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List of Publications by Year
in descending order

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Version: 2024-02-01

64 papers	2,311 citations	279798 23 h-index	233421 45 g-index
67 all docs	67 docs citations	67 times ranked	3170 citing authors

#	Article	IF	Citations
1	Shark centra microanatomy and mineral density variation studied with laboratory microComputed Tomography. Journal of Structural Biology, 2022, 214, 107831.	2.8	8
2	Microstructure and energy dispersive diffraction reconstruction of 3D patterns of crystallographic texture in a shark centrum. Journal of Medical Imaging, 2022, 9, 031504.	1.5	5
3	Distribution, structure, and mineralization of calcified cartilage remnants in hard antlers. Bone Reports, 2022, 16, 101571.	0.4	3
4	Special Section Guest Editorial: Hard X-Ray Tomography with Micrometer Resolution. Journal of Medical Imaging, 2022, 9, .	1.5	1
5	Influence of Geometry and Architecture on the In Vivo Success of 3D-Printed Scaffolds for Spinal Fusion. Tissue Engineering - Part A, 2021, 27, 26-36.	3.1	22
6	X-ray computed tomography. Nature Reviews Methods Primers, 2021, 1, .	21.2	305
7	Effect of Postoperative Analgesic Exposure to the Cannabinoid Receptor Agonist WIN55 on Osteogenic Differentiation and Spinal Fusion in Rats. Journal of Bone and Joint Surgery - Series A, 2021, 103, 984-991.	3.0	4
8	Osteoinductivity and biomechanical assessment of a 3D printed demineralized bone matrix-ceramic composite in a rat spine fusion model. Acta Biomaterialia, 2021, 127, 146-158.	8.3	18
9	A mummyâ€™s secrets. , 2021, , .		0
10	3D-Printed Ceramic-Demineralized Bone Matrix Hyperelastic Bone Composite Scaffolds for Spinal Fusion. Tissue Engineering - Part A, 2020, 26, 157-166.	3.1	33
11	Carbonated apatite lattice parameter variation across incremental growth lines in teeth. Materialia, 2020, 14, 100935.	2.7	9
12	Growth Factors, Carrier Materials, and Bone Repair. Handbook of Experimental Pharmacology, 2020, 262, 121-156.	1.8	9
13	X-ray fluorescence microscopy: A method of measuring ion concentrations in the ear. Hearing Research, 2020, 391, 107948.	2.0	6
14	Combined computed tomography and position-resolved X-ray diffraction of an intact Roman-era Egyptian portrait mummy. Journal of the Royal Society Interface, 2020, 17, 20200686.	3.4	7
15	Fluvastatin protects cochleae from damage by high-level noise. Scientific Reports, 2018, 8, 3033.	3.3	19
16	Alcohol exposure decreases osteopontin expression during fracture healing and osteopontin-mediated mesenchymal stem cell migration in vitro. Journal of Orthopaedic Surgery and Research, 2018, 13, 101.	2.3	16
17	Growth of second stage mineral in Lytechinus variegatus. Connective Tissue Research, 2018, 59, 345-355.	2.3	0
18	Sulfated glycopeptide nanostructures for multipotent protein activation. Nature Nanotechnology, 2017, 12, 821-829.	31.5	148

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19	Cementum structure in Beluga whale teeth. Acta Biomaterialia, 2017, 48, 289-299.	8.3	32
20	In vitro effect of amorphous calcium phosphate paste applied for extended periods of time on enamel remineralization. Journal of Applied Oral Science, 2017, 25, 596-603.	1.8	17
21	Effect of recombinant human bone morphogenetic proteinâ€2 on a novel lung cancer spine metastasis model in rodents. Journal of Orthopaedic Research, 2016, 34, 1274-1281.	2.3	4
22	The effect of vancomycin powder on bone healing in a rat spinal rhBMP-2 model. Journal of Neurosurgery: Spine, 2016, 25, 147-153.	1.7	36
23	Ovariectomy-Induced Osteoporosis Does Not Impact Fusion Rates in a Recombinant Human Bone Morphogenetic Protein-2â€"Dependent Rat Posterolateral Arthrodesis Model. Global Spine Journal, 2016, 6, 60-68.	2.3	5
24	Using synchrotron Xâ€ray phaseâ€contrast microâ€computed tomography to study tissue damage by laser irradiation. Lasers in Surgery and Medicine, 2016, 48, 866-877.	2.1	2
25	Hyperelastic â€œboneâ€: A highly versatile, growth factorâ€"free, osteoregenerative, scalable, and surgically friendly biomaterial. Science Translational Medicine, 2016, 8, 358ra127.	12.4	300
26	Maximum a posteriori estimation of crystallographic phases in X-ray diffraction tomography. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140392.	3.4	18
27	Radiant energy required for infrared neural stimulation. Scientific Reports, 2015, 5, 13273.	3.3	47
28	Dioxin Exposure Impairs BMP-2-Mediated Spinal Fusion in a Rat Arthrodesis Model. Journal of Bone and Joint Surgery - Series A, 2015, 97, 1003-1010.	3.0	22
29	Reconstructing cerebrovascular networks under local physiological constraints by integer programming. Medical Image Analysis, 2015, 25, 86-94.	11.6	19
30	The Mineralâ€"Collagen Interface in Bone. Calcified Tissue International, 2015, 97, 262-280.	3.1	151
31	Systemic Delivery of an Oncolytic Adenovirus Expressing Decorin for the Treatment of Breast Cancer Bone Metastases. Human Gene Therapy, 2015, 26, 813-825.	2.7	63
32	Calcite orientations and composition ranges within teeth across Echinoidea. Connective Tissue Research, 2014, 55, 48-52.	2.3	7
33	Submicrometer structure of sea urchin tooth via remote synchrotron microCT imaging. , 2014, , .		1
34	Sea urchins have teeth? A review of their microstructure, biomineralization, development and mechanical properties. Connective Tissue Research, 2014, 55, 41-51.	2.3	15
35	Effect of cyclic loading on the nanoscale deformation of hydroxyapatite and collagen fibrils in bovine bone. Biomechanics and Modeling in Mechanobiology, 2014, 13, 615-626.	2.8	5
36	Bone cell-independent benefits of raloxifene on the skeleton: A novel mechanism for improving bone material properties. Bone, 2014, 61, 191-200.	2.9	72

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37	Bovine and equine peritubular and intertubular dentin. Acta Biomaterialia, 2014, 10, 3969-3977.	8.3	17
38	Evolution of Phase Strains During Tensile Loading of Bovine Cortical Bone. Advanced Engineering Materials, 2013, 15, 238-249.	3.5	3
39	Radiant energy during infrared neural stimulation at the target structure. Proceedings of SPIE, 2013, 8565, 85655P.	0.8	4
40	Sea urchin tooth mineralization: Calcite present early in the aboral plumula. Journal of Structural Biology, 2012, 180, 280-289.	2.8	17
41	Near tubule and intertubular bovine dentin mapped at the 250 nm level. Journal of Structural Biology, 2011, 176, 203-211.	2.8	25
42	Nanocomposite therapy as a more efficacious and less inflammatory alternative to bone morphogenetic proteinâ€2 in a rodent arthrodesis model. Journal of Orthopaedic Research, 2011, 29, 1812-1819.	2.3	27
43	Internal strain gradients quantified in bone under load using high-energy X-ray scattering. Journal of Biomechanics, 2011, 44, 291-296.	2.1	19
44	On the Formation and Functions of High and Very High Magnesium Calcites in the Continuously Growing Teeth of the Echinoderm Lytechinus variegatus: Development of Crystallinity and Protein Involvement. Cells Tissues Organs, 2011, 194, 131-137.	2.3	9
45	Regulation of Breast Cancer-induced Bone Lesions by Î²-Catenin Protein Signaling. Journal of Biological Chemistry, 2011, 286, 42575-42584.	3.4	32
46	High Energy X-ray Diffraction Measurement of Load Transfer between Hydroxyapatite and Collagen in Bovine Dentin. Materials Research Society Symposia Proceedings, 2009, 1187, 140.	0.1	0
47	Microstructures of Antarctic cidaroid spines: diversity of shapes and ectosymbiont attachments. Marine Biology, 2009, 156, 1559-1572.	1.5	26
48	Atorvastatin Attenuates Lrp5 Mediated Calcification in the Hypercholesterolemic Aortic Valves from ApoE mice. FASEB Journal, 2009, 23, 362.11.	0.5	0
49	High energy X-ray scattering tomography applied to bone. Journal of Structural Biology, 2008, 161, 144-150.	2.8	77
50	Synchrotron microComputed Tomography of the mature bovine dentinoenamel junction. Journal of Structural Biology, 2008, 161, 162-171.	2.8	31
51	Micromechanical response of mineral and collagen phases in bone. Journal of Structural Biology, 2007, 157, 365-370.	2.8	111
52	MicroCT Analysis of Symphyseal Ontogeny in Archaeolemur. International Journal of Primatology, 2007, 28, 1385-1396.	1.9	17
53	Mapping of magnesium and of different protein fragments in sea urchin teeth via secondary ion mass spectroscopy. Journal of Structural Biology, 2006, 155, 87-95.	2.8	56
54	Pathological Calcification in Juvenile Dermatomyositis (JDM): MicroCT and Synchrotron X-Ray Diffraction Reveal Hydroxyapatite with Varied Microstructures. Connective Tissue Research, 2004, 45, 248-256.	2.3	24

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55	MicroCT quantification of in vitro bone resorption of neonatal murine calvaria exposed to IL-1 or PTH. Journal of Structural Biology, 2004, 147, 185-199.	2.8	28
56	Synchrotron X-ray Studies of the Keel of the Short-Spined Sea Urchin Lytechinus variegatus: Absorption Microtomography (microCT) and Small Beam Diffraction Mapping. Calcified Tissue International, 2003, 72, 555-566.	3.1	25
57	Multiple microscopy modalities applied to a sea urchin tooth fragment. Journal of Synchrotron Radiation, 2003, 10, 393-397.	2.4	10
58	Three-dimensional microarchitecture of the plates (primary, secondary, and carinar process) in the developing tooth of Lytechinus variegatus revealed by synchrotron X-ray absorption microtomography (microCT). Journal of Structural Biology, 2003, 144, 282-300.	2.8	46
59	X-ray microCT study of pyramids of the sea urchin Lytechinus variegatus. Journal of Structural Biology, 2003, 141, 9-21.	2.8	47
60	X-ray absorption microtomography (microCT) and small beam diffraction mapping of sea urchin teeth. Journal of Structural Biology, 2002, 139, 1-12.	2.8	69
61	MicroComputed Tomography. , 0, , .		30
62	MicroComputed Tomography. , 0, , .		126
63	Microcomputed tomography (laboratory and synchrotron) of intact archeological human second metacarpal bones and age at death. International Journal of Osteoarchaeology, 0, , .	1.2	1
64	Intact archeological human bones and age at death studied with transmission xâ€ray diffraction and small angle xâ€ray scattering. International Journal of Osteoarchaeology, 0, , .	1.2	1