilage with increased cross-linkingâ€"Contribution of steric and electrostatic effects. Medical Engineering and Physics, 2013, 35, 1415-1420.	1.7	23
131	Multi-scale imaging techniques to investigate solute transport across articular cartilage. Journal of Biomechanics, 2018, 78, 10-20.	2.1	23
132	Dual Contrast CT Method Enables Diagnostics of Cartilage Injuries and Degeneration Using a Single CT Image. Annals of Biomedical Engineering, 2017, 45, 2857-2866.	2.5	22
133	Tissue viscoelasticity is related to tissue composition but may not fully predict the apparent-level viscoelasticity in human trabecular bone – An experimental and finite element study. Journal of Biomechanics, 2017, 65, 96-105.	2.1	22
134	Mortality in middle-aged men with obstructive sleep apnea in Finland. Sleep and Breathing, 2013, 17, 1047-1053.	1.7	21
135	Importance of Material Properties and Porosity of Bone on Mechanical Response of Articular Cartilage in Human Knee Joint—A Two-Dimensional Finite Element Study. Journal of Biomechanical Engineering, 2014, 136, 121005.	1.3	21
136	Effects of Freeze–Thaw Cycle with and without Proteolysis Inhibitors and Cryopreservant on the Biochemical and Biomechanical Properties of Articular Cartilage. Cartilage, 2014, 5, 97-106.	2.7	20
137	Contrast-Enhanced Computed Tomography Enables Quantitative Evaluation of Tissue Properties at Intrajoint Regions in Cadaveric Knee Cartilage. Cartilage, 2017, 8, 391-399.	2.7	20
138	Quantitative susceptibility mapping of articular cartilage: Ex vivo findings at multiple orientations and following different degradation treatments. Magnetic Resonance in Medicine, 2018, 80, 2702-2716.	3.0	20
139	Quantitative Dual Contrast CT Technique for Evaluation of Articular Cartilage Properties. Annals of Biomedical Engineering, 2018, 46, 1038-1046.	2.5	20
140	Correlation of Subchondral Bone Density and Structure from Plain Radiographs with Micro Computed Tomography Ex Vivo. Annals of Biomedical Engineering, 2016, 44, 1698-1709.	2.5	19
141	Hyperosmolaric contrast agents in cartilage tomography may expose cartilage to overload-induced cell death. Journal of Biomechanics, 2012, 45, 497-503.	2.1	18
142	Gender differences in severity of desaturation events following hypopnea and obstructive apnea events in adults during sleep. Physiological Measurement, 2017, 38, 1490-1502.	2.1	18
143	Differences in arousal probability and duration after apnea and hypopnea events in adult obstructive sleep apnea patients. Physiological Measurement, 2018, 39, 114004.	2.1	18
144	Computational evaluation of altered biomechanics related to articular cartilage lesions observed in vivo. Journal of Orthopaedic Research, 2019, 37, 1042-1051.	2.3	18

#	Article	lF	CITATIONS
145	Imaging of proteoglycan and water contents in human articular cartilage with fullâ€body CT using dual contrast technique. Journal of Orthopaedic Research, 2019, 37, 1059-1070.	2.3	18
146	Mechano-acoustic determination of Young's modulus of articular cartilage. Biorheology, 2004, 41, 167-79.	0.4	18
147	Amount of weight loss or gain influences the severity of respiratory events in sleep apnea. Medical and Biological Engineering and Computing, 2015, 53, 975-988.	2.8	17
148	Quantitative Evaluation of Knee Subchondral Bone Mineral Density Using Cone Beam Computed Tomography. IEEE Transactions on Medical Imaging, 2015, 34, 2186-2190.	8.9	17
149	Cationic Contrast Agent Diffusion Differs Between Cartilage and Meniscus. Annals of Biomedical Engineering, 2016, 44, 2913-2921.	2.5	17
150	Mortalityâ€riskâ€based apnea–hypopnea index thresholds for diagnostics of obstructive sleep apnea. Journal of Sleep Research, 2019, 28, e12855.	3.2	17
151	Polysomnographic scoring of sleep bruxism events is accurate even in the absence of video recording but unreliable with EMG-only setups. Sleep and Breathing, 2020, 24, 893-904.	1.7	17
152	Identification of locations susceptible to osteoarthritis in patients with anterior cruciate ligament reconstruction: Combining knee joint computational modelling with follow-up T1i-and T2 imaging. Clinical Biomechanics, 2020, 79, 104844.	1.2	17
153	Longer and Deeper Desaturations Are Associated With the Worsening of Mild Sleep Apnea: The Sleep Heart Health Study. Frontiers in Neuroscience, 2021, 15, 657126.	2.8	17
154	Assessment of obstructive sleep apnea-related sleep fragmentation utilizing deep learning-based sleep staging from photoplethysmography. Sleep, 2021, 44, .	1.1	17
155	Effect of different oxygen desaturation threshold levels on hypopnea scoring and classification of severity of sleep apnea. Sleep and Breathing, 2015, 19, 947-954.	1.7	16
156	Combination of optical coherence tomography and near infrared spectroscopy enhances determination of articular cartilage composition and structure. Scientific Reports, 2017, 7, 10586.	3.3	16
157	The prevalence of REM-related obstructive sleep apnoea is reduced by the AASM 2012 hypopnoea criteria. Sleep and Breathing, 2018, 22, 57-64.	1.7	16
158	Simultaneous Quantitation of Cationic and Non-ionic Contrast Agents in Articular Cartilage Using Synchrotron MicroCT Imaging. Scientific Reports, 2019, 9, 7118.	3.3	16
159	Synchrotron MicroCT Reveals the Potential of the Dual Contrast Technique for Quantitative Assessment of Human Articular Cartilage Composition. Journal of Orthopaedic Research, 2020, 38, 563-573.	2.3	16
160	Evaluation of articular cartilage with quantitative MRI in an equine model of postâ€traumatic osteoarthritis. Journal of Orthopaedic Research, 2021, 39, 63-73.	2.3	16
161	Detailed Assessment of Sleep Architecture With Deep Learning and Shorter Epoch-to-Epoch Duration Reveals Sleep Fragmentation of Patients With Obstructive Sleep Apnea. IEEE Journal of Biomedical and Health Informatics, 2021, 25, 2567-2574.	6.3	16
162	Novel parameters reflect changes in morphology of respiratory events during weight loss. Physiological Measurement, 2013, 34, 1013-1026.	2.1	15

#	Article	IF	Citations
163	Diagnosis of Knee Osteochondral Lesions With Ultrasound Imaging. Arthroscopy Techniques, 2015, 4, e429-e433.	1.3	15
164	Estimation of articular cartilage properties using multivariate analysis of optical coherence tomography signal. Osteoarthritis and Cartilage, 2015, 23, 2206-2213.	1.3	15
165	Effect of porosity, tissue density, and mechanical properties on radial sound speed in human cortical bone. Medical Physics, 2016, 43, 2030-2039.	3.0	15
166	Menthol concentration in topical cold gel does not have significant effect on skin cooling. Skin Research and Technology, 2016, 22, 40-45.	1.6	15
167	The AASM 2012 recommended hypopnea criteria increase the incidence of obstructive sleep apnea but not the proportion of positional obstructive sleep apnea. Sleep Medicine, 2016, 26, 23-29.	1.6	15
168	Screenâ€printed ambulatory electrode set enables accurate diagnostics of sleep bruxism. Journal of Sleep Research, 2018, 27, 103-112.	3.2	15
169	Characterizing human subchondral bone properties using near-infrared (NIR) spectroscopy. Scientific Reports, 2018, 8, 9733.	3.3	15
170	The hypoxic burden: also known as the desaturation severity parameter. European Heart Journal, 2019, 40, 2991-2993.	2.2	15
171	Ultrasonic evaluation of acute impact injury of articular cartilage inÂvitro. Osteoarthritis and Cartilage, 2012, 20, 719-726.	1.3	14
172	Contrast enhanced imaging of human meniscus using cone beam CT. Osteoarthritis and Cartilage, 2015, 23, 1367-1376.	1.3	14
173	Optimal Regression Method for Near-Infrared Spectroscopic Evaluation of Articular Cartilage. Applied Spectroscopy, 2017, 71, 2253-2262.	2.2	14
174	Does Magnetic Resonance Imaging Provide Superior Reliability for Achilles and Patellar Tendon Cross-Sectional Area Measurements Compared with Ultrasound Imaging?. Ultrasound in Medicine and Biology, 2019, 45, 3186-3198.	1.5	14
175	Effects of optical beam angle on quantitative optical coherence tomography (OCT) in normal and surface degenerated bovine articular cartilage. Physics in Medicine and Biology, 2011, 56, 491-509.	3.0	13
176	Nondestructive fluorescence-based quantification of threose-induced collagen cross-linking in bovine articular cartilage. Journal of Biomedical Optics, 2012, 17, 0970031.	2.6	13
177	Tissue optical properties combined with machine learning enables estimation of articular cartilage composition and functional integrity. Biomedical Optics Express, 2020, 11, 6480.	2.9	13
178	Acoustic properties of articular cartilage under mechanical stress. Biorheology, 2006, 43, 523-35.	0.4	13
179	Design, construction and evaluation of an ambulatory device for screening of sleep apnea. Medical and Biological Engineering and Computing, 2009, 47, 59-66.	2.8	12
180	Strain-Dependent Modulation of Ultrasound Speed in Articular Cartilage Under Dynamic Compression. Ultrasound in Medicine and Biology, 2009, 35, 1177-1184.	1.5	12

#	Article	IF	CITATIONS
181	Application of optical coherence tomography enhances reproducibility of arthroscopic evaluation of equine joints. Acta Veterinaria Scandinavica, 2014, 56, 3.	1.6	12
182	Morbidity and mortality risk ratios are elevated in severe supine dominant OSA: a long-term follow-up study. Sleep and Breathing, 2015, 19, 653-660.	1.7	12
183	RemLogic plug-in enables clinical application of apnea-hypopnea index adjusted for severity of individual obstruction events. Journal of Medical Engineering and Technology, 2016, 40, 119-126.	1.4	12
184	Estimating daytime sleepiness with previous night electroencephalography, electrooculography, and electromyography spectrograms in patients with suspected sleep apnea using a convolutional neural network. Sleep, 2020, 43, .	1.1	12
185	Effects of human articular cartilage constituents on simultaneous diffusion of cationic and nonionic contrast agents. Journal of Orthopaedic Research, 2021, 39, 771-779.	2.3	12
186	Raman spectroscopy is sensitive to biochemical changes related to various cartilage injuries. Journal of Raman Spectroscopy, 2021, 52, 796-804.	2.5	12
187	Differences in Acoustic Properties of Intact and Degenerated Human Patellar Cartilage During Compression. Ultrasound in Medicine and Biology, 2009, 35, 1367-1375.	1.5	11
188	Contrast-Enhanced Micro–Computed Tomography in Evaluation of Spontaneous Repair of Equine Cartilage. Cartilage, 2012, 3, 235-244.	2.7	11
189	Amsterdam positional OSA classification: the AASM 2012 recommended hypopnoea criteria increases the number of positional therapy candidates. Sleep and Breathing, 2017, 21, 411-417.	1.7	11
190	Method for Segmentation of Knee Articular Cartilages Based on Contrast-Enhanced CT Images. Annals of Biomedical Engineering, 2018, 46, 1756-1767.	2.5	11
191	Power spectral densities of nocturnal pulse oximetry signals differ in OSA patients with and without daytime sleepiness. Sleep Medicine, 2020, 73, 231-237.	1.6	11
192	Dual contrast in computed tomography allows earlier characterization of articular cartilage over single contrast. Journal of Orthopaedic Research, 2020, 38, 2230-2238.	2.3	11
193	Quantitative dual contrast photon-counting computed tomography for assessment of articular cartilage health. Scientific Reports, 2021, 11, 5556.	3.3	11
194	Deep Learning Enables Accurate Automatic Sleep Staging Based on Ambulatory Forehead EEG. IEEE Access, 2022, 10, 26554-26566.	4.2	11
195	Human Articular Cartilage Proteoglycans Are Not Undersulfated in Osteoarthritis. Connective Tissue Research, 2007, 48, 27-33.	2.3	10
196	Numerical Analysis of Uncertainties in Dual Frequency Bone Ultrasound Technique. Ultrasound in Medicine and Biology, 2010, 36, 288-294.	1.5	10
197	Weight loss alters severity of individual nocturnal respiratory events depending on sleeping position. Physiological Measurement, 2014, 35, 2037-2052.	2.1	10
198	Improved Sweat Artifact Tolerance of Screen-Printed EEG Electrodes by Material Selection-Comparison of Electrochemical Properties in Artificial Sweat. IEEE Access, 2019, 7, 133237-133247.	4.2	10

#	Article	IF	Citations
199	Triple Contrast CT Method Enables Simultaneous Evaluation of Articular Cartilage Composition and Segmentation. Annals of Biomedical Engineering, 2020, 48, 556-567.	2.5	10
200	Rapid CT-based Estimation of Articular Cartilage Biomechanics in the Knee Joint Without Cartilage Segmentation. Annals of Biomedical Engineering, 2020, 48, 2965-2975.	2.5	10
201	Acute stroke and TIA patients have specific polygraphic features of obstructive sleep apnea. Sleep and Breathing, 2020, 24, 1495-1505.	1.7	10
202	Infrared Fiber-Optic Spectroscopy Detects Bovine Articular Cartilage Degeneration. Cartilage, 2021, 13, 285S-294S.	2.7	10
203	Improvement of arthroscopic cartilage stiffness probe using amorphous diamond coating. , 2005, 73B, 15-22.		9
204	Effects of ultrasound frequency, temporal sampling frequency, and spatial sampling step on the quantitative ultrasound parameters of articular cartilage. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 1383-1393.	3.0	9
205	Estimation of fixed charge density and diffusivity profiles in cartilage using contrast enhanced computer tomography. International Journal for Numerical Methods in Engineering, 2014, 98, 371-390.	2.8	9
206	Collagen and Chondrocyte Concentrations Control Ultrasound Scattering in Agarose Scaffolds. Ultrasound in Medicine and Biology, 2014, 40, 2162-2171.	1.5	9
207	A Handy EEG Electrode Set for patients suffering from altered mental state. Journal of Clinical Monitoring and Computing, 2015, 29, 697-705.	1.6	9
208	Optical spectroscopic determination of human meniscus composition. Journal of Orthopaedic Research, 2016, 34, 270-278.	2.3	9
209	Transport of lodine Is Different in Cartilage and Meniscus. Annals of Biomedical Engineering, 2016, 44, 2114-2122.	2.5	9
210	Near Infrared Spectroscopy Enables Differentiation of Mechanically and Enzymatically Induced Cartilage Injuries. Annals of Biomedical Engineering, 2020, 48, 2343-2353.	2.5	9
211	Functional and structural properties of human patellar articular cartilage in osteoarthritis. Journal of Biomechanics, 2021, 126, 110634.	2.1	9
212	Self-Applied Home Sleep Recordings. Sleep Medicine Clinics, 2021, 16, 545-556.	2.6	9
213	<i>In Vivo</i> Evaluation of the Potential of High-Frequency Ultrasound for Arthroscopic Examination of the Shoulder Joint. Cartilage, 2016, 7, 248-255.	2.7	8
214	Effect of oxygen desaturation threshold on determination of OSA severity during weight loss. Sleep and Breathing, 2016, 20, 33-42.	1.7	8
215	Porosity predicted from ultrasound backscatter using multivariate analysis can improve accuracy of cortical bone thickness assessment. Journal of the Acoustical Society of America, 2017, 141, 575-585.	1.1	8
216	Solute Transport of Negatively Charged Contrast Agents Across Articular Surface of Injured Cartilage. Annals of Biomedical Engineering, 2017, 45, 973-981.	2.5	8

#	Article	IF	Citations
217	Infrared thermography reveals effect of working posture on skin temperature in office workers. International Journal of Occupational Safety and Ergonomics, 2018, 24, 457-463.	1.9	8
218	Near Infrared Spectroscopic Evaluation of Ligament and Tendon Biomechanical Properties. Annals of Biomedical Engineering, 2019, 47, 213-222.	2.5	8
219	Intra-night variation in apnea-hypopnea index affects diagnostics and prognostics of obstructive sleep apnea. Sleep and Breathing, 2020, 24, 379-386.	1.7	8
220	Discrete element and finite element methods provide similar estimations for hip joint contact mechanics during walking gait. Journal of Biomechanics, 2021, 115, 110163.	2.1	8
221	Structure, composition and fibril-reinforced poroviscoelastic properties of bovine knee ligaments and patellar tendon. Journal of the Royal Society Interface, 2021, 18, 20200737.	3.4	8
222	Subjectâ€specific biomechanical analysis to estimate locations susceptible to osteoarthritis—Finite element modeling and MRI followâ€up of ACL reconstructed patients. Journal of Orthopaedic Research, 2022, 40, 1744-1755.	2.3	8
223	Undersulfated chondroitin sulfate does not increase in osteoarthritic cartilage. Journal of Rheumatology, 2004, 31, 2449-53.	2.0	8
224	Technical and practical improvements in arthroscopic indentation technique for diagnostics of articular cartilage softening. Journal of Medical Engineering and Technology, 2011, 35, 40-46.	1.4	7
225	Differences in acoustic impedance of fresh and embedded human trabecular bone samples—Scanning acoustic microscopy and numerical evaluation. Journal of the Acoustical Society of America, 2016, 140, 1931-1936.	1.1	7
226	Regular chondrocyte spacing is a potential cause for coherent ultrasound backscatter in human articular cartilage. Journal of the Acoustical Society of America, 2017, 141, 3105-3116.	1.1	7
227	Peri-apneic hemodynamic reactions in obstructive sleep apnea. Pathophysiology, 2017, 24, 197-203.	2.2	7
228	Bayesian Network Model to Evaluate the Effectiveness of Continuous Positive Airway Pressure Treatment of Sleep Apnea. Healthcare Informatics Research, 2018, 24, 346.	1.9	7
229	Contrast enhanced computed tomography for real-time quantification of glycosaminoglycans in cartilage tissue engineered constructs. Acta Biomaterialia, 2019, 100, 202-212.	8.3	7
230	Tailored Synthesis of PEGylated Bismuth Nanoparticles for X-ray Computed Tomography and Photothermal Therapy: One-Pot, Targeted Pyrolysis, and Self-Promotion. ACS Applied Materials & Interfaces, 2020, 12, 47233-47244.	8.0	7
231	Diabetes and cardiovascular diseases are associated with the worsening of intermittent hypoxaemia. Journal of Sleep Research, 2021, , e13441.	3.2	7
232	Optical spectroscopic characterization of human meniscus biomechanical properties. Journal of Biomedical Optics, 2017, 22, 1.	2.6	7
233	Novel oxygen desaturation parameters are associated with cardiac troponin I: Data from the Akershus Sleep Apnea Project. Journal of Sleep Research, 2022, 31, e13581.	3.2	7
234	Ultrasound speed varies in articular cartilage under indentation loading [Coresspondence]. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 2772-2780.	3.0	6

#	Article	IF	CITATIONS
235	Ultrasound Backscattering Is Anisotropic in Bovine Articular Cartilage. Ultrasound in Medicine and Biology, 2015, 41, 1958-1966.	1.5	6
236	Infrared microspectroscopic determination of collagen cross-links in articular cartilage. Journal of Biomedical Optics, 2017, 22, 035007.	2.6	6
237	Required CPAP usage time to normalize AHI in obstructive sleep apnea patients: a simulation study. Physiological Measurement, 2018, 39, 115009.	2.1	6
238	Dataset on equine cartilage near infrared spectra, composition, and functional properties. Scientific Data, 2019, 6, 164.	5.3	6
239	Bright ultrashort echo time SWIFT MRI signal at the osteochondral junction is not located in the calcified cartilage. Journal of Orthopaedic Research, 2020, 38, 2649-2656.	2.3	6
240	Gamma Power of Electroencephalogram Arousal Is Modulated by Respiratory Event Type and Severity in Obstructive Sleep Apnea. IEEE Transactions on Biomedical Engineering, 2022, 69, 1417-1423.	4.2	6
241	Quantitative Information From Ultrasound Evaluation of Articular Cartilage Should Be Interpreted With Care. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2007, 23, 1137-1138.	2.7	5
242	2-D finite difference time domain model of ultrasound reflection from normal and osteoarthritic human articular cartilage surface. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2010, 57, 892-899.	3.0	5
243	Effects of non-optimal focusing on dual-frequency ultrasound measurements of bone. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 1182-1188.	3.0	5
244	Dependence of light attenuation and backscattering on collagen concentration and chondrocyte density in agarose scaffolds. Physics in Medicine and Biology, 2014, 59, 6537-6548.	3.0	5
245	Shielded Design of Screen-Printed EEG Electrode Set Reduces Interference Pick-Up. IEEE Sensors Journal, 2014, 14, 2692-2697.	4.7	5
246	Species-Independent Modeling of High-Frequency Ultrasound Backscatter in Hyaline Cartilage. Ultrasound in Medicine and Biology, 2016, 42, 1375-1384.	1.5	5
247	Optical coherence tomography enables accurate measurement of equine cartilage thickness for determination of speed of sound. Monthly Notices of the Royal Astronomical Society: Letters, 2016, 87, 418-424.	3.3	5
248	Effect of collagen cross-linking on quantitative MRI parameters of articular cartilage. Osteoarthritis and Cartilage, 2016, 24, 1656-1664.	1.3	5
249	Accounting for spatial dependency in multivariate spectroscopic data. Chemometrics and Intelligent Laboratory Systems, 2018, 182, 166-171.	3.5	5
250	Longer duration electroencephalogram arousals have a better relationship with impaired vigilance and health status in obstructive sleep apnoea. Sleep and Breathing, 2021, 25, 263-270.	1.7	5
251	An In-Laboratory Comparison of FocusBand EEG Device and Textile Electrodes Against a Medical-Grade System and Wet Gel Electrodes. IEEE Access, 2021, 9, 132580-132591.	4.2	5
252	Articular cartilage optical properties in the near-infrared (NIR) spectral range vary with depth and tissue integrity. Biomedical Optics Express, 2021, 12, 6066.	2.9	5

#	Article	IF	CITATIONS
253	Structural, compositional, and functional effects of blunt and sharp cartilage damage on the joint: A 9â€month equine groove model study. Journal of Orthopaedic Research, 2021, 39, 2363-2375.	2.3	5
254	Linear Acoustics of Trabecular Bone. , 2011, , 265-289.		5
255	Dualâ€contrast microâ€CT enables cartilage lesion detection and tissue condition evaluation ex vivo. Equine Veterinary Journal, 2023, 55, 315-324.	1.7	5
256	Inter-individual changes in cortical bone three-dimensional microstructure and elastic coefficient have opposite effects on radial sound speed. Journal of the Acoustical Society of America, 2015, 138, 3491-3499.	1.1	4
257	Finite difference time domain model of ultrasound propagation in agarose scaffold containing collagen or chondrocytes. Journal of the Acoustical Society of America, 2016, 140, 1-7.	1.1	4
258	Multimodality scoring of chondral injuries in the equine fetlock joint exÂvivo. Osteoarthritis and Cartilage, 2017, 25, 790-798.	1.3	4
259	Ultrasound Assessment of Human Meniscus. Ultrasound in Medicine and Biology, 2017, 43, 1753-1763.	1.5	4
260	Quantification of porcine myocardial perfusion with modified dual bolus MRI – a prospective study with a PET reference. BMC Medical Imaging, 2019, 19, 58.	2.7	4
261	Comparison of the effect of weight change, simulated computational continuous positive airway pressure treatment and positional therapy on severity of sleep apnea. Journal of Sleep Research, 2021, 30, e13070.	3.2	4
262	Beyond the apnea–hypopnea index: alternative diagnostic parameters and machine learning solutions for estimation of sleep apnea severity. Sleep, 2021, 44, .	1.1	4
263	Increased nocturnal arterial pulsation frequencies of obstructive sleep apnoea patients is associated with an increased number of lapses in a psychomotor vigilance task. ERJ Open Research, 2020, 6, 00277-2020.	2.6	4
264	Technical Performance of Textile-Based Dry Forehead Electrodes Compared With Medical-Grade Overnight Home Sleep Recordings. IEEE Access, 2021, 9, 157902-157915.	4.2	4
265	Changes in subchondral bone structure and mechanical properties do not substantially affect cartilage mechanical responses $\hat{a} \in A$ finite element study. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 128, 105129.	3.1	4
266	Novel screen printed electrode set for routine EEG recordings in patients with altered mental status. , 2013, 2013, 6724-7.		3
267	Ultrasound Arthroscopy of Hip in Treatment of Osteochondritis Dissecans. Arthroscopy Techniques, 2017, 6, e1063-e1068.	1.3	3
268	Semiâ€automated International Cartilage Repair Society scoring of equine articular cartilage lesions in optical coherence tomography images. Equine Veterinary Journal, 2017, 49, 552-555.	1.7	3
269	Automated Preprocessing of Near Infrared Spectroscopic Data. , 2019, , .		3
270	Spectroscopic Evaluation of Post-Traumatic Osteoarthritis in Shetland Ponies. , 2018, , .		3

#	Article	IF	Citations
271	Self-Applied Electrode Set Provides a Clinically Feasible Solution Enabling EEG Recording in Home Sleep Apnea Testing. IEEE Access, 2022, 10, 60633-60642.	4.2	3
272	A portable device for intensive care brain function monitoring with event-related potentials. Computer Methods and Programs in Biomedicine, 2008, 89, 83-92.	4.7	2
273	Assessment of myocardial perfusion with MRI using a modified dual bolus method. Physiological Measurement, 2014, 35, 533-547.	2.1	2
274	Phased-array ultrasound technology enhances accuracy of dual frequency ultrasound measurements – towards improved ultrasound bone diagnostics. Journal of Medical Engineering and Technology, 2016, 40, 293-297.	1.4	2
275	Near-Infrared Spectroscopy for Mapping of Human Meniscus Biochemical Constituents. Annals of Biomedical Engineering, 2021, 49, 469-476.	2.5	2
276	Quantification of Myocardial Blood Flow by Machine Learning Analysis of Modified Dual Bolus MRI Examination. Annals of Biomedical Engineering, 2021, 49, 653-662.	2.5	2
277	Dualâ€contrast computed tomography enables detection of equine posttraumatic osteoarthritis in vitro. Journal of Orthopaedic Research, 2022, 40, 703-711.	2.3	2
278	Deep Learning Classification of Cartilage Integrity Using Near Infrared Spectroscopy., 2018,,.		2
279	Clinical Contrast-Enhanced Computed Tomography With Semi-Automatic Segmentation Provides Feasible Input for Computational Models of the Knee Joint. Journal of Biomechanical Engineering, 2020, 142, .	1.3	2
280	Near infrared spectroscopic evaluation of biochemical and crimp properties of knee joint ligaments and patellar tendon. PLoS ONE, 2022, 17, e0263280.	2.5	2
281	QTc prolongation is associated with severe desaturations in stroke patients with sleep apnea. BMC Pulmonary Medicine, 2022, 22, .	2.0	2
282	Biomechanical, biochemical, and near infrared spectral data of bovine knee ligaments and patellar tendon. Data in Brief, 2021, 36, 106976.	1.0	1
283	Site- and Zone-Dependent Changes in Proteoglycan Content and Biomechanical Properties of Bluntly and Sharply Grooved Equine Articular Cartilage. Annals of Biomedical Engineering, 2022, 50, 1787-1797.	2.5	1
284	Estimation of Systematic and Spatially Correlated Components of Random Signals from Repeated Measurements: Application to Contrast Enhanced Computer Tomography Measurements. SIAM Journal of Scientific Computing, 2016, 38, B77-B99.	2.8	0
285	Near-infrared Spectroscopy: A Potential Tool for Mapping Meniscus Properties. , 2018, , .		0
286	Estimating Mechanical Properties of Bovine Knee Ligaments and Tendons with Near Infrared Spectroscopy. , 2018, , .		0
287	Near-infrared Spectroscopy Based Arthroscopic Evaluation of Human Knee Joint Cartilage, Through Automated Selection of an Anatomically Specific Regression Model. , 2018, , .		0
288	Arthroscopic Near-Infrared Spectroscopic Prediction of Human Meniscus Properties., 2019,,.		0

#	Article	IF	CITATIONS
289	Mid-infrared and Near infrared spectroscopic analysis of mechanically and enzymatically damaged cartilage. , 2019, , .		O
290	Mid-infrared Spectroscopic Assessment of Cartilage Degeneration. , 2019, , .		0
291	Assessment of Ligament Viscoelastic Properties Using Raman Spectroscopy. Annals of Biomedical Engineering, 0, , .	2.5	0