Tamara Alliston

List of Publications by Year
in descending order

76 papers	6,440 citations	109137 35 h-index	88477 70 g-index
85 all docs	85 docs citations	85 times ranked	9323 citing authors

#	Article	IF	Citations
1	Osteoarthritis Pathophysiology. Clinics in Geriatric Medicine, 2022, 38, 193-219.	1.0	17
2	At the Crux of Joint Crosstalk: TGFÎ² Signaling in the Synovial Joint. Current Rheumatology Reports, 2022, 24, 184-197.	2.1	1
3	Mechanosensitive Control of Articular Cartilage and Subchondral Bone Homeostasis in Mice Requires Osteocytic Transforming Growth Factor Î² Signaling. Arthritis and Rheumatology, 2021, 73, 414-425.	2.9	25
4	A comparison of alendronate to varying magnitude PEMF in mitigating bone loss and altering bone remodeling in skeletally mature osteoporotic rats. Bone, 2021, 143, 115761.	1.4	13
5	Fluid shear stress generates a unique signaling response by activating multiple TGFÎ² family type I receptors in osteocytes. FASEB Journal, 2021, 35, e21263.	0.2	18
6	Disrupted osteocyte connectivity and pericellular fluid flow in bone with aging and defective TGF-Î² signaling. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	58
7	Altered canalicular remodeling associated with femur fracture in mice. Journal of Orthopaedic Research, 2021, , .	1.2	2
8	Mechanosensitive miRâ€•100 coordinates TGFÎ² and Wnt signaling in osteocytes during fluid shear stress. FASEB Journal, 2021, 35, e21883.	0.2	6
9	Assessment of Osteocytes: Techniques for Studying Morphological and Molecular Changes Associated with Perilacunar/Canalicular Remodeling of the Bone Matrix. Methods in Molecular Biology, 2021, 2230, 303-323.	0.4	7
10	CYLD, a mechanosensitive deubiquitinase, regulates TGFÎ² signaling in load-induced bone formation. Bone, 2020, 131, 115148.	1.4	10
11	Quantitative and qualitative bone imaging: A review of synchrotron radiation microtomography analysis in bone research. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 110, 103887.	1.5	11
12	Biologically Regulated Marrow Stimulation by Blocking TGF-Î²1 With Losartan Oral Administration Results in Hyaline-like Cartilage Repair: A Rabbit Osteochondral Defect Model. American Journal of Sports Medicine, 2020, 48, 974-984.	1.9	32
13	The importance of diversity, equity, and inclusion in orthopedic research. Journal of Orthopaedic Research, 2020, 38, 1661-1665.	1.2	10
14	<scp>TGFÎ²</scp> Regulation of Perilacunar/Canalicular Remodeling Is Sexually Dimorphic. Journal of Bone and Mineral Research, 2020, 35, 1549-1561.	3.1	25
15	Prioritization of Genes Relevant to Bone Fragility Through the Unbiased Integration of Aging Mouse Bone Transcriptomics and Human GWAS Analyses. Journal of Bone and Mineral Research, 2020, 37, 804-817.	3.1	10
16	Osteocyte dysfunction promotes osteoarthritis through MMP13-dependent suppression of subchondral bone homeostasis. Bone Research, 2019, 7, 34.	5.4	67
17	Bone Quality Sleuths: Uncovering Tissue-Level Mechanisms of Bone Fragility in Human Type 2 Diabetes. Journal of Bone and Mineral Research, 2019, 34, 1189-1190.	3.1	2
18	Investigating Osteocytic Perilacunar/Canalicular Remodeling. Current Osteoporosis Reports, 2019, 17, 157-168.	1.5	39

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19	T1Ï•based fibril-reinforced poroviscoelastic constitutive relation of human articular cartilage using inverse finite element technology. Quantitative Imaging in Medicine and Surgery, 2019, 9, 359-370.	1.1	7
20	Chronic kidney disease and aging differentially diminish bone material and microarchitecture in C57Bl/6 mice. Bone, 2019, 127, 91-103.	1.4	37
21	Dynamic imaging demonstrates that pulsed electromagnetic fields (PEMF) suppress ILâ€6 transcription in bovine nucleus pulposus cells. Journal of Orthopaedic Research, 2018, 36, 778-787.	1.2	7
22	Fatigue as the missing link between bone fragility and fracture. Nature Biomedical Engineering, 2018, 2, 62-71.	11.6	57
23	Bone marrow lesions in osteoarthritis: What lies beneath. Journal of Orthopaedic Research, 2018, 36, 1818-1825.	1.2	62
24	Treatment with antiâ€Sclerostin antibody to stimulate mandibular bone formation. Head and Neck, 2018, 40, 1453-1460.	0.9	11
25	A modular approach to creating large engineered cartilage surfaces. Journal of Biomechanics, 2018, 67, 177-183.	0.9	5
26	Glucocorticoids cause mandibular bone fragility and suppress osteocyte perilacunar-canalicular remodeling. Bone Reports, 2018, 9, 145-153.	0.2	20
27	Glucocorticoid suppression of osteocyte perilacunar remodeling is associated with subchondral bone degeneration in osteonecrosis. Scientific Reports, 2017, 7, 44618.	1.6	71
28	Osteocyte-Intrinsic TGF-Î² Signaling Regulates Bone Quality through Perilacunar/Canalicular Remodeling. Cell Reports, 2017, 21, 2585-2596.	2.9	128
29	Smad4 regulates growth plate matrix production and chondrocyte polarity. Biology Open, 2017, 6, 358-364.	0.6	11
30	Effects of cell type and configuration on anabolic and catabolic activity in 3D coâ€culture of mesenchymal stem cells and nucleus pulposus cells. Journal of Orthopaedic Research, 2017, 35, 61-73.	1.2	23
31	Mechanobiology of TGFÎ² signaling in the skeleton. Matrix Biology, 2016, 52-54, 413-425.	1.5	42
32	Parallel mechanisms suppress cochlear bone remodeling to protect hearing. Bone, 2016, 89, 7-15.	1.4	37
33	Correlating highâ€resolution magic angle spinning NMR spectroscopy and gene analysis in osteoarthritic cartilage. NMR in Biomedicine, 2015, 28, 523-528.	1.6	4
34	Disrupted Bone Remodeling Leads to Cochlear Overgrowth and Hearing Loss in a Mouse Model of Fibrous Dysplasia. PLoS ONE, 2014, 9, e94989.	1.1	18
35	How Tough Is Brittle Bone? Investigating Osteogenesis Imperfecta in Mouse Bone. Journal of Bone and Mineral Research, 2014, 29, 1392-1401.	3.1	119
36	Calluses Flex Their Muscles to Align Bone Fragments during Fracture Repair. Developmental Cell, 2014, 31, 137-138.	3.1	0

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37	Pulsed Electromagnetic Fields (PEMF) Inhibit Matrix Metalloproteinase-13 Expression in Human Annulus Fibrosus Cells. Spine Journal, 2014, 14, S167.	0.6	0
38	Ligand-Independent and Tissue-Selective Androgen Receptor Inhibition by Pyrvinium. ACS Chemical Biology, 2014, 9, 692-702.	1.6	46
39	Biological Regulation of Bone Quality. Current Osteoporosis Reports, 2014, 12, 366-375.	1.5	70
40	Evolution of a developmental mechanism: Species-specific regulation of the cell cycle and the timing of events during craniofacial osteogenesis. Developmental Biology, 2014, 385, 380-395.	0.9	44
41	Accumulation of Exogenous Activated TGF-Î² in the Superficial Zone ofÂArticular Cartilage. Biophysical Journal, 2013, 104, 1794-1804.	0.2	57
42	Regulation of postnatal bone homeostasis by TGFÎ². BoneKEy Reports, 2013, 2, 255.	2.7	68
43	Development of a porous poly(DLâ€lactic acidâ€coâ€glycolic acid)â€based scaffold for mastoid airâ€cell regeneration. Laryngoscope, 2013, 123, 3156-3161.	1.1	9
44	Prolonged alendronate treatment prevents the decline in serum TGF-Î²1 levels and reduces cortical bone strength in long-term estrogen deficiency rat model. Bone, 2013, 52, 424-432.	1.4	14
45	Smad3 binds scleraxis and mohawk and regulates tendon matrix organization. Journal of Orthopaedic Research, 2013, 31, 1475-1483.	1.2	79
46	Load Regulates Bone Formation and Sclerostin Expression through a TGFÎ²-Dependent Mechanism. PLoS ONE, 2013, 8, e53813.	1.1	69
47	ECM stiffness primes the TGFÎ² pathway to promote chondrocyte differentiation. Molecular Biology of the Cell, 2012, 23, 3731-3742.	0.9	173
48	Chondrocyteâ€intrinsic Smad3 represses Runx2â€inducible matrix metalloproteinase 13 expression to maintain articular cartilage and prevent osteoarthritis. Arthritis and Rheumatism, 2012, 64, 3278-3289.	6.7	114
49	Matrix metalloproteinaseâ€"13 is required for osteocytic perilacunar remodeling and maintains bone fracture resistance. Journal of Bone and Mineral Research, 2012, 27, 1936-1950.	3.1	185
50	Targeted Loss of Proteoglycans Results in Changes of Frequency-Dependent Viscoelastic Behavior of the Intact Articular Cartilage. , 2012, , .		0
51	The use of polyacrylamide gels for mechanical calibration of cartilage â€" A combined nanoindentation and unconfined compression study. Journal of the Mechanical Behavior of Biomedical Materials, 2011, 4, 1540-1547.	1.5	24
52	Structured three-dimensional co-culture of mesenchymal stem cells with chondrocytes promotes chondrogenic differentiation without hypertrophy. Osteoarthritis and Cartilage, 2011, 19, 1210-1218.	0.6	121
53	Characterization of the effects of x-ray irradiation on the hierarchical structure and mechanical properties of human cortical bone. Biomaterials, 2011, 32, 8892-8904.	5.7	250
54	Changes in cortical bone response to high-fat diet from adolescence to adulthood in mice. Osteoporosis International, 2011, 22, 2283-2293.	1.3	76

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55	Examination of Bone Ossification Markers in Cochlear Development. Laryngoscope, 2011, 121, S313.	1.1	0
56	Local tissue properties of human osteoarthritic cartilage correlate with magnetic resonance <i>T</i>₁rho relaxation times. Journal of Orthopaedic Research, 2011, 29, 1312-1319.	1.2	30
57	TGFÎ² and Runx2 calibration of bone extracellular matrix quality for tissue-specific function. IBMS BoneKEy, 2011, 8, 370-380.	0.1	2
58	Age-related changes in the plasticity and toughness of human cortical bone at multiple length scales. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14416-14421.	3.3	325
59	In situ materials characterization using the tissue diagnostic instrument. Polymer Testing, 2010, 29, 159-163.	2.3	6
60	Tissueâ€specific calibration of extracellular matrix material properties by transforming growth factorâ€Î² and Runx2 in bone is required for hearing. EMBO Reports, 2010, 11, 765-771.	2.0	37
61	Chondroitin sulfate and growth factor signaling in the skeleton: Possible links to MPS VI. Journal of Pediatric Rehabilitation Medicine, 2010, 3, 129-138.	0.3	27
62	Reduced size-independent mechanical properties of cortical bone in high-fat diet-induced obesity. Bone, 2010, 46, 217-225.	1.4	90
63	Osteopontin deficiency increases bone fragility but preserves bone mass. Bone, 2010, 46, 1564-1573.	1.4	169
64	The tissue diagnostic instrument. Review of Scientific Instruments, 2009, 80, 054303.	0.6	66
65	A tense situation: forcing tumour progression. Nature Reviews Cancer, 2009, 9, 108-122.	12.8	1,636
66	Pharmacologic Inhibition of the TGF-Î² Type I Receptor Kinase Has Anabolic and Anti-Catabolic Effects on Bone. PLoS ONE, 2009, 4, e5275.	1.1	163
67	Transforming Growth Factor-Î². , 2008, , 1145-1166.		10
68	Elevated TGF-Î²2 signaling in dentin results in sex related enamel defects. Archives of Oral Biology, 2007, 52, 814-821.	0.8	13
69	Smads In Mesenchymal Differentiation. , 2006, , 93-112.		1
70	Repression of Bone Morphogenetic Protein and Activin-inducible Transcription by Evi-1. Journal of Biological Chemistry, 2005, 280, 24227-24237.	1.6	79
71	TGF-Â regulates the mechanical properties and composition of bone matrix. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 18813-18818.	3.3	193
72	Repression of Runx2 function by TGF-Î² through recruitment of class II histone deacetylases by Smad3. EMBO Journal, 2005, 24, 2543-2555.	3.5	307

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73	Transforming Growth Factor-Î²1 Regulation of Collagenase-3 Expression in Osteoblastic Cells by Cross-talk between the Smad and MAPK Signaling Pathways and Their Components, Smad2 and Runx2. Journal of Biological Chemistry, 2004, 279, 19327-19334.	1.6	117
74	Interfering with bone remodelling. Nature, 2002, 416, 686-687.	13.7	81
75	TGF-beta-induced repression of CBFA1 by Smad3 decreases cbfa1 and osteocalcin expression and inhibits osteoblast differentiation. EMBO Journal, 2001, 20, 2254-2272.	3.5	470
76	Molecular mechanisms of ovulation and luteinization. Molecular and Cellular Endocrinology, 1998, 145, 47-54.	1.6	205