

Matthew Allen

List of Publications by Year in descending order

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Version: 2024-02-01

233
papers

10,485
citations

38660

50
h-index

39575

94
g-index

241
all docs

241
docs citations

241
times ranked

8768
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical Stimulation of Bone in Vivo Reduces Osteocyte Expression of Sost/Sclerostin. <i>Journal of Biological Chemistry</i> , 2008, 283, 5866-5875.	1.6	1,136
2	Sost downregulation and local Wnt signaling are required for the osteogenic response to mechanical loading. <i>Bone</i> , 2012, 50, 209-217.	1.4	396
3	The Pathogenesis of Bisphosphonate-Related Osteonecrosis of the Jaw: So Many Hypotheses, So Few Data. <i>Journal of Oral and Maxillofacial Surgery</i> , 2009, 67, 61-70.	0.5	353
4	Periosteum: biology, regulation, and response to osteoporosis therapies. <i>Bone</i> , 2004, 35, 1003-1012.	1.4	345
5	Control of Bone Mass and Remodeling by PTH Receptor Signaling in Osteocytes. <i>PLoS ONE</i> , 2008, 3, e2942.	1.1	331
6	Iron deficiency drives an autosomal dominant hypophosphatemic rickets (ADHR) phenotype in fibroblast growth factor-23 (Fgf23) knock-in mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, E1146-55.	3.3	318
7	Alterations in canine vertebral bone turnover, microdamage accumulation, and biomechanical properties following 1-year treatment with clinical treatment doses of risedronate or alendronate. <i>Bone</i> , 2006, 39, 872-879.	1.4	226
8	A crucial role of caspase-3 in osteogenic differentiation of bone marrow stromal stem cells. <i>Journal of Clinical Investigation</i> , 2004, 114, 1704-1713.	3.9	221
9	Cell autonomous requirement of connexin 43 for osteocyte survival: Consequences for endocortical resorption and periosteal bone formation. <i>Journal of Bone and Mineral Research</i> , 2012, 27, 374-389.	3.1	204
10	Mandible Matrix Necrosis in Beagle Dogs After 3 Years of Daily Oral Bisphosphonate Treatment. <i>Journal of Oral and Maxillofacial Surgery</i> , 2008, 66, 987-994.	0.5	196
11	Changes in non-enzymatic glycation and its association with altered mechanical properties following 1-year treatment with risedronate or alendronate. <i>Osteoporosis International</i> , 2009, 20, 887-894.	1.3	185
12	PTH receptor signaling in osteocytes governs periosteal bone formation and intracortical remodeling. <i>Journal of Bone and Mineral Research</i> , 2011, 26, 1035-1046.	3.1	184
13	Bisphosphonate effects on bone turnover, microdamage, and mechanical properties: What we think we know and what we know that we don't know. <i>Bone</i> , 2011, 49, 56-65.	1.4	182
14	Ageing Reduces Skeletal Blood Flow, Endothelium-Dependent Vasodilation, and NO Bioavailability in Rats. <i>Journal of Bone and Mineral Research</i> , 2007, 22, 1280-1288.	3.1	144
15	Circulating $\hat{\pm}$ Klotho influences phosphate handling by controlling FGF23 production. <i>Journal of Clinical Investigation</i> , 2012, 122, 4710-4715.	3.9	135
16	Exercise-induced changes in the cortical bone of growing mice are bone- and gender-specific. <i>Bone</i> , 2007, 40, 1120-1127.	1.4	128
17	Bisphosphonates alter trabecular bone collagen cross-linking and isomerization in beagle dog vertebra. <i>Osteoporosis International</i> , 2008, 19, 329-337.	1.3	126
18	Failure of mineralized collagen fibrils: Modeling the role of collagen cross-linking. <i>Journal of Biomechanics</i> , 2008, 41, 1427-1435.	0.9	121

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19	Three Years of Alendronate Treatment Results in Similar Levels of Vertebral Microdamage as After One Year of Treatment. <i>Journal of Bone and Mineral Research</i> , 2007, 22, 1759-1765.	3.1	120
20	Reference-point indentation correlates with bone toughness assessed using whole-bone traditional mechanical testing. <i>Bone</i> , 2013, 53, 301-305.	1.4	120
21	Site- and compartment-specific changes in bone with hindlimb unloading in mature adult rats. <i>Bone</i> , 2002, 31, 149-157.	1.4	114
22	Neonatal Iron Deficiency Causes Abnormal Phosphate Metabolism by Elevating FGF23 in Normal and ADHR Mice. <i>Journal of Bone and Mineral Research</i> , 2014, 29, 361-369.	3.1	109
23	Bisphosphonate treatment modifies canine bone mineral and matrix properties and their heterogeneity. <i>Bone</i> , 2010, 46, 666-672.	1.4	106
24	Decreased MicroRNA Is Involved in the Vascular Remodeling Abnormalities in Chronic Kidney Disease (CKD). <i>PLoS ONE</i> , 2013, 8, e64558.	1.1	106
25	Anti-Sclerostin Antibody Treatment in a Rat Model of Progressive Renal Osteodystrophy. <i>Journal of Bone and Mineral Research</i> , 2015, 30, 499-509.	3.1	103
26	Skeletal changes associated with the onset of type 2 diabetes in the ZDF and ZSDS rodent models. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2009, 296, E765-E774.	1.8	100
27	Alendronate Reduces Bone Toughness of Ribs without Significantly Increasing Microdamage Accumulation in Dogs Following 3 Years of Daily Treatment. <i>Calcified Tissue International</i> , 2008, 82, 354-360.	1.5	95
28	Protection From Glucocorticoid-Induced Osteoporosis by Anti-Catabolic Signaling in the Absence of Sost/Sclerostin. <i>Journal of Bone and Mineral Research</i> , 2016, 31, 1791-1802.	3.1	95
29	Raloxifene enhances vertebral mechanical properties independent of bone density. <i>Bone</i> , 2006, 39, 1130-1135.	1.4	92
30	Parathyroid Hormone Receptor Signaling Induces Bone Resorption in the Adult Skeleton by Directly Regulating the RANKL Gene in Osteocytes. <i>Endocrinology</i> , 2014, 155, 2797-2809.	1.4	92
31	Mandibular necrosis in beagle dogs treated with bisphosphonates. <i>Orthodontics and Craniofacial Research</i> , 2009, 12, 221-228.	1.2	89
32	In situ examination of the time-course for secondary mineralization of Haversian bone using synchrotron Fourier transform infrared microspectroscopy. <i>Matrix Biology</i> , 2008, 27, 34-41.	1.5	77
33	Inhibition of Osteocyte Apoptosis Prevents the Increase in Osteocytic Receptor Activator of Nuclear Factor κ B Ligand (RANKL) but Does Not Stop Bone Resorption or the Loss of Bone Induced by Unloading. <i>Journal of Biological Chemistry</i> , 2015, 290, 18934-18942.	1.6	74
34	Cancer treatment dosing regimens of zoledronic acid result in near-complete suppression of mandible intracortical bone remodeling in beagle dogs. <i>Journal of Bone and Mineral Research</i> , 2010, 25, 98-105.	3.1	72
35	A Comparison of Calcium to Zoledronic Acid for Improvement of Cortical Bone in an Animal Model of CKD. <i>Journal of Bone and Mineral Research</i> , 2014, 29, 902-910.	3.1	72
36	Bone cell-independent benefits of raloxifene on the skeleton: A novel mechanism for improving bone material properties. <i>Bone</i> , 2014, 61, 191-200.	1.4	72

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37	Defective osteogenesis of the stromal stem cells predisposes CD18-null mice to osteoporosis. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 14022-14027.	3.3	70
38	Strontium ranelate does not stimulate bone formation in ovariectomized rats. Osteoporosis International, 2008, 19, 1331-1341.	1.3	69
39	True Gold or Pyrite: A Review of Reference Point Indentation for Assessing Bone Mechanical Properties In Vivo. Journal of Bone and Mineral Research, 2015, 30, 1539-1550.	3.1	69
40	Mineralization, microdamage, and matrix: How bisphosphonates influence material properties of bone. BoneKEy Osteovision, 2007, 4, 49-60.	0.6	66
41	Skeletal Muscle Regeneration and Oxidative Stress Are Altered in Chronic Kidney Disease. PLoS ONE, 2016, 11, e0159411.	1.1	62
42	Hindlimb unloading has a greater effect on cortical compared with cancellous bone in mature female rats. Journal of Applied Physiology, 2003, 94, 642-650.	1.2	58
43	Compromised osseous healing of dental extraction sites in zoledronic acid-treated dogs. Osteoporosis International, 2011, 22, 693-702.	1.3	58
44	Alendronate treatment alters bone tissues at multiple structural levels in healthy canine cortical bone. Bone, 2015, 81, 352-363.	1.4	58
45	Conditional Deletion of Murine <i>Fgf23</i> : Interruption of the Normal Skeletal Responses to Phosphate Challenge and Rescue of Genetic Hypophosphatemia. Journal of Bone and Mineral Research, 2016, 31, 1247-1257.	3.1	57
46	Human femoral neck has less cellular periosteum, and more mineralized periosteum, than femoral diaphyseal bone. Bone, 2005, 36, 311-316.	1.4	56
47	Bisphosphonates and Osteonecrosis of the Jaw: Moving from the Bedside to the Bench. Cells Tissues Organs, 2009, 189, 289-294.	1.3	56
48	Increased nitric oxide-mediated vasodilation of bone resistance arteries is associated with increased trabecular bone volume after endurance training in rats. Bone, 2010, 46, 813-819.	1.4	55
49	High Bone Mass in Mice Lacking Cx37 Because of Defective Osteoclast Differentiation. Journal of Biological Chemistry, 2014, 289, 8508-8520.	1.6	54
50	Effects of 1 to 3 years' treatment with alendronate on mechanical properties of the femoral shaft in a canine model: Implications for subtrochanteric femoral fracture risk. Journal of Orthopaedic Research, 2009, 27, 1288-1292.	1.2	52
51	Increased FGF23 protects against detrimental cardio-renal consequences during elevated blood phosphate in CKD. JCI Insight, 2019, 4, .	2.3	52
52	Antiremodeling Agents Influence Osteoblast Activity Differently in Modeling and Remodeling Sites of Canine Rib. Calcified Tissue International, 2006, 79, 255-261.	1.5	48
53	The resistance of cortical bone tissue to failure under cyclic loading is reduced with alendronate. Bone, 2014, 64, 57-64.	1.4	48
54	Biglycan Deficiency Interferes With Ovariectomy-Induced Bone Loss. Journal of Bone and Mineral Research, 2003, 18, 2152-2158.	3.1	46

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55	Cx43 Overexpression in Osteocytes Prevents Osteocyte Apoptosis and Preserves Cortical Bone Quality in Aging Mice. <i>JBMR Plus</i> , 2018, 2, 206-216.	1.3	46
56	Bisphosphonates do not inhibit periosteal bone formation in estrogen deficient animals and allow enhanced bone modeling in response to mechanical loading. <i>Bone</i> , 2010, 46, 203-207.	1.4	45
57	The mechanical phenotype of biglycan-deficient mice is bone- and gender-specific. <i>Bone</i> , 2006, 39, 106-116.	1.4	44
58	Raloxifene Enhances Material-Level Mechanical Properties of Femoral Cortical and Trabecular Bone. <i>Endocrinology</i> , 2007, 148, 3908-3913.	1.4	43
59	In vivo reference point indentation reveals positive effects of raloxifene on mechanical properties following 6months of treatment in skeletally mature beagle dogs. <i>Bone</i> , 2013, 56, 449-453.	1.4	43
60	Bisphosphonates do not alter the rate of secondary mineralization. <i>Bone</i> , 2011, 49, 701-705.	1.4	42
61	The effects of bisphosphonates on jaw bone remodeling, tissue properties, and extraction healing. <i>Odontology / the Society of the Nippon Dental University</i> , 2011, 99, 8-17.	0.9	42
62	Resorption Controls Bone Anabolism Driven by Parathyroid Hormone (PTH) Receptor Signaling in Osteocytes. <i>Journal of Biological Chemistry</i> , 2013, 288, 29809-29820.	1.6	41
63	Changes in vertebral strength-density and energy absorption-density relationships following bisphosphonate treatment in beagle dogs. <i>Osteoporosis International</i> , 2008, 19, 95-99.	1.3	40
64	PTHrP-Derived Peptides Restore Bone Mass and Strength in Diabetic Mice: Additive Effect of Mechanical Loading. <i>Journal of Bone and Mineral Research</i> , 2017, 32, 486-497.	3.1	40
65	Cortical Bone Mechanical Properties Are Altered in an Animal Model of Progressive Chronic Kidney Disease. <i>PLoS ONE</i> , 2014, 9, e99262.	1.1	40
66	Erythropoietin and a hypoxia-inducible factor prolyl hydroxylase inhibitor (HIF-1 α PHDi) lowers FGF23 in a model of chronic kidney disease (CKD). <i>Physiological Reports</i> , 2020, 8, e14434.	0.7	39
67	Biglycan-Deficient Mice Have Delayed Osteogenesis after Marrow Ablation. <i>Calcified Tissue International</i> , 2003, 72, 577-582.	1.5	37
68	Skeletal effects of zoledronic acid in an animal model of chronic kidney disease. <i>Osteoporosis International</i> , 2013, 24, 1471-1481.	1.3	37
69	Heritability of lumbar trabecular bone mechanical properties in baboons. <i>Bone</i> , 2010, 46, 835-840.	1.4	36
70	Skeletal Microdamage: Less About Biomechanics and More About Remodeling. <i>Clinical Reviews in Bone and Mineral Metabolism</i> , 2008, 6, 24-30.	1.3	35
71	Skeletal accumulation of bisphosphonates: implications for osteoporosis treatment. <i>Expert Opinion on Drug Metabolism and Toxicology</i> , 2008, 4, 1371-1378.	1.5	35
72	Bisphosphonate Binding Affinity Affects Drug Distribution in Both Intracortical and Trabecular Bone of Rabbits. <i>Calcified Tissue International</i> , 2012, 90, 202-210.	1.5	35

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73	Changes in skeletal collagen cross-links and matrix hydration in high- and low-turnover chronic kidney disease. <i>Osteoporosis International</i> , 2015, 26, 977-985.	1.3	35
74	Ovariectomy stimulates and bisphosphonates inhibit intracortical remodeling in the mouse mandible. <i>Orthodontics and Craniofacial Research</i> , 2010, 13, 214-222.	1.2	34
75	Pathogenesis of Arrhythmias in a Model of CKD. <i>Journal of the American Society of Nephrology: JASN</i> , 2014, 25, 2812-2821.	3.0	34
76	Duration-dependent effects of clinically relevant oral alendronate doses on cortical bone toughness in beagle dogs. <i>Bone</i> , 2015, 71, 58-62.	1.4	34
77	Functional recovery of the plantarflexor muscle group after hindlimb unloading in the rat. <i>European Journal of Applied Physiology</i> , 2004, 93, 130-138.	1.2	33
78	Morphological Assessment of Basic Multicellular Unit Resorption Parameters in Dogs Shows Additional Mechanisms of Bisphosphonate Effects on Bone. <i>Calcified Tissue International</i> , 2010, 86, 67-71.	1.5	33
79	Defective cancellous bone structure and abnormal response to PTH in cortical bone of mice lacking Cx43 cytoplasmic C-terminus domain. <i>Bone</i> , 2015, 81, 632-643.	1.4	33
80	Prenatal methadone exposure disrupts behavioral development and alters motor neuron intrinsic properties and local circuitry. <i>ELife</i> , 2021, 10, .	2.8	32
81	Food restriction and simulated microgravity: effects on bone and serum leptin. <i>Journal of Applied Physiology</i> , 2008, 104, 1086-1093.	1.2	31
82	Methodological assessment of acid-etching for visualizing the osteocyte lacunar-canalicular networks using scanning electron microscopy. <i>Microscopy Research and Technique</i> , 2010, 73, 182-186.	1.2	31
83	Absence of Exposed Bone Following Dental Extraction in Beagle Dogs Treated With 9-Months of High-Dose Zoledronic Acid Combined With Dexamethasone. <i>Journal of Oral and Maxillofacial Surgery</i> , 2013, 71, 1017-1026.	0.5	31
84	Effect of Advanced Glycation End-Products (AGE) Lowering Drug ALT-711 on Biochemical, Vascular, and Bone Parameters in a Rat Model of CKD-MBD. <i>Journal of Bone and Mineral Research</i> , 2020, 35, 608-617.	3.1	31
85	Aging and Estrogen Status: A Possible Endothelium-Dependent Vascular Coupling Mechanism in Bone Remodeling. <i>PLoS ONE</i> , 2012, 7, e48564.	1.1	31
86	Differential bone and muscle recovery following hindlimb unloading in skeletally mature male rats. <i>Journal of Musculoskeletal Neuronal Interactions</i> , 2006, 6, 217-25.	0.1	31
87	Identification of material parameters based on Mohr-Coulomb failure criterion for bisphosphonate treated canine vertebral cancellous bone. <i>Bone</i> , 2008, 43, 775-780.	1.4	30
88	<i>In vivo</i> effects of zoledronic acid on oral mucosal epithelial cells. <i>Oral Diseases</i> , 2011, 17, 291-297.	1.5	29
89	Treatment with eldcalcitol positively affects mineralization, microdamage, and collagen crosslinks in primate bone. <i>Bone</i> , 2015, 73, 8-15.	1.4	29
90	Inhibition of CaMKK2 Enhances Fracture Healing by Stimulating Indian Hedgehog Signaling and Accelerating Endochondral Ossification. <i>Journal of Bone and Mineral Research</i> , 2018, 33, 930-944.	3.1	29

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91	Higher Bone Matrix Density Exists in Only a Subset of Patients With Bisphosphonate-Related Osteonecrosis of the Jaw. <i>Journal of Oral and Maxillofacial Surgery</i> , 2009, 67, 1373-1377.	0.5	28
92	Medication-Related Osteonecrosis of the Jaw. <i>Oral and Maxillofacial Surgery Clinics of North America</i> , 2015, 27, 497-508.	0.4	28
93	Animal models of osteonecrosis of the jaw. <i>Journal of Musculoskeletal Neuronal Interactions</i> , 2007, 7, 358-60.	0.1	28
94	One year of alendronate treatment lowers microstructural stresses associated with trabecular microdamage initiation. <i>Bone</i> , 2010, 47, 241-247.	1.4	27
95	A Review of Pharmaceutical Agents and Oral Bone Health: How Osteonecrosis of the Jaw Has Affected the Field. <i>International Journal of Oral and Maxillofacial Implants</i> , 2014, 29, e45-e57.	0.6	27
96	Effects of skeletal unloading on the vasomotor properties of the rat femur principal nutrient artery. <i>Journal of Applied Physiology</i> , 2015, 118, 980-988.	1.2	27
97	Time course of rapid bone loss and cortical porosity formation observed by longitudinal μ CT in a rat model of CKD. <i>Bone</i> , 2019, 125, 16-24.	1.4	27
98	Short-term pharmacologic RAGE inhibition differentially affects bone and skeletal muscle in middle-aged mice. <i>Bone</i> , 2019, 124, 89-102.	1.4	26
99	Increased strontium uptake in trabecular bone of ovariectomized calcium-deficient rats treated with strontium ranelate or strontium chloride. <i>Journal of Synchrotron Radiation</i> , 2011, 18, 835-841.	1.0	24
100	The Rho-GEF Kalirin regulates bone mass and the function of osteoblasts and osteoclasts. <i>Bone</i> , 2014, 60, 235-245.	1.4	24
101	Even with rehydration, preservation in ethanol influences the mechanical properties of bone and how bone responds to experimental manipulation. <i>Bone</i> , 2017, 97, 49-53.	1.4	24
102	Partial Weight Bearing Does Not Prevent Musculoskeletal Losses Associated with Disuse. <i>Medicine and Science in Sports and Exercise</i> , 2013, 45, 2052-2060.	0.2	23
103	Compromised vertebral structural and mechanical properties associated with progressive kidney disease and the effects of traditional pharmacological interventions. <i>Bone</i> , 2015, 77, 50-56.	1.4	23
104	Simulating the Lunar Environment: Partial Weightbearing and High-LET Radiation-Induce Bone Loss and Increase Sclerostin-Positive Osteocytes. <i>Radiation Research</i> , 2016, 186, 254-263.	0.7	23
105	Beta-1 Adrenergic Agonist Treatment Mitigates Negative Changes in Cancellous Bone Microarchitecture and Inhibits Osteocyte Apoptosis during Disuse. <i>PLoS ONE</i> , 2014, 9, e106904.	1.1	22
106	Genetic Rescue of Glycosylation-deficient Fgf23 in the Galnt3 Knockout Mouse. <i>Endocrinology</i> , 2014, 155, 3891-3898.	1.4	22
107	Raloxifene reduces skeletal fractures in an animal model of osteogenesis imperfecta. <i>Matrix Biology</i> , 2016, 52-54, 19-28.	1.5	22
108	Effects of eccentric exercise training on cortical bone and muscle strength in the estrogen-deficient mouse. <i>Journal of Applied Physiology</i> , 2005, 98, 1674-1681.	1.2	21

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109	Development of an in vivo rabbit ulnar loading model. <i>Bone</i> , 2015, 75, 55-61.	1.4	21
110	A computational assessment of the independent contribution of changes in canine trabecular bone volume fraction and microarchitecture to increased bone strength with suppression of bone turnover. <i>Journal of Biomechanics</i> , 2007, 40, 3424-3431.	0.9	20
111	Greater magnitude of turnover suppression occurs earlier after treatment initiation with risedronate than alendronate. <i>Bone</i> , 2011, 49, 128-132.	1.4	20
112	Intracortical Bone Remodeling Variation Shows Strong Genetic Effects. <i>Calcified Tissue International</i> , 2013, 93, 472-480.	1.5	20
113	Recent Advances in Understanding Bisphosphonate Effects on Bone Mechanical Properties. <i>Current Osteoporosis Reports</i> , 2018, 16, 198-204.	1.5	20
114	Orthodontic mini-implant diameter does not affect in-situ linear microcrack generation in the mandible or the maxilla. <i>American Journal of Orthodontics and Dentofacial Orthopedics</i> , 2012, 142, 768-773.	0.8	19
115	In Vivo UTE-MRI Reveals Positive Effects of Raloxifene on Skeletal-Bound Water in Skeletally Mature Beagle Dogs. <i>Journal of Bone and Mineral Research</i> , 2015, 30, 1441-1444.	3.1	19
116	Structural features underlying raloxifene's biophysical interaction with bone matrix. <i>Bioorganic and Medicinal Chemistry</i> , 2016, 24, 759-767.	1.4	19
117	Raloxifene improves skeletal properties in an animal model of cystic chronic kidney disease. <i>Kidney International</i> , 2016, 89, 95-104.	2.6	19
118	Adenine-induced chronic kidney disease induces a similar skeletal phenotype in male and female C57BL/6 mice with more severe deficits in cortical bone properties of male mice. <i>PLoS ONE</i> , 2021, 16, e0250438.	1.1	19
119	Age and sex effects on FGF23-mediated response to mild phosphate challenge. <i>Bone</i> , 2021, 146, 115885.	1.4	19
120	Bone hydration: How we can evaluate it, what can it tell us, and is it an effective therapeutic target?. <i>Bone Reports</i> , 2022, 16, 101161.	0.2	19
121	Effects of spaceflight on the murine mandible: Possible factors mediating skeletal changes in non-weight bearing bones of the head. <i>Bone</i> , 2016, 83, 156-161.	1.4	18
122	Incorporating tissue anisotropy and heterogeneity in finite element models of trabecular bone altered predicted local stress distributions. <i>Biomechanics and Modeling in Mechanobiology</i> , 2018, 17, 605-614.	1.4	18
123	Elevations in Cortical Porosity Occur Prior to Significant Rise in Serum Parathyroid Hormone in Young Female Mice with Adenine-Induced CKD. <i>Calcified Tissue International</i> , 2020, 106, 392-400.	1.5	18
124	Low Bone Turnover in Chronic Kidney Disease Is Associated with Decreased VEGF-A Expression and Osteoblast Differentiation. <i>American Journal of Nephrology</i> , 2015, 41, 464-473.	1.4	17
125	Reference point indentation is insufficient for detecting alterations in traditional mechanical properties of bone under common experimental conditions. <i>Bone</i> , 2016, 87, 97-101.	1.4	17
126	Dietary Phosphate Restriction Normalizes Biochemical and Skeletal Abnormalities in a Murine Model of Tumoral Calcinosis. <i>Endocrinology</i> , 2011, 152, 4504-4513.	1.4	16

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127	Microcrack density and nanomechanical properties in the subchondral region of the immature piglet femoral head following ischemic osteonecrosis. <i>Bone</i> , 2013, 52, 632-639.	1.4	16
128	Reduced skeletal muscle function is associated with decreased fiber cross-sectional area in the Cy/+ rat model of progressive kidney disease. <i>Nephrology Dialysis Transplantation</i> , 2015, 31, gfv352.	0.4	16
129	Exposure to Low-Dose X-Ray Radiation Alters Bone Progenitor Cells and Bone Microarchitecture. <i>Radiation Research</i> , 2017, 188, 433-442.	0.7	16
130	Voluntary Chronic Heavy Alcohol Consumption in Male Rhesus Macaques Suppresses Cancellous Bone Formation and Increases Bone Marrow Adiposity. <i>Alcoholism: Clinical and Experimental Research</i> , 2019, 43, 2494-2503.	1.4	16
131	Zoledronate and Raloxifene combination therapy enhances material and mechanical properties of diseased mouse bone. <i>Bone</i> , 2019, 127, 199-206.	1.4	16
132	The HIF-PHI BAY 85-3934 (Molidustat) Improves Anemia and Is Associated With Reduced Levels of Circulating FGF23 in a CKD Mouse Model. <i>Journal of Bone and Mineral Research</i> , 2020, 36, 1117-1130.	3.1	16
133	Differential skeletal responses of hindlimb unloaded rats on a vitamin D-deficient diet to 1,25-dihydroxyvitamin D3 and its analog, seocalcitol (EB1089). <i>Bone</i> , 2004, 35, 134-143.	1.4	14
134	Alendronate treatment results in similar levels of trabecular bone remodeling in the femoral neck and vertebra. <i>Osteoporosis International</i> , 2009, 20, 647-652.	1.3	14
135	Preclinical Models for Skeletal Research: How Commonly Used Species Mimic (or Don't) Aspects of Human Bone. <i>Toxicologic Pathology</i> , 2017, 45, 851-854.	0.9	14
136	Effect of ovariectomy on the progression of chronic kidney disease-mineral bone disorder (CKD-MBD) in female Cy/+ rats. <i>Scientific Reports</i> , 2019, 9, 7936.	1.6	14
137	Mechanics of linear microcracking in trabecular bone. <i>Journal of Biomechanics</i> , 2019, 83, 34-42.	0.9	14
138	Muscle contraction induces osteogenic levels of cortical bone strain despite muscle weakness in a mouse model of Osteogenesis Imperfecta. <i>Bone</i> , 2020, 132, 115061.	1.4	14
139	Animal Models of Osteonecrosis. <i>Clinical Reviews in Bone and Mineral Metabolism</i> , 2011, 9, 63-80.	1.3	13
140	Variability of in vivo reference point indentation in skeletally mature inbred rats. <i>Journal of Biomechanics</i> , 2014, 47, 2504-2507.	0.9	13
141	Zoledronate treatment has different effects in mouse strains with contrasting baseline bone mechanical phenotypes. <i>Osteoporosis International</i> , 2016, 27, 3637-3643.	1.3	13
142	Reversing cortical porosity: Cortical pore infilling in preclinical models of chronic kidney disease. <i>Bone</i> , 2021, 143, 115632.	1.4	13
143	Low Bone Turnover and Microdamage? How and Where to Assess It?. <i>Journal of Bone and Mineral Research</i> , 2008, 23, 1150-1151.	3.1	12
144	A novel approach to evaluate the effect of medicaments used in endodontic regeneration on root canal surface indentation. <i>Clinical Oral Investigations</i> , 2014, 18, 1569-1575.	1.4	12

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145	Genome-Wide Mapping and Interrogation of the Nmp4 Antianabolic Bone Axis. <i>Molecular Endocrinology</i> , 2015, 29, 1269-1285.	3.7	12
146	Reversal of loss of bone mass in old mice treated with mefloquine. <i>Bone</i> , 2018, 114, 22-31.	1.4	12
147	Age- and sex-dependent role of osteocytic pannexin1 on bone and muscle mass and strength. <i>Scientific Reports</i> , 2019, 9, 13903.	1.6	12
148	Loss of <i>Nmp4</i> optimizes osteogenic metabolism and secretion to enhance bone quality. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2019, 316, E749-E772.	1.8	12
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