Marc D Mckee

List of Publications by Year
in descending order

182 papers	22,244 citations	13099 68 h-index	8630 146 g-index
192 all docs	192 docs citations	192 times ranked	19669 citing authors

#	Article	IF	Citations
1	Endocrine Regulation of Energy Metabolism by the Skeleton. Cell, 2007, 130, 456-469.	28.9	2,151
2	Spontaneous calcification of arteries and cartilage in mice lacking matrix GLA protein. Nature, 1997, 386, 78-81.	27.8	1,895
3	Bisphosphonate-Associated Osteonecrosis of the Jaw: Report of a Task Force of the American Society for Bone and Mineral Research. Journal of Bone and Mineral Research, 2007, 22, 1479-1491.	2.8	1,397
4	Phosphate Regulation of Vascular Smooth Muscle Cell Calcification. Circulation Research, 2000, 87, E10-7.	4.5	1,192
5	Osteopontin. Critical Reviews in Oral Biology and Medicine, 2000, 11, 279-303.	4.4	933
6	Unique coexpression in osteoblasts of broadly expressed genes accounts for the spatial restriction of ECM mineralization to bone. Genes and Development, 2005, 19, 1093-1104.	5.9	535
7	Extracellular matrix mineralization is regulated locally; different roles of two gla-containing proteins. Journal of Cell Biology, 2004, 165, 625-630.	5.2	448
8	Calcification of Vascular Smooth Muscle Cell Cultures. Circulation Research, 1999, 84, 166-178.	4.5	423
9	Mice Lacking Osteopontin Show Normal Development and Bone Structure but Display Altered Osteoclast Formation In Vitro. Journal of Bone and Mineral Research, 1998, 13, 1101-1111.	2.8	380
10	Osteopontin Inhibits Mineral Deposition and Promotes Regression of Ectopic Calcification. American Journal of Pathology, 2002, 161, 2035-2046.	3.8	366
11	Oral Bisphosphonateâ€“Induced Osteonecrosis: Risk Factors, Prediction of Risk Using Serum CTX Testing, Prevention, and Treatment. Journal of Oral and Maxillofacial Surgery, 2008, 66, 1320-1321.	1.2	365
12	Intermittent injections of osteocalcin improve glucose metabolism and prevent type 2 diabetes in mice. Bone, 2012, 50, 568-575.	2.9	359
13	Tissue engineering of cartilage using an injectable and adhesive chitosan-based cell-delivery vehicle. Osteoarthritis and Cartilage, 2005, 13, 318-329.	1.3	323
14	Osteopontin at mineralized tissue interfaces in bone, teeth, and osseointegrated implants: Ultrastructural distribution and implications for mineralized tissue formation, turnover, and repair. Microscopy Research and Technique, 1996, 33, 141-164.	2.2	318
15	The eggshell: structure, composition and mineralization. Frontiers in Bioscience - Landmark, 2012, 17, 1266.	3.0	315
16	Pyrophosphate Inhibits Mineralization of Osteoblast Cultures by Binding to Mineral, Up-regulating Osteopontin, and Inhibiting Alkaline Phosphatase Activity. Journal of Biological Chemistry, 2007, 282, 15872-15883.	3.4	313
17	Inactivation of the Osteopontin Gene Enhances Vascular Calcification of Matrix Gla Proteinâ€“deficient Mice. Journal of Experimental Medicine, 2002, 196, 1047-1055.	8.5	301
18	Osteopontin Deficiency Increases Mineral Content and Mineral Crystallinity in Mouse Bone. Calcified Tissue International, 2002, 71, 145-154.	3.1	278

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19	In vitro osteogenesis assays: Influence of the primary cell source on alkaline phosphatase activity and mineralization. Pathologie Et Biologie, 2009, 57, 318-323.	2.2	261
20	Drilling and microfracture lead to different bone structure and necrosis during boneâ€marrow stimulation for cartilage repair. Journal of Orthopaedic Research, 2009, 27, 1432-1438.	2.3	224
21	Enzyme Replacement Therapy for Murine Hypophosphatasia. Journal of Bone and Mineral Research, 2008, 23, 777-787.	2.8	222
22	Identification and localization of lysozyme as a component of eggshell membranes and eggshell matrix. Matrix Biology, 2000, 19, 443-453.	3.6	215
23	Fibrillin Assembly Requires Fibronectin. Molecular Biology of the Cell, 2009, 20, 846-858.	2.1	210
24	Chitosanâ€“glycerol phosphate/blood implants elicit hyaline cartilage repair integrated with porous subchondral bone in microdrilled rabbit defects. Osteoarthritis and Cartilage, 2007, 15, 78-89.	1.3	207
25	Loss of skeletal mineralization by the simultaneous ablation of PHOSPHO1 and alkaline phosphatase function: A unified model of the mechanisms of initiation of skeletal calcification. Journal of Bone and Mineral Research, 2011, 26, 286-297.	2.8	199
26	Molecular and cellular biology of alveolar bone. Periodontology 2000, 2000, 24, 99-126.	13.4	192
27	Role of physical forces in regulating the form and function of the periodontal ligament. Periodontology 2000, 2000, 24, 56-72.	13.4	191
28	Ultrastructural immunolocalization of noncollagenous (osteopontin and osteocalcin) and plasma (albumin and Î±2HS-glycoprotein) proteins in rat bone. Journal of Bone and Mineral Research, 1993, 8, 485-496.	2.8	179
29	MEPE-ASARM Peptides Control Extracellular Matrix Mineralization by Binding to Hydroxyapatite: An Inhibition Regulated by PHEX Cleavage of ASARM. Journal of Bone and Mineral Research, 2008, 23, 1638-1649.	2.8	174
30	Mineral chaperones: a role for fetuin-A and osteopontin in the inhibition and regression of pathologic calcification. Journal of Molecular Medicine, 2008, 86, 379-389.	3.9	165
31	Ultrastructural Analysis of Vascular Calcifications in Uremia. Journal of the American Society of Nephrology: JASN, 2010, 21, 689-696.	6.1	157
32	Osteopontin: An Interfacial Extracellular Matrix Protein in Mineralized Tissues. Connective Tissue Research, 1996, 35, 197-205.	2.3	156
33	Osteomalacia in Hyp Mice Is Associated with Abnormal Phex Expression and with Altered Bone Matrix Protein Expression and Deposition¹. Endocrinology, 2001, 142, 926-939.	2.8	155
34	Enamel Defects and Ameloblast-specific Expression in Enam Knock-out/lacZ Knock-in Mice. Journal of Biological Chemistry, 2008, 283, 10858-10871.	3.4	152
35	Phosphorylation-dependent inhibition of mineralization by osteopontin ASARM peptides is regulated by PHEX cleavage. Journal of Bone and Mineral Research, 2010, 25, 695-705.	2.8	151
36	Molecular Cloning and Ultrastructural Localization of the Core Protein of an Eggshell Matrix Proteoglycan, Ovocleidin-116. Journal of Biological Chemistry, 1999, 274, 32915-32923.	3.4	137

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37	Depth of subchondral perforation influences the outcome of bone marrow stimulation cartilage repair. Journal of Orthopaedic Research, 2011, 29, 1178-1184.	2.3	136
38	Extracellular matrix in tooth cementum and mantle dentin: Localization of osteopontin and other noncollagenous proteins, plasma proteins, and glycoconjugates by electron microscopy. The Anatomical Record, 1996, 245, 293-312.	1.8	134
39	Ovocalyxin-32, a Novel Chicken Eggshell Matrix Protein. Journal of Biological Chemistry, 2001, 276, 39243-39252.	3.4	132
40	Developmental appearance and distribution of bone sialoprotein and osteopontin in human and rat cementum. The Anatomical Record, 1998, 250, 13-33.	1.8	131
41	Extracellular matrix calcification: where is the action?. Nature Genetics, 1999, 21, 150-151.	21.4	131
42	Chiral acidic amino acids induce chiral hierarchical structure in calcium carbonate. Nature Communications, 2017, 8, 15066.	12.8	129
43	The biological function of DMP-1 in osteocyte maturation is mediated by its 57-kDa c-terminal fragment. Journal of Bone and Mineral Research, 2011, 26, 331-340.	2.8	120
44	Proteolytic processing of osteopontin by PHEX and accumulation of osteopontin fragments in Hyp mouse bone, the murine model of X-linked hypophosphatemia. Journal of Bone and Mineral Research, 2013, 28, 688-699.	2.8	119
45	Secretion of osteopontin by macrophages and its accumulation at tissue surfaces during wound healing in mineralized tissues: A potential requirement for macrophage adhesion and phagocytosis. The Anatomical Record, 1996, 245, 394-409.	1.8	114
46	Rescue of odontogenesis in Dmp1-deficient mice by targeted re-expression of DMP1 reveals roles for DMP1 in early odontogenesis and dentin apposition in vivo. Developmental Biology, 2007, 303, 191-201.	2.0	112
47	Osteopontin and the Bone Remodeling Sequence. Annals of the New York Academy of Sciences, 1995, 760, 177-189.	3.8	111
48	Tissue Transglutaminase and Its Substrates in Bone. Journal of Bone and Mineral Research, 2002, 17, 2161-2173.	2.8	111
49	Enzyme Replacement Therapy Prevents Dental Defects in a Model of Hypophosphatasia. Journal of Dental Research, 2011, 90, 470-476.	5.2	106
50	Cloning of Ovocalyxin-36, a Novel Chicken Eggshell Protein Related to Lipopolysaccharide-binding Proteins, Bactericidal Permeability-increasing Proteins, and Plunc Family Proteins. Journal of Biological Chemistry, 2007, 282, 5273-5286.	3.4	101
51	Renal Calcification in Mice Homozygous for the Disrupted Type IIa Na/Pi Cotransporter Gene Npt2. Journal of Bone and Mineral Research, 2003, 18, 644-657.	2.8	100
52	Aged bovine chondrocytes display a diminished capacity to produce a collagen-rich, mechanically functional cartilage extracellular matrix. Journal of Orthopaedic Research, 2005, 23, 1354-1362.	2.3	100
53	Molecular determinants of extracellular matrix mineralization in bone and blood vessels. Current Opinion in Nephrology and Hypertension, 2010, 19, 359-365.	2.0	97
54	Smooth muscle cells deficient in osteopontin have enhanced susceptibility to calcification in vitro. Cardiovascular Research, 2005, 66, 324-333.	3.8	93

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55	Partial Rescue of theHypPhenotype by Osteoblast-TargetedPHEX(Phosphate-Regulating Gene with) Tj ETQq1 1 0.784314 rgBT /Overlock 2913-2925.	3.7	92
56	Nonlinear Tensile Properties of Bovine Articular Cartilage and Their Variation With Age and Depth. Journal of Biomechanical Engineering, 2004, 126, 129-137.	1.3	88
57	Hierarchies of Extracellular Matrix and Mineral Organization in Bone of the Craniofacial Complex and Skeleton. Cells Tissues Organs, 2005, 181, 176-188.	2.3	86
58	Proteoglycan desulfation determines the efficiency of chondrocyte autophagy and the extent of FGF signaling during endochondral ossification. Genes and Development, 2008, 22, 2645-2650.	5.9	86
59	ATP acts as a survival signal and prevents the mineralization of aortic valve. Journal of Molecular and Cellular Cardiology, 2012, 52, 1191-1202.	1.9	86
60	Extracellular matrix mineralization in murine MC3T3-E1 osteoblast cultures: An ultrastructural, compositional and comparative analysis with mouse bone. Bone, 2015, 71, 244-256.	2.9	86
61	Nanostructure, osteopontin, and mechanical properties of calcitic avian eggshell. Science Advances, 2018, 4, eaar3219.	10.3	86
62	Tooth root dentin mineralization defects in a mouse model of hypophosphatasia. Journal of Bone and Mineral Research, 2013, 28, 271-282.	2.8	85
63	The importance of particle size and DNA condensation salt for calcium phosphate nanoparticle transfection. Biomaterials, 2008, 29, 3384-3392.	11.4	82
64	Extracellular Matrix Proteins and the Dynamics of Dentin Formation. Connective Tissue Research, 2002, 43, 301-307.	2.3	81
65	Ultrastructural matrixâ€“mineral relationships in avian eggshell, and effects of osteopontin on calcite growth in vitro. Journal of Structural Biology, 2008, 163, 84-99.	2.8	81
66	Osteopontin and Wound Healing in Bone. Cells Tissues Organs, 2011, 194, 313-319.	2.3	80
67	Ultrastructural characterization and immunolocalization of osteopontin in rat calvarial osteoblast primary cultures. , 1996, 33, 214-231.		77
68	Cyclic Induction and Rapid Movement of Sequential Waves of New Smooth-Ended Ameloblast Modulation Bands in Rat Incisors as Visualized By Polychrome Fluorescent Labeling and Gbha-Staining of Maturing Enamel. Advances in Dental Research, 1987, 1, 162-175.	3.6	76
69	Increased Osteopontin Contributes to Inhibition of Bone Mineralization in FGF23-Deficient Mice. Journal of Bone and Mineral Research, 2014, 29, 693-704.	2.8	76
70	Collagen Biomineralization In Vivo by Sustained Release of Inorganic Phosphate Ions. Advanced Materials, 2010, 22, 1858-1862.	21.0	70
71	A cell-autonomous requirement for neutral sphingomyelinase 2 in bone mineralization. Journal of Cell Biology, 2011, 194, 277-289.	5.2	70
72	Disulfide-linked heterodimeric clusterin is a component of the chicken eggshell matrix and egg white. Matrix Biology, 2003, 22, 397-407.	3.6	69

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73	Ultrastructure of avian eggshell during resorption following egg fertilization. Journal of Structural Biology, 2009, 168, 527-538.	2.8	67
74	Osteopontin and the dento-osseous pathobiology of X-linked hypophosphatemia. Bone, 2017, 95, 151-161.	2.9	66
75	Hand transcription factors cooperatively regulate development of the distal midline mesenchyme. Developmental Biology, 2007, 310, 154-168.	2.0	64
76	ASARM mineralization hypothesis: A bridge to progress. Journal of Bone and Mineral Research, 2010, 25, 1191-1192.	2.8	61
77	MEPE-Derived ASARM Peptide Inhibits Odontogenic Differentiation of Dental Pulp Stem Cells and Impairs Mineralization in Tooth Models of X-Linked Hypophosphatemia. PLoS ONE, 2013, 8, e56749.	2.5	61
78	Absence of Î±vÎ²6 Integrin Is Linked to Initiation and Progression of Periodontal Disease. American Journal of Pathology, 2008, 172, 1271-1286.	3.8	60
79	Modulation of Calcium Oxalate Dihydrate Growth by Selective Crystal-face Binding of Phosphorylated Osteopontin and Polyaspartate Peptide Showing Occlusion by Sectoral (Compositional) Zoning. Journal of Biological Chemistry, 2009, 284, 23491-23501.	3.4	60
80	Hand2 controls osteoblast differentiation in the branchial arch by inhibiting DNA binding of Runx2. Development (Cambridge), 2009, 136, 615-625.	2.5	59
81	Mature Full-thickness Articular Cartilage Explants Attached to Bone are Physiologically Stable over Long-term Culture in Serum-free Media. Connective Tissue Research, 1999, 40, 259-272.	2.3	58
82	Nanoforms: a new type of protein-associated mineralization. Geochimica Et Cosmochimica Acta, 2001, 65, 63-74.	3.9	57
83	Osteoid-Mimicking Dense Collagen/Chitosan Hybrid Gels. Biomacromolecules, 2011, 12, 2946-2956.	5.4	57
84	Mineralization of Dense Collagen Hydrogel Scaffolds by Human Pulp Cells. Journal of Dental Research, 2013, 92, 648-654.	5.2	57
85	AnIn VitroAssessment of a Cell-Containing Collagenous Extracellular Matrixâ€"like Scaffold for Bone Tissue Engineering. Tissue Engineering - Part A, 2010, 16, 781-793.	3.1	56
86	Comparative Temporospatial Expression Profiling of Murine Amelotin Protein during Amelogenesis. Cells Tissues Organs, 2012, 195, 535-549.	2.3	56
87	Enamelin Is Critical for Ameloblast Integrity and Enamel Ultrastructure Formation. PLoS ONE, 2014, 9, e89303.	2.5	56
88	Osteopontin Upregulation and Polymerization by Transglutaminase 2 in Calcified Arteries of Matrix Gla Protein-deficient Mice. Journal of Histochemistry and Cytochemistry, 2007, 55, 375-386.	2.5	55
89	Phosphorylation-dependent mineral-type specificity for apatite-binding peptide sequences. Biomaterials, 2010, 31, 9422-9430.	11.4	55
90	Colloidal-gold Immunocytochemical Localization of Osteopontin in Avian Eggshell Gland and Eggshell. Journal of Histochemistry and Cytochemistry, 2008, 56, 467-476.	2.5	54

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91	Cohesive behavior of soft biological adhesives: Experiments and modeling. Acta Biomaterialia, 2012, 8, 3349-3359.	8.3	54
92	Polyphosphates inhibit extracellular matrix mineralization in MC3T3-E1 osteoblast cultures. Bone, 2013, 53, 478-486.	2.9	54
93	Extracellular matrix mineralization in periodontal tissues: Noncollagenous matrix proteins, enzymes, and relationship to hypophosphatasia and Xâ€linked hypophosphatemia. Periodontology 2000, 2013, 63, 102-122.	13.4	54
94	Effect of chitosan particles and dexamethasone on human bone marrow stromal cell osteogenesis and angiogenic factor secretion. Bone, 2009, 45, 617-626.	2.9	53
95	Intracellular precipitation of hydroxyapatite mineral and implications for pathologic calcification. Journal of Structural Biology, 2008, 162, 468-479.	2.8	52
96	Compounded PHOSPHO1/ALPL Deficiencies Reduce Dentin Mineralization. Journal of Dental Research, 2013, 92, 721-727.	5.2	49
97	Cartilage abnormalities are associated with abnormal Phex expression and with altered matrix protein and MMP-9 localization in Hyp mice. Bone, 2004, 34, 638-647.	2.9	46
98	Penetration of various molecular-weight proteins into the enamel organ and enamel of the rat incisor. Archives of Oral Biology, 1986, 31, 287-296.	1.8	45
99	Matrix Gla Protein Inhibition of Tooth Mineralization. Journal of Dental Research, 2008, 87, 839-844.	5.2	44
100	Dynamics of Structural Barriers and Innate Immune Components during Incubation of the Avian Egg: Critical Interplay between Autonomous Embryonic Development and Maternal Anticipation. Journal of Innate Immunity, 2019, 11, 111-124.	3.8	44
101	Osteopontin Expression and Regulation in the Testis, Efferent Ducts, and Epididymis of Rats During Postnatal Development Through to Adulthood1. Biology of Reproduction, 2002, 66, 1437-1448.	2.7	43
102	Osteopontin functions as an opsonin and facilitates phagocytosis by macrophages of hydroxyapatite-coated microspheres: Implications for bone wound healing. Bone, 2008, 43, 708-716.	2.9	42
103	Chiral switching in biomineral suprastructures induced by homochiral <scp>l</scp> -amino acid. Science Advances, 2018, 4, eaas9819.	10.3	41
104	Effects of fixation and demineralization on the retention of bone phosphoprotein and other matrix components as evaluated by biochemical analyses and quantitative immunocytochemistry. Journal of Bone and Mineral Research, 1991, 6, 937-945.	2.8	40
105	Regression of Medial Elastocalcinosis in Rat Aorta. Circulation, 2005, 112, 1628-1635.	1.6	38
106	Tissue-specific mineralization defects in the periodontium of the Hyp mouse model of X-linked hypophosphatemia. Bone, 2017, 103, 334-346.	2.9	38
107	Avian Eggshell Structure and Osteopontin. Cells Tissues Organs, 2009, 189, 38-43.	2.3	37
108	Morphological and immunocytochemical characterization of primary osteogenic cell cultures derived from fetal rat cranial tissue. The Anatomical Record, 1998, 252, 554-567.	1.8	36

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109	Phenotypic Modulation of Vascular Smooth Muscle Cells During Medial Arterial Calcification: a Role for Endothelin?. Journal of Cardiovascular Pharmacology, 2004, 44, S147-S150.	1.9	36
110	Lumenal calcification and microvasculopathy in fetuin-A-deficient mice lead to multiple organ morbidity. PLoS ONE, 2020, 15, e0228503.	2.5	35
111	Inositol hexakisphosphate inhibits mineralization of MC3T3-E1 osteoblast cultures. Bone, 2010, 46, 1100-1107.	2.9	33
112	Impaired mineral quality in dentin in X-linked hypophosphatemia. Connective Tissue Research, 2018, 59, 91-96.	2.3	32
113	Transglutaminase Crosslinking of SIBLING Proteins in Teeth. Journal of Dental Research, 2005, 84, 607-612.	5.2	31
114	Critical role for Î±vÎ²6 integrin in enamel biomineralization. Journal of Cell Science, 2012, 126, 732-44.	2.0	31
115	Mineralization-inhibiting effects of transglutaminase-crosslinked polymeric osteopontin. Bone, 2017, 101, 37-48.	2.9	31
116	Biological stenciling of mineralization in the skeleton: Local enzymatic removal of inhibitors in the extracellular matrix. Bone, 2020, 138, 115447.	2.9	31
117	Diagenesis-inspired reaction of magnesium ions with surface enamel mineral modifies properties of human teeth. Acta Biomaterialia, 2016, 37, 174-183.	8.3	30
118	Effect of Chitosan Incorporation and Scaffold Geometry on Chondrocyte Function in Dense Collagen Type I Hydrogels. Tissue Engineering - Part A, 2013, 19, 2553-2564.	3.1	29
119	Chiral biomineralized structures and their biomimetic synthesis. Materials Horizons, 2019, 6, 1974-1990.	12.2	29
120	Bone acidic glycoprotein-75 self-associates to form macromolecular complexes in vitro and in vivo with the potential to sequester phosphate ions. Journal of Cellular Biochemistry, 1997, 64, 547-564.	2.6	28
121	Crossfibrillar mineral tessellation in normal and Hyp mouse bone as revealed by 3D FIB-SEM microscopy. Journal of Structural Biology, 2020, 212, 107603.	2.8	27
122	Effects of CO2 Laser Irradiation in vivo on Rat Alveolar Bone and Incisor Enamel, Dentin, and Pulp. Journal of Dental Research, 1993, 72, 1406-1417.	5.2	26
123	Craniofacial and Dental Defects in the Col1a1^{Jrt/+} Mouse Model of Osteogenesis Imperfecta. Journal of Dental Research, 2016, 95, 761-768.	5.2	26
124	Matrix Gla protein deficiency impairs nasal septum growth, causing midface hypoplasia. Journal of Biological Chemistry, 2017, 292, 11400-11412.	3.4	25
125	Distinct effects of amlodipine treatment on vascular elastocalcinosis and stiffness in a rat model of isolated systolic hypertension. Journal of Hypertension, 2007, 25, 1879-1886.	0.5	24
126	Osteopontin deposition in remodeling bone: An osteoblast mediated event. Journal of Bone and Mineral Research, 1996, 11, 873-874.	2.8	24

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127	High strength brushite bioceramics obtained by selective regulation of crystal growth with chiral biomolecules. Acta Biomaterialia, 2020, 106, 351-359.	8.3	24
128	Intraclonal plasticity for bone, smooth muscle, and adipocyte lineages in bone marrow stroma fibroblastoid cells. Experimental Cell Research, 2003, 290, 346-357.	2.6	23
129	Bone toughness at the molecular scale: A model for fracture toughness using crosslinked osteopontin on synthetic and biogenic mineral substrates. Bone, 2018, 110, 304-311.	2.9	23
130	Genetic Ablation of Osteopontin in Osteomalacic <scp>Hyp</scp> Mice Partially Rescues the Deficient Mineralization Without Correcting Hypophosphatemia. Journal of Bone and Mineral Research, 2020, 35, 2032-2048.	2.8	23
131	Defective Mineralization in X-Linked Hypophosphatemia Dental Pulp Cell Cultures. Journal of Dental Research, 2018, 97, 184-191.	5.2	22
132	Extracellular vesicles of calcifying turkey leg tendon characterized by immunocytochemistry and high voltage electron microscopic tomography and 3-D graphic image reconstruction. Bone and Mineral, 1992, 17, 237-241.	1.9	21
133	Calcium oxalate crystals in fetal bovine serum: Implications for cell culture, phagocytosis and biomineralization studies in vitro. Journal of Cellular Biochemistry, 2008, 103, 1379-1393.	2.6	21
134	The effect of SERPINF1 in-frame mutations in osteogenesis imperfecta type VI. Bone, 2015, 76, 115-120.	2.9	21
135	Homochirality in biomineral suprastructures induced by assembly of single-enantiomer amino acids from a nonracemic mixture. Nature Communications, 2019, 10, 2318.	12.8	21
136	Bone Matrix and Mineralization. , 2012, , 9-37.		20
137	Mathematical model for bone mineralization. Frontiers in Cell and Developmental Biology, 2015, 3, 51.	3.7	19
138	Expression and inactivation of osteopontin-degrading PHEX enzyme in squamous cell carcinoma. International Journal of Biochemistry and Cell Biology, 2016, 77, 155-164.	2.8	19
139	Mineral tessellation in bone and the stenciling principle for extracellular matrix mineralization. Journal of Structural Biology, 2022, 214, 107823.	2.8	19
140	Cell proliferation and apoptosis in enamelin null mice. European Journal of Oral Sciences, 2011, 119, 329-337.	1.5	18
141	Prevention of vascular calcification: is pyrophosphate therapy a solution?. Kidney International, 2011, 79, 490-493.	5.2	18
142	Modulation of calcium oxalate dihydrate growth by phosphorylated osteopontin peptides. Journal of Structural Biology, 2018, 204, 131-144.	2.8	17
143	Multiscale structural evolution of citrate-triggered intrafibrillar and interfibrillar mineralization in dense collagen gels. Journal of Structural Biology, 2020, 212, 107592.	2.8	17
144	Serum Protein Controlled Nanoparticle Synthesis. Advanced Functional Materials, 2011, 21, 2968-2977.	14.9	16

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145	Effects of various agents on staining of the maturation pattern at the surface of rat incisor enamel. Archives of Oral Biology, 1986, 31, 577-585.	1.8	15
146	A radioautographic study of the effects of vinblastine on the fate of injected 45calcium and [125I]-insulin in the rat incisor. Archives of Oral Biology, 1987, 32, 433-437.	1.8	15
147	Local Regulation of Tooth Mineralization by Sphingomyelin Phosphodiesterase 3. Journal of Dental Research, 2013, 92, 358-364.	5.2	15
148	Constitutive Nuclear Expression of Dentin Matrix Protein 1 Fails to Rescue the Dmp1-null Phenotype. Journal of Biological Chemistry, 2014, 289, 21533-21543.	3.4	15
149	The eggshell: structure and protective function. , 2011, , 151-182.		14
150	Osteopontin as a novel substrate for the proprotein convertase 5/6 (PCSK5) in bone. Bone, 2018, 107, 45-55.	2.9	14
151	A bilayered dense collagen/chitosan hydrogel to model the osteochondral interface. Emergent Materials, 2019, 2, 245-262.	5.7	14
152	Hypophosphatemic osteosclerosis, hyperostosis, and enthesopathy associated with novel homozygous mutations of DMP1 encoding dentin matrix protein 1 and SPP1 encoding osteopontin: The first digenic SIBLING protein osteopathy?. Bone, 2020, 132, 115190.	2.9	14
153	Deep learning for 3D imaging and image analysis in biomineralization research. Journal of Structural Biology, 2020, 212, 107598.	2.8	14
154	Effects of Altered Bone Remodeling and Retention of Cement Lines on Bone Quality in Osteopetrotic Aged c-Src-Deficient Mice. Calcified Tissue International, 2010, 86, 172-183.	3.1	13
155	Hierarchical organization of bone in three dimensions: A twist of twists. Journal of Structural Biology: X, 2022, 6, 100057.	1.3	13
156	Demonstration by staining and radioautography of cyclical distributions of protein at the enamel surface in rat incisors. Archives of Oral Biology, 1988, 33, 413-423.	1.8	12
157	Persistence of Vascular Calcification after Reversal of Uremia. American Journal of Pathology, 2017, 187, 332-338.	3.8	11
158	Collagen/chitosan composite scaffolds for bone and cartilage tissue engineering. , 2017, , 163-198.		10
159	The role of extracellular matrix phosphorylation on energy dissipation in bone. ELife, 2020, 9, .	6.0	10
160	Torn ACL: a new bioengineered substitute brought from the laboratory to the knee joint. Applied Bionics and Biomechanics, 2004, 1, 115-121.	1.1	9
161	The Role of the Airâ^'Liquid Interface in Protein-Mediated Biomineralization of Calcium Carbonate. Crystal Growth and Design, 2011, 11, 803-810.	3.0	9
162	Effects of Full-Length Phosphorylated Osteopontin and Constituent Acidic Peptides and Amino Acids on Calcite Dissolution. Crystal Growth and Design, 2014, 14, 979-987.	3.0	9

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163	Optimization of 3D network topology for bioinspired design of stiff and lightweight bone-like structures. Materials Science and Engineering C, 2021, 123, 112010.	7.3	8
164	Polarized light through polycrystalline vaterite helicoids. Chemical Communications, 2020, 56, 7353-7356.	4.1	8
165	Biophysical Analyses of Sequential Bands of Enamel Related to Ruffle-ended and Smooth-ended Maturation Ameloblasts. Journal of Dental Research, 1989, 68, 101-106.	5.2	7
166	Cyclical incorporation of 33P into rat incisor enamel in vivo as visualized by whole-mount radioautography. Archives of Oral Biology, 1989, 34, 989-993.	1.8	7
167	<scp>FAM20Câ€Mediated</scp> Phosphorylation of <scp>MEPE</scp> and Its Acidic Serineâ€•and <scp>Aspartateâ€Rich</scp> Motif. JBMR Plus, 2020, 4, e10378.	2.7	7
168	Semiconstrained elbow replacement for distal humeral nonunion. Journal of Bone and Joint Surgery: British Volume, 1995, 77-B, 665-666.	3.4	6
169	Bone matrix proteins. , 2000, , 46-63.		5
170	Letter to the Editor, concerning: â€œFGF23-regulated production of fetuin-A (AHSG) in osteocytesâ€• Bone, 2016, 93, 223-224.	2.9	5
171	Nanostructure of mouse otoconia. Journal of Structural Biology, 2020, 210, 107489.	2.8	4
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