Fanxin Long

List of Publications by Year
in descending order

96 papers	13,316 citations	30070 54 h-index	39675 94 g-index
102 all docs	102 docs citations	102 times ranked	15311 citing authors

#	Article	IF	Citations
1	Assessing Energy Substrate Oxidation In Vitro with ¹⁴CO₂ Trapping. Journal of Visualized Experiments, 2022, , .	0.3	1
2	Impaired glucose metabolism underlies articular cartilage degeneration in osteoarthritis. FASEB Journal, 2022, 36, .	0.5	14
3	Rational Design of Bisphosphonate Lipid-like Materials for mRNA Delivery to the Bone Microenvironment. Journal of the American Chemical Society, 2022, 144, 9926-9937.	13.7	46
4	Biphasic regulation of glutamine consumption by WNT during osteoblast differentiation. Journal of Cell Science, 2021, 134, .	2.0	36
5	Functional interaction between Wnt and Bmp signaling in periosteal bone growth. Scientific Reports, 2021, 11, 10782.	3.3	9
6	WNT7B overexpression rescues bone loss caused by glucocorticoids in mice. FASEB Journal, 2021, 35, e21683.	0.5	4
7	The critical role of Hedgehog-responsive mesenchymal progenitors in meniscus development and injury repair. ELife, 2021, 10, .	6.0	14
8	Gli1+ progenitors mediate bone anabolic function of teriparatide via Hh and Igf signaling. Cell Reports, 2021, 36, 109542.	6.4	15
9	Malic Enzyme Couples Mitochondria with Aerobic Glycolysis in Osteoblasts. Cell Reports, 2020, 32, 108108.	6.4	79
10	The Amino Acid Sensor <scp><i>Eif2ak4</i>/GCN2</scp> Is Required for Proliferation of Osteoblast Progenitors in Mice. Journal of Bone and Mineral Research, 2020, 35, 2004-2014.	2.8	21
11	Diet-Induced Metabolic Dysregulation in Female Mice Causes Osteopenia in Adult Offspring. Journal of the Endocrine Society, 2020, 4, bvaa028.	0.2	8
12	Both aerobic glycolysis and mitochondrial respiration are required for osteoclast differentiation. FASEB Journal, 2020, 34, 11058-11067.	0.5	55
13	Inducible expression of Wnt7b promotes bone formation in aged mice and enhances fracture healing. Bone Research, 2020, 8, 4.	11.4	30
14	Single cell transcriptomics identifies a unique adipose lineage cell population that regulates bone marrow environment. ELife, 2020, 9, .	6.0	191
15	Osteoblast Differentiation. , 2020, , 409-415.		0
16	Less Is More: Ditching Mitochondria Saves Hypoxic Cartilage. Developmental Cell, 2019, 49, 656-658.	7.0	5
17	Increased glycolysis mediates Wnt7bâ€induced bone formation. FASEB Journal, 2019, 33, 7810-7821.	0.5	38
18	mTOR signaling in skeletal development and disease. Bone Research, 2018, 6, 1.	11.4	202

#	Article	IF	Citations
19	Glucose metabolism in bone. Bone, 2018, 115, 2-7.	2.9	104
20	Glucose metabolism induced by Bmp signaling is essential for murine skeletal development. Nature Communications, 2018, 9, 4831.	12.8	82
21	Energy Metabolism and Bone. Bone, 2018, 115, 1.	2.9	6
22	High expression of Sonic hedgehog in allergic airway epithelia contributes to goblet cell metaplasia. Mucosal Immunology, 2018, 11, 1306-1315.	6.0	23
23	Notch signaling suppresses glucose metabolism in mesenchymal progenitors to restrict osteoblast differentiation. Journal of Clinical Investigation, 2018, 128, 5573-5586.	8.2	82
24	Unintended targeting of Dmp1-Cre reveals a critical role for Bmpr1a signaling in the gastrointestinal mesenchyme of adult mice. Bone Research, 2017, 5, 16049.	11.4	69
25	Energy Metabolism of the Osteoblast: Implications for Osteoporosis. Endocrine Reviews, 2017, 38, 255-266.	20.1	272
26	Differential involvement of Wnt signaling in Bmp regulation of cancellous versus periosteal bone growth. Bone Research, 2017, 5, 17016.	11.4	20
27	Bmp Induces Osteoblast Differentiation through both Smad4 and mTORC1 Signaling. Molecular and Cellular Biology, 2017, 37, .	2.3	80
28	Gli1 identifies osteogenic progenitors for bone formation and fracture repair. Nature Communications, 2017, 8, 2043.	12.8	248
29	mTORC1 Signaling Promotes Limb Bud Cell Growth and Chondrogenesis. Journal of Cellular Biochemistry, 2017, 118, 748-753.	2.6	20
30	Wnt signaling and cellular metabolism in osteoblasts. Cellular and Molecular Life Sciences, 2017, 74, 1649-1657.	5.4	212
31	Hedgehog signaling via Gli2 prevents obesity induced by high-fat diet in adult mice. ELife, 2017, 6, .	6.0	47
32	Signaling Cascades Governing Cdc42-Mediated Chondrogenic Differentiation and Mensenchymal Condensation. Genetics, 2016, 202, 1055-1069.	2.9	17
33	FGF signaling in the osteoprogenitor lineage non-autonomously regulates postnatal chondrocyte proliferation and skeletal growth. Development (Cambridge), 2016, 143, 1811-22.	2.5	56
34	Wnt Protein Signaling Reduces Nuclear Acetyl-CoA Levels to Suppress Gene Expression during Osteoblast Differentiation. Journal of Biological Chemistry, 2016, 291, 13028-13039.	3.4	43
35	Stromal-Initiated Changes in the Bone Promote Metastatic Niche Development. Cell Reports, 2016, 14, 82-92.	6.4	103
36	Rictor is required for optimal bone accrual in response to anti-sclerostin therapy in the mouse. Bone, 2016, 85, 1-8.	2.9	23

#	Article	IF	Citations
37	PTH Promotes Bone Anabolism by Stimulating Aerobic Glycolysis via IGF Signaling. Journal of Bone and Mineral Research, 2015, 30, 1959-1968.	2.8	109
38	Hedgehog signaling activates a positive feedback mechanism involving insulin-like growth factors to induce osteoblast differentiation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4678-4683.	7.1	78
39	Dual function of Bmpr1a signaling in restricting preosteoblast proliferation and stimulating osteoblast activity in the mouse. Development (Cambridge), 2015, 143, 339-47.	2.5	52
40	Hedgehog signaling stimulates the conversion of cholesterol to steroids. Cellular Signalling, 2015, 27, 487-497.	3.6	29
41	BMPâ€“Smad4 signaling is required for precartilaginous mesenchymal condensation independent of Sox9 in the mouse. Developmental Biology, 2015, 400, 132-138.	2.0	64
42	mTORC1 Signaling Promotes Osteoblast Differentiation from Preosteoblasts. PLoS ONE, 2015, 10, e0130627.	2.5	66
43	<i>Gpr126/Adgrg6</i>deletion in cartilage models idiopathic scoliosis and pectus excavatum in mice. Human Molecular Genetics, 2015, 24, 4365-4373.	2.9	82
44	Hedgehog signaling mediates woven bone formation and vascularization during stress fracture healing. Bone, 2015, 81, 524-532.	2.9	36
45	mTORC2 Signaling Promotes Skeletal Growth and Bone Formation in Mice. Journal of Bone and Mineral Research, 2015, 30, 369-378.	2.8	82
46	Enthesis fibrocartilage cells originate from a population of Hedgehog-responsive cells modulated by the loading environment. Development (Cambridge), 2015, 142, 196-206.	2.5	124
47	Increased glutamine catabolism mediates bone anabolism in response to WNT signaling. Journal of Clinical Investigation, 2015, 125, 551-562.	8.2	126
48	Osx-Cre Targets Multiple Cell Types besides Osteoblast Lineage in Postnatal Mice. PLoS ONE, 2014, 9, e85161.	2.5	158
49	BMPRIA Mediated Signaling Is Essential for Temporomandibular Joint Development in Mice. PLoS ONE, 2014, 9, e101000.	2.5	33
50	Wnt7b can replace Ihh to induce hypertrophic cartilage vascularization but not osteoblast differentiation during endochondral bone development. Bone Research, 2014, 2, 14004.	11.4	19
51	Aerobic Glycolysis in Osteoblasts. Current Osteoporosis Reports, 2014, 12, 433-438.	3.6	69
52	Up-regulation of glycolytic metabolism is required for HIF1Î±-driven bone formation. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8673-8678.	7.1	126
53	WNT7B Promotes Bone Formation in part through mTORC1. PLoS Genetics, 2014, 10, e1004145.	3.5	122
54	mTORC1 signaling controls mammalian skeletal growth through stimulation of protein synthesis. Development (Cambridge), 2014, 141, 2848-2854.	2.5	97

#	Article	IF	Citations
55	Radioactive In Situ Hybridization to Detect Gene Expression in Skeletal Tissue Sections. Methods in Molecular Biology, 2014, 1130, 217-232.	0.9	3
56	Constitutive Activation of IKK2/NF-Î°B Impairs Osteogenesis and Skeletal Development. PLoS ONE, 2014, 9, e91421.	2.5	28
57	Development of the Endochondral Skeleton. Cold Spring Harbor Perspectives in Biology, 2013, 5, a008334-a008334.	5.5	477
58	Inhibition of Ca2+/Calmodulinâ€"Dependent Protein Kinase Kinase 2 Stimulates Osteoblast Formation and Inhibits Osteoclast Differentiation. Journal of Bone and Mineral Research, 2013, 28, 1599-1610.	2.8	52
59	WNT-LRP5 Signaling Induces Warburg Effect through mTORC2 Activation during Osteoblast Differentiation. Cell Metabolism, 2013, 17, 745-755.	16.2	294
60	Notch Signaling and Bone Remodeling. Current Osteoporosis Reports, 2013, 11, 126-129.	3.6	70
61	Role of WNT7B-induced Noncanonical Pathway in Advanced Prostate Cancer. Molecular Cancer Research, 2013, 11, 482-493.	3.4	59
62	Î²-catenin promotes bone formation and suppresses bone resorption in postnatal growing mice. Journal of Bone and Mineral Research, 2013, 28, 1160-1169.	2.8	108
63	Constitutive Activation of Gli2 Impairs Bone Formation in Postnatal Growing Mice. PLoS ONE, 2013, 8, e55134.	2.5	10
64	Physiological Notch Signaling Maintains Bone Homeostasis via RBPjk and Hey Upstream of NFATc1. PLoS Genetics, 2012, 8, e1002577.	3.5	76
65	Hedgehog Signaling Inhibition Blocks Growth of Resistant Tumors through Effects on Tumor Microenvironment. Cancer Research, 2012, 72, 897-907.	0.9	72
66	Prenatal Bone Development. , 2012, , 39-53.		3
67	Building strong bones: molecular regulation of the osteoblast lineage. Nature Reviews Molecular Cell Biology, 2012, 13, 27-38.	37.0	898
68	Indian hedgehog requires additional effectors besides Runx2 to induce osteoblast differentiation. Developmental Biology, 2012, 362, 76-82.	2.0	41
69	Lrp5 and Lrp6 redundantly control skeletal development in the mouse embryo. Developmental Biology, 2011, 359, 222-229.	2.0	139
70	Role of HIFâ€1Î± in skeletal development. Annals of the New York Academy of Sciences, 2010, 1192, 322-326.	3.8	144
71	The Gli2 transcriptional activator is a crucial effector for Ihh signaling in osteoblast development and cartilage vascularization. Development (Cambridge), 2009, 136, 4177-4185.	2.5	87
72	Mechanism of shortened bones in mucopolysaccharidosis VII. Molecular Genetics and Metabolism, 2009, 97, 202-211.	1.1	61

#	Article	IF	Citations
73	Notch signaling maintains bone marrow mesenchymal progenitors by suppressing osteoblast differentiation. Nature Medicine, 2008, 14, 306-314.	30.7	532
74	An FGFâ€"WNT gene regulatory network controls lung mesenchyme development. Developmental Biology, 2008, 319, 426-436.	2.0	127
75	Rac1 Activation Controls Nuclear Localization of Î²-catenin during Canonical Wnt Signaling. Cell, 2008, 133, 340-353.	28.9	433
76	When the Gut Talks to Bone. Cell, 2008, 135, 795-796.	28.9	16
77	Targeting intercellular signals for bone regeneration from bone marrow mesenchymal progenitors. Cell Cycle, 2008, 7, 2106-2111.	2.6	9
78	NOTCH1 Regulates Osteoclastogenesis Directly in Osteoclast Precursors and Indirectly via Osteoblast Lineage Cells. Journal of Biological Chemistry, 2008, 283, 6509-6518.	3.4	202
79	Syk, c-Src, the Î±vÎ²3 integrin, and ITAM immunoreceptors, in concert, regulate osteoclastic bone resorption. Journal of Cell Biology, 2007, 176, 877-888.	5.2	263
80	Shox2 is required for chondrocyte proliferation and maturation in proximal limb skeleton. Developmental Biology, 2007, 306, 549-559.	2.0	73
81	Tamoxifen-inducible gene deletion reveals a distinct cell type associated with trabecular bone, and direct regulation of PTHrP expression and chondrocyte morphology by Ihh in growth region cartilage. Developmental Biology, 2007, 308, 93-105.	2.0	97
82	Noncanonical Wnt Signaling through G Protein-Linked PKCÎ´ Activation Promotes Bone Formation. Developmental Cell, 2007, 12, 113-127.	7.0	286
83	Suppression of CXCL12 Production by Bone Marrow Osteoblasts Is a Common and Critical Pathway for Cytokine-Induced Mobilization.. Blood, 2007, 110, 220-220.	1.4	18
84	Independent regulation of skeletal growth by Ihh and IGF signaling. Developmental Biology, 2006, 298, 327-333.	2.0	31
85	Fibroblast growth factor signals regulate a wave of Hedgehog activation that is essential for coronary vascular development. Genes and Development, 2006, 20, 1651-1666.	5.9	214
86	Conditional deletion of Indian hedgehog from collagen type 2Î±1-expressing cells results in abnormal endochondral bone formation. Journal of Pathology, 2005, 207, 453-461.	4.5	111
87	Ihh controls cartilage development by antagonizing Gli3, but requires additional effectors to regulate osteoblast and vascular development. Development (Cambridge), 2005, 132, 4339-4351.	2.5	172
88	Canonical Wnt Signaling in Differentiated Osteoblasts Controls Osteoclast Differentiation. Developmental Cell, 2005, 8, 751-764.	7.0	1,402
89	Sequential roles of Hedgehog and Wnt signaling in osteoblast development. Development (Cambridge), 2005, 132, 49-60.	2.5	593
90	Ihh signaling is directly required for the osteoblast lineage in the endochondral skeleton. Development (Cambridge), 2004, 131, 1309-1318.	2.5	372

#	Article	IF	Citations
91	Regulation of Endochondral Cartilage Growth in the Developing Avian Limb: Cooperative Involvement of Perichondrium and Periosteum. Developmental Biology, 2001, 240, 433-442.	2.0	47
92	CREB regulates hepatic gluconeogenesis through the coactivator PGC-1. Nature, 2001, 413, 179-183.	27.8	1,238
93	Genetic manipulation of hedgehog signaling in the endochondral skeleton reveals a direct role in the regulation of chondrocyte proliferation. Development (Cambridge), 2001, 128, 5099-5108.	2.5	565
94	Type X Collagen and Other Up-Regulated Components of the Avian Hypertrophic Cartilage Program. Progress in Molecular Biology and Translational Science, 1998, 60, 79-109.	1.9	18
95	Multiple Transcriptional Elements in the Avian Type X Collagen Gene. Journal of Biological Chemistry, 1998, 273, 6542-6549.	3.4	22
96	Tissue-specific Regulation of the Type X Collagen Gene:. Journal of Biological Chemistry, 1995, 270, 31310-31314.	3.4	29