

Mustafa Unal

List of Publications by Year in descending order

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Version: 2024-02-01

25
papers

638
citations

623734

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642732

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26
all docs

26
docs citations

26
times ranked

791
citing authors

#	ARTICLE	IF	CITATIONS
1	Raman spectroscopy-based water measurements identify the origin of MRI T2 signal in human articular cartilage zones and predict histopathologic score. <i>Journal of Biophotonics</i> , 2022, 15, e202100212.	2.3	3
2	Raman spectroscopic determination of bone matrix quantity and quality augments prediction of human cortical bone mechanical properties. <i>Journal of Biomechanics</i> , 2021, 119, 110342.	2.1	9
3	Compositional assessment of bone by Raman spectroscopy. <i>Analyst, The</i> , 2021, 146, 7464-7490.	3.5	34
4	Constitutive activation of MEK1 in osteoprogenitors increases strength of bone despite impairing mineralization. <i>Bone</i> , 2020, 130, 115106.	2.9	6
5	The age-related decrease in material properties of BALB/c mouse long bones involves alterations to the extracellular matrix. <i>Bone</i> , 2020, 130, 115126.	2.9	25
6	LETTER TO THE EDITOR. <i>Connective Tissue Research</i> , 2020, 61, 420-422.	2.3	3
7	Assessing matrix quality by Raman spectroscopy helps predict fracture toughness of human cortical bone. <i>Scientific Reports</i> , 2019, 9, 7195.	3.3	45
8	Manipulating the Amount and Structure of the Organic Matrix Affects the Water Compartments of Human Cortical Bone. <i>JBMR Plus</i> , 2019, 3, e10135.	2.7	21
9	Raman spectroscopy-based water content is a negative predictor of articular human cartilage mechanical function. <i>Osteoarthritis and Cartilage</i> , 2019, 27, 304-313.	1.3	16
10	Bound Water and Hydroxyproline are the essential contributors to collagen molecular stability: A Computational Analysis. <i>Academic Platform Journal of Engineering and Science</i> , 2019, 7, 373-380.	0.6	0
11	Low bone toughness in the TallyHO model of juvenile type 2 diabetes does not worsen with age. <i>Bone</i> , 2018, 110, 204-214.	2.9	21
12	Assessing glycation-mediated changes in human cortical bone with Raman spectroscopy. <i>Journal of Biophotonics</i> , 2018, 11, e201700352.	2.3	41
13	The Role of Matrix Composition in the Mechanical Behavior of Bone. <i>Current Osteoporosis Reports</i> , 2018, 16, 205-215.	3.6	87
14	Repetitive short-term application of extracellular calcium is osteopromotive to osteoprogenitor cells. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, e1349-e1359.	2.7	3
15	Chemical characterization of Maltese-cross birefringent particles in synovial fluid samples collected from symptomatic joints. <i>Joint Bone Spine</i> , 2018, 85, 501-503.	1.6	2
16	Interrelationships between electrical, mechanical and hydration properties of cortical bone. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 77, 12-23.	3.1	21
17	Shortwave-infrared Raman spectroscopic classification of water fractions in articular cartilage ex vivo. <i>Journal of Biomedical Optics</i> , 2018, 23, 1.	2.6	16
18	Effects of losartan treatment on the physicochemical properties of diabetic rat bone. <i>Journal of Bone and Mineral Metabolism</i> , 2017, 35, 161-170.	2.7	15

#	ARTICLE	IF	CITATIONS
19	Miniscrew biomechanics: Guidelines for the use of rigid indirect anchorage mechanics. American Journal of Orthodontics and Dentofacial Orthopedics, 2017, 152, 413-419.	1.7	10
20	Raman spectral markers of collagen denaturation and hydration in human cortical bone tissue are affected by radiation sterilization and high cycle fatigue damage. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 75, 314-321.	3.1	27
21	Novel Raman Spectroscopic Biomarkers Indicate That Postyield Damage Denatures Bone's Collagen. Journal of Bone and Mineral Research, 2016, 31, 1015-1025.	2.8	65
22	Fundamentals of Musculoskeletal Biomechanics. , 2016, , 15-36.		4
23	Raman spectral classification of mineral- and collagen-bound water's associations to elastic and post-yield mechanical properties of cortical bone. Bone, 2015, 81, 315-326.	2.9	75
24	Molecular spectroscopic identification of the water compartments in bone. Bone, 2014, 67, 228-236.	2.9	56
25	Micro and Nano-Scale Technologies for Cell Mechanics. Nanobiomedicine, 2014, 1, 5.	5.7	33