Ernestina Schipani

List of Publications by Year
in descending order

109 papers	9,986 citations	47006 47 h-index	38395 95 g-index
110 all docs	110 docs citations	110 times ranked	10210 citing authors

#	Article	IF	Citations
1	Hypoxia in cartilage: HIF-1Î± is essential for chondrocyte growth arrest and survival. Genes and Development, 2001, 15, 2865-2876.	5.9	690
2	A Constitutively Active Mutant PTH-PTHrP Receptor in Jansen-Type Metaphyseal Chondrodysplasia. Science, 1995, 268, 98-100.	12.6	657
3	The hypoxia-inducible factor Î± pathway couples angiogenesis to osteogenesis during skeletal development. Journal of Clinical Investigation, 2007, 117, 1616-1626.	8.2	616
4	Indian hedgehog couples chondrogenesis to osteogenesis in endochondral bone development. Journal of Clinical Investigation, 2001, 107, 295-304.	8.2	356
5	VEGFA is necessary for chondrocyte survival during bone development. Development (Cambridge), 2004, 131, 2161-2171.	2.5	347
6	Control of Bone Mass and Remodeling by PTH Receptor Signaling in Osteocytes. PLoS ONE, 2008, 3, e2942.	2.5	331
7	Molecular mechanisms of endochondral bone development. Biochemical and Biophysical Research Communications, 2005, 328, 658-665.	2.1	330
8	Regulation of Osteogenesis-Angiogenesis Coupling by HIFs and VEGF. Journal of Bone and Mineral Research, 2009, 24, 1347-1353.	2.8	321
9	Dicer-dependent pathways regulate chondrocyte proliferation and differentiation. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1949-1954.	7.1	315
10	PTHrP and Indian hedgehog control differentiation of growth plate chondrocytes at multiple steps. Development (Cambridge), 2002, 129, 2977-2986.	2.5	272
11	The HIF Signaling Pathway in Osteoblasts Directly Modulates Erythropoiesis through the Production of EPO. Cell, 2012, 149, 63-74.	28.9	244
12	Differential regulation of myeloid leukemias by the bone marrow microenvironment. Nature Medicine, 2013, 19, 1513-1517.	30.7	233
13	SIRT1 regulates differentiation of mesenchymal stem cells by deacetylating Î²â€catenin. EMBO Molecular Medicine, 2013, 5, 430-440.	6.9	233
14	HIF-1Î± controls extracellular matrix synthesis by epiphyseal chondrocytes. Journal of Cell Science, 2003, 116, 1819-1826.	2.0	231
15	Hypoxia-driven pathways in bone development, regeneration and disease. Nature Reviews Rheumatology, 2012, 8, 358-366.	8.0	231
16	Indian hedgehog stimulates periarticular chondrocyte differentiation to regulate growth plate length independently of PTHrP. Journal of Clinical Investigation, 2005, 115, 1734-1742.	8.2	227
17	Suppression of Wnt Signaling by Dkk1 Attenuates PTH-Mediated Stromal Cell Response and New Bone Formation. Cell Metabolism, 2010, 11, 161-171.	16.2	203
18	Hif-1Î± regulates differentiation of limb bud mesenchyme and joint development. Journal of Cell Biology, 2007, 177, 451-464.	5.2	181

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19	Inhibition of Hif1Î± prevents both trauma-induced and genetic heterotopic ossification. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E338-47.	7.1	178
20	The Importance of Autosomal Genes in Kallmann Syndrome: Genotype-Phenotype Correlations and Neuroendocrine Characteristics¹. Journal of Clinical Endocrinology and Metabolism, 2001, 86, 1532-1538.	3.6	170
21	Role of hypoxia-inducible factor-1Î± in angiogenicâ€“osteogenic coupling. Journal of Molecular Medicine, 2009, 87, 583-590.	3.9	157
22	Role of HIFâ€•1Î± in skeletal development. Annals of the New York Academy of Sciences, 2010, 1192, 322-326.	3.8	144
23	Hypoxia, HIFs and bone development. Bone, 2010, 47, 190-196.	2.9	123
24	Deletion of Vhlh in chondrocytes reduces cell proliferation and increases matrix deposition during growth plate development. Development (Cambridge), 2004, 131, 2497-2508.	2.5	119
25	PTHrP and Indian hedgehog control differentiation of growth plate chondrocytes at multiple steps. Development (Cambridge), 2002, 129, 2977-86.	2.5	118
26	The interplay of osteogenesis and hematopoiesis. Journal of Cell Biology, 2004, 167, 1113-1122.	5.2	113
27	Cellular Hypoxia Promotes Heterotopic Ossification by Amplifying BMP Signaling. Journal of Bone and Mineral Research, 2016, 31, 1652-1665.	2.8	110
28	Scleraxis-Lineage Cells Contribute to Ectopic Bone Formation in Muscle and Tendon. Stem Cells, 2017, 35, 705-710.	3.2	102
29	Hypoxic Regulation of Nucleus Pulposus Cell Survival. American Journal of Pathology, 2010, 176, 1577-1583.	3.8	101
30	Bone marrow mesenchymal stem cells. Journal of Cellular Biochemistry, 2010, 109, 277-282.	2.6	96
31	Hypoxia and HIF-1Î± in chondrogenesis. Seminars in Cell and Developmental Biology, 2005, 16, 539-546.	5.0	94
32	VEGF-independent cell-autonomous functions of HIF-1Î± regulating oxygen consumption in fetal cartilage are critical for chondrocyte survival. Journal of Bone and Mineral Research, 2012, 27, 596-609.	2.8	94
33	Erythropoietin stimulates murine and human fibroblast growth factor-23, revealing novel roles for bone and bone marrow. Haematologica, 2017, 102, e427-e430.	3.5	93
34	Regulation of HIF1Î± under Hypoxia by APE1/Ref-1 Impacts CA9 Expression: Dual Targeting in Patient-Derived 3D Pancreatic Cancer Models. Molecular Cancer Therapeutics, 2016, 15, 2722-2732.	4.1	91
35	Hypoxia promotes noncanonical autophagy in nucleus pulposus cells independent of MTOR and HIF1A signaling. Autophagy, 2016, 12, 1631-1646.	9.1	89
36	Loss of HIF-1Î± in the Notochord Results in Cell Death and Complete Disappearance of the Nucleus Pulposus. PLoS ONE, 2014, 9, e110768.	2.5	83

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37	PTHrP, PTH, and the PTH/PTHrP receptor in endochondral bone development. Birth Defects Research Part C: Embryo Today Reviews, 2003, 69, 352-362.	3.6	78
38	Oxygen-sensing PHDs regulate bone homeostasis through the modulation of osteoprotegerin. Genes and Development, 2015, 29, 817-831.	5.9	78
39	A Central Role for Hypoxic Signaling in Cartilage, Bone, and Hematopoiesis. Current Osteoporosis Reports, 2011, 9, 46-52.	3.6	76
40	Hypoxia-inducible Factor-1 (HIF-1) but Not HIF-2 Is Essential for Hypoxic Induction of Collagen Prolyl 4-Hydroxylases in Primary Newborn Mouse Epiphyseal Growth Plate Chondrocytes. Journal of Biological Chemistry, 2012, 287, 37134-37144.	3.4	75
41	Phospholipase C Signaling via the Parathyroid Hormone (PTH)/PTH-Related Peptide Receptor Is Essential for Normal Bone Responses to PTH. Endocrinology, 2010, 151, 3502-3513.	2.8	66
42	Extracellular matrix genes as hypoxia-inducible targets. Cell and Tissue Research, 2010, 339, 19-29.	2.9	61
43	Anabolic action of parathyroid hormone regulated by the Î² ₂ -adrenergic receptor. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7433-7438.	7.1	61
44	Fetal Growth Plate. Annals of the New York Academy of Sciences, 2007, 1117, 26-39.	3.8	60
45	MicroRNA-140 and the silencing of osteoarthritis. Genes and Development, 2010, 24, 1075-1080.	5.9	60
46	High irisin levels are associated with better glycemic control and bone health in children with Type 1 diabetes. Diabetes Research and Clinical Practice, 2018, 141, 10-17.	2.8	60
47	Lack of HIF-2Î± in limb bud mesenchyme causes a modest and transient delay of endochondral bone development. Nature Medicine, 2011, 17, 25-26.	30.7	53
48	HIF targets in bone remodeling and metastatic disease. , 2015, 150, 169-177.		52
49	Nf2/Merlin Regulates Hematopoietic Stem Cell Behavior by Altering Microenvironmental Architecture. Cell Stem Cell, 2008, 3, 221-227.	11.1	50
50	Hypoxia and HIF-1Â in Chondrogenesis. Annals of the New York Academy of Sciences, 2006, 1068, 66-73.	3.8	47
51	Polycomb repressive complex 2 regulates skeletal growth by suppressing Wnt and TGF-Î² signalling. Nature Communications, 2016, 7, 12047.	12.8	47
52	Bicarbonate Recycling by HIF-1â€"Dependent Carbonic Anhydrase Isoforms 9 and 12 Is Critical in Maintaining Intracellular pH and Viability of Nucleus Pulposus Cells. Journal of Bone and Mineral Research, 2018, 33, 338-355.	2.8	46
53	Suppressing mesenchymal stem cell hypertrophy and endochondral ossification in 3D cartilage regeneration with nanofibrous poly(l-lactic acid) scaffold and matrilin-3. Acta Biomaterialia, 2018, 76, 29-38.	8.3	46
54	Severe Extracellular Matrix Abnormalities and Chondrodysplasia in Mice Lacking Collagen Prolyl 4-Hydroxylase Isoenzyme II in Combination with a Reduced Amount of Isoenzyme I. Journal of Biological Chemistry, 2015, 290, 16964-16978.	3.4	43

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55	The role of HIF proteins in maintaining the metabolic health of the intervertebral disc. Nature Reviews Rheumatology, 2021, 17, 426-439.	8.0	43
56	The PTH/PTHrP receptor in Jansenâ€™s metaphyseal chondrodysplasia. Journal of Endocrinological Investigation, 2000, 23, 545-554.	3.3	41
57	Suppressing Mitochondrial Respiration Is Critical for Hypoxia Tolerance in the Fetal Growth Plate. Developmental Cell, 2019, 49, 748-763.e7.	7.0	41
58	Hypoxia-inducible factor 2Î± is a negative regulator of osteoblastogenesis and bone mass accrual. Bone Research, 2019, 7, 7.	11.4	39
59	In Vivo Targeted Deletion of Calpain Small Subunit, Capn4, in Cells of the Osteoblast Lineage Impairs Cell Proliferation, Differentiation, and Bone Formation. Journal of Biological Chemistry, 2008, 283, 21002-21010.	3.4	38
60	Selective and Nonselective Inverse Agonists for Constitutively Active Type-1 Parathyroid Hormone Receptors: Evidence for Altered Receptor Conformations*. Endocrinology, 2001, 142, 1534-1545.	2.8	36
61	Loss of GsÎ± in the Postnatal Skeleton Leads to Low Bone Mass and a Blunted Response to Anabolic Parathyroid Hormone Therapy. Journal of Biological Chemistry, 2016, 291, 1631-1642.	3.4	36
62	Partial rescue of postnatal growth plate abnormalities in Ihh mutants by expression of a constitutively active PTH/PTHrP receptor. Bone, 2010, 46, 472-478.	2.9	32
63	Sphingosine 1-phosphate (S1P) signalling: Role in bone biology and potential therapeutic target for bone repair. Pharmacological Research, 2017, 125, 232-245.	7.1	30
64	Osteopontin Negatively Regulates Parathyroid Hormone Receptor Signaling in Osteoblasts. Journal of Biological Chemistry, 2008, 283, 19400-19409.	3.4	29
65	Osteoprotegerin Abrogated Cortical Porosity and Bone Marrow Fibrosis in a Mouse Model of Constitutive Activation of the PTH/PTHrP Receptor. American Journal of Pathology, 2009, 174, 2160-2171.	3.8	29
66	Loss of VHL in mesenchymal progenitors of the limb bud alters multiple steps of endochondral bone development. Developmental Biology, 2014, 393, 124-136.	2.0	29
67	Fibromodulin is expressed by both chondrocytes and osteoblasts during fetal bone development. Journal of Cellular Biochemistry, 2001, 82, 46-57.	2.6	27
68	Targeted Deletion of <i>Capn4</i> in Cells of the Chondrocyte Lineage Impairs Chondrocyte Proliferation and Differentiation. Molecular and Cellular Biology, 2010, 30, 2799-2810.	2.3	27
69	Regulation of Bone Marrow Angiogenesis by Osteoblasts during Bone Development and Homeostasis. Frontiers in Endocrinology, 2013, 4, 85.	3.5	25
70	Receptors for parathyroid hormone and parathyroid hormone-related peptide: from molecular cloning to definition of diseases. Current Opinion in Nephrology and Hypertension, 1996, 5, 300-306.	2.0	24
71	Constitutively Active Parathyroid Hormone Receptor Signaling in Cells in Osteoblastic Lineage Suppresses Mechanical Unloading-induced Bone Resorption. Journal of Biological Chemistry, 2007, 282, 25509-25516.	3.4	22
72	Constitutively active PTH/PTHrP receptor specifically expressed in osteoblasts enhances bone formation induced by bone marrow ablation. Journal of Cellular Physiology, 2012, 227, 408-415.	4.1	22

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73	Chronic inflammation triggered by the NLRP3 inflammasome in myeloid cells promotes growth plate dysplasia by mesenchymal cells. Scientific Reports, 2017, 7, 4880.	3.3	22
74	Systemic Administration of Recombinant Irisin Accelerates Fracture Healing in Mice. International Journal of Molecular Sciences, 2021, 22, 10863.	4.1	22
75	A Novel Population of Cells Expressing Both Hematopoietic and Mesenchymal Markers Is Present in the Normal Adult Bone Marrow and Is Augmented in a Murine Model of Marrow Fibrosis. American Journal of Pathology, 2012, 180, 811-818.	3.8	20
76	HIF-1Î± and growth plate development: what we really know. BoneKEy Reports, 2015, 4, 730.	2.7	19
77	Perâ€1 is a specific clock gene regulated by parathyroid hormone (PTH) signaling in osteoblasts and is functional for the transcriptional events induced by PTH. Journal of Cellular Biochemistry, 2011, 112, 433-438.	2.6	17
78	<i>Hox11</i>genes regulate postnatal longitudinal bone growth and growth plate proliferation. Biology Open, 2015, 4, 1538-1548.	1.2	17
79	Deletion of the Transcription Factor PGC-1Î± in Mice Negatively Regulates Bone Mass. Calcified Tissue International, 2018, 103, 638-652.	3.1	17
80	Impairment of Bone Remodeling in <i>LIGHT/TNFSF14</i>-Deficient Mice. Journal of Bone and Mineral Research, 2018, 33, 704-719.	2.8	16
81	Analysis of Mouse Growth Plate Development. Current Protocols in Mouse Biology, 2016, 6, 67-130.	1.2	15
82	Posttranslational modifications of collagens as targets of hypoxia and Hifâ€1Î± in endochondral bone development. Annals of the New York Academy of Sciences, 2010, 1192, 317-321.	3.8	12
83	Fibrosis and Hypoxia-Inducible Factor-1Î±â€“Dependent Tumors of the Soft Tissue on Loss of Von Hippel-Lindau in Mesenchymal Progenitors. American Journal of Pathology, 2015, 185, 3090-3101.	3.8	9
84	Mice expressing a constitutively active PTH/PTHrP receptor in osteoblasts show reduced callus size but normal callus morphology during fracture healing. Monthly Notices of the Royal Astronomical Society: Letters, 2007, 78, 39-45.	3.3	8
85	About the importance of being desulfated: Figure 1.. Genes and Development, 2008, 22, 2750-2754.	5.9	8
86	Development of the Skeleton. , 2013, , 97-126.		8
87	An Inverse Agonist Ligand of the PTH Receptor Partially Rescues Skeletal Defects in a Mouse Model of Jansen's Metaphyseal Chondrodysplasia. Journal of Bone and Mineral Research, 2020, 35, 540-549.	2.8	8
88	Reduced Bone Mass in Collagen Prolyl 4â€Hydroxylase <i>P4ha1</i>^{+/âˆ’}; <i>P4ha2</i>^{âˆ’/âˆ’} Compound Mutant Mice. JBMR Plus, 2022, 6, .	2.7	8
89	In vivo survival strategies for cellular adaptation to hypoxia: HIF1Î±-dependent suppression of mitochondrial oxygen consumption and decrease of intracellular hypoxia are critical for survival of hypoxic chondrocytes. Bone, 2020, 140, 115572.	2.9	7
90	Jansen's Metaphyseal Chondrodysplasia and Blomstrand's Lethal Chondrodysplasia. , 2002, , 1117-XLI.		6

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91	TUNEL Assay on Skeletal Tissue Sections to Detect Cell Death. Methods in Molecular Biology, 2014, 1130, 245-248.	0.9	6
92	Development of electrospun polymer scaffolds for the localized and controlled delivery of siponimod for the management of critical bone defects. International Journal of Pharmaceutics, 2020, 590, 119956.	5.2	5
93	Development of the Skeleton. , 2008, , 241-269.		4
94	Haplotype frequencies and linkage disequilibrium analysis of four frequent polymorphisms at the PTH/PTH-related peptide receptor gene locus. Molecular and Cellular Probes, 2004, 18, 353-357.	2.1	2
95	Genetic Disorders Caused by PTH/PTHrP Receptor Mutations. , 2008, , 1431-1452.		2
96	A new window on MSCs. Blood, 2008, 112, 217-218.	1.4	1
97	ATF4 and HIF-1Î± in bone: An intriguing relationship. Journal of Bone and Mineral Research, 2013, 28, 1866-1869.	2.8	1
98	Hypoxia and the hypoxia-inducible factors in the skeleton. IBMS BoneKEy, 2008, 5, 275-284.	0.0	1
99	Parathyroid Hormone-Induced Modulation of the Bone Marrow Microenvironment Reduces Leukemic Stem Cells in Murine Chronic Myelogenous-Leukemia-Like Disease Via a TGFbeta-Dependent Pathway. Blood, 2011, 118, 1670-1670.	1.4	1
100	Differential Regulation of Myeloid Leukemias by the Bone Marrow Microenvironment. Blood, 2012, 120, 1245-1245.	1.4	1
101	The Role of Hypoxia-Induced Factors. , 2010, , 107-123.		1
102	Intervertebral disc: a rising star in the skeleton galaxy (ASBMR 2012). IBMS BoneKEy, 2013, 10, .	0.0	0
103	Development of the skeleton. , 2021, , 39-73.		0
104	Natriuretic peptides, cGMP and growth plate development. BoneKEy Osteovision, 0, , .	0.6	0
105	A novel PTH/PTHrP receptor (PPRc) mutation: The ongoing tale of PPRc and the growth plate becomes more complex. BoneKEy Osteovision, 0, , .	0.6	0
106	Biological Pathways and In Vivo Anti-Tumor Activity Induced by Atiprimod in Multiple Myeloma (MM).. Blood, 2006, 108, 3455-3455.	1.4	0
107	In Vivo Effects of Zoledronic Acid on Bone Remodeling.. Blood, 2007, 110, 3520-3520.	1.4	0
108	Parathyroid Hormone-Induced Modulation of the Bone Marrow Microenvironment Inhibits the Development of Murine Chronic Myelogenous-Leukemia-Like Disease. Blood, 2010, 116, 937-937.	1.4	0

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109	Fetal Growth Cartilage:. Methods in Molecular Biology, 2021, 2245, 53-84.	0.9	0