

Karen M Lyons

List of Publications by Year in descending order

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105
papers

9,044
citations

38660

50
h-index

42291

92
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116
all docs

116
docs citations

116
times ranked

9994
citing authors

#	ARTICLE	IF	CITATIONS
1	gp130/STAT3 signaling is required for homeostatic proliferation and anabolism in postnatal growth plate and articular chondrocytes. <i>Communications Biology</i> , 2022, 5, 64.	2.0	7
2	A requirement for STAT3 in limb development. <i>FASEB Journal</i> , 2021, 35, .	0.2	0
3	Loss of KDM4B exacerbates bone-fat imbalance and mesenchymal stromal cell exhaustion in skeletal aging. <i>Cell Stem Cell</i> , 2021, 28, 1057-1073.e7.	5.2	77
4	<sc>CCN1</sc>/Cyr61 Is Required in Osteoblasts for Responsiveness to the Anabolic Activity of <sc>PTH</sc>. <i>Journal of Bone and Mineral Research</i> , 2020, 35, 2289-2300.	3.1	7
5	TGF β ² as a gatekeeper of BMP action in the developing growth plate. <i>Bone</i> , 2020, 137, 115439.	1.4	10
6	Endogenous CCN family member WISP1 inhibits trauma-induced heterotopic ossification. <i>JCI Insight</i> , 2020, 5, .	2.3	12
7	CTGF/CCN2 facilitates LRP4-mediated formation of the embryonic neuromuscular junction. <i>EMBO Reports</i> , 2020, 21, e48462.	2.0	15
8	Homozygous missense variant in <i>BMPRI1A</i> resulting in BMPR signaling disruption and syndromic features. <i>Molecular Genetics & Genomic Medicine</i> , 2019, 7, e969.	0.6	8
9	BMPs, TGF β ² , and border security at the interzone. <i>Current Topics in Developmental Biology</i> , 2019, 133, 153-170.	1.0	24
10	The TGF β ² type I receptor TGF β ² RI functions as an inhibitor of BMP signaling in cartilage. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 15570-15579.	3.3	29
11	FoxD1-driven CCN2 deletion causes axial skeletal deformities, pulmonary hypoplasia, and neonatal asphyctic death. <i>Journal of Cell Communication and Signaling</i> , 2019, 13, 573-577.	1.8	3
12	Characterization of bone morphology in CCN5/WISP5 knockout mice. <i>Journal of Cell Communication and Signaling</i> , 2018, 12, 265-270.	1.8	8
13	CYR61/CCN1 Regulates Sclerostin Levels and Bone Maintenance. <i>Journal of Bone and Mineral Research</i> , 2018, 33, 1076-1089.	3.1	27
14	A genetic signature of the evolution of loss of flight in the Galapagos cormorant. <i>Science</i> , 2017, 356, .	6.0	76
15	BmpR1A is a major type 1 BMP receptor for BMP-Smad signaling during skull development. <i>Developmental Biology</i> , 2017, 429, 260-270.	0.9	22
16	CCN2 reduction mediates protective effects of BMP7 treatment in obstructive nephropathy. <i>Journal of Cell Communication and Signaling</i> , 2017, 11, 39-48.	1.8	6
17	Design and Analysis of CCN Gene Activity Using CCN Knockout Mice Containing LacZ Reporters. <i>Methods in Molecular Biology</i> , 2017, 1489, 325-345.	0.4	2
18	ATP6V1H Deficiency Impairs Bone Development through Activation of MMP9 and MMP13. <i>PLoS Genetics</i> , 2017, 13, e1006481.	1.5	42

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19	Smad2 and Smad3 Regulate Chondrocyte Proliferation and Differentiation in the Growth Plate. <i>PLoS Genetics</i> , 2016, 12, e1006352.	1.5	43
20	Role of CCN2 in Amino Acid Metabolism of Chondrocytes. <i>Journal of Cellular Biochemistry</i> , 2016, 117, 927-937.	1.2	9
21	Deletion of BMP receptor type IB decreased bone mass in association with compromised osteoblastic differentiation of bone marrow mesenchymal progenitors. <i>Scientific Reports</i> , 2016, 6, 24256.	1.6	32
22	Report on the 8th international workshop on the CCN family of genes “Nice November 3-8, 2015. <i>Journal of Cell Communication and Signaling</i> , 2016, 10, 77-86.	1.8	3
23	TGF β ² and BMP Dependent Cell Fate Changes Due to Loss of Filamin B Produces Disc Degeneration and Progressive Vertebral Fusions. <i>PLoS Genetics</i> , 2016, 12, e1005936.	1.5	47
24	WNT1-induced Secreted Protein-1 (WISP1), a Novel Regulator of Bone Turnover and Wnt Signaling. <i>Journal of Biological Chemistry</i> , 2015, 290, 14004-14018.	1.6	79
25	NELL-1 in the treatment of osteoporotic bone loss. <i>Nature Communications</i> , 2015, 6, 7362.	5.8	93
26	Fibrosis and Hypoxia-Inducible Factor-1 α -Dependent Tumors of the Soft Tissue on Loss of Von Hippel-Lindau in Mesenchymal Progenitors. <i>American Journal of Pathology</i> , 2015, 185, 3090-3101.	1.9	9
27	The Type I BMP Receptor ACVR1/ALK2 is Required for Chondrogenesis During Development. <i>Journal of Bone and Mineral Research</i> , 2015, 30, 733-741.	3.1	59
28	CCN family protein 2 (CCN2) promotes the early differentiation, but inhibits the terminal differentiation of skeletal myoblasts. <i>Journal of Biochemistry</i> , 2015, 157, 91-100.	0.9	25
29	Members of the CCN Family of Matricellular Proteins are Required for the Formation and Maintenance of Multiple Skeletal Tissues. <i>FASEB Journal</i> , 2015, 29, 92.2.	0.2	0
30	Repression of Sox9 by Jag1 Is Continuously Required to Suppress the Default Chondrogenic Fate of Vascular Smooth Muscle Cells. <i>Developmental Cell</i> , 2014, 31, 707-721.	3.1	65
31	Connective tissue growth factor is expressed in bone marrow stromal cells and promotes interleukin-7-dependent B lymphopoiesis. <i>Haematologica</i> , 2014, 99, 1149-1156.	1.7	18
32	CCN2 as a Novel Molecule Supporting Energy Metabolism of Chondrocytes. <i>Journal of Cellular Biochemistry</i> , 2014, 115, 854-865.	1.2	22
33	TGF β ² signaling in cartilage development and maintenance. <i>Birth Defects Research Part C: Embryo Today Reviews</i> , 2014, 102, 37-51.	3.6	217
34	GATA4 Is Essential for Bone Mineralization via ER α and TGF β ² /BMP Pathways. <i>Journal of Bone and Mineral Research</i> , 2014, 29, 2676-2687.	3.1	35
35	Whole-Mount Skeletal Staining. <i>Methods in Molecular Biology</i> , 2014, 1130, 113-121.	0.4	172
36	Automated Cell Detection and Morphometry on Growth Plate Images of Mouse Bone. <i>Applied Mathematics</i> , 2014, 05, 2866-2880.	0.1	2

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37	CCN2/CTGF is required for matrix organization and to protect growth plate chondrocytes from cellular stress. <i>Journal of Cell Communication and Signaling</i> , 2013, 7, 219-230.	1.8	27
38	Connective tissue growth factor regulates adipocyte differentiation of mesenchymal stromal cells and facilitates leukemia bone marrow engraftment. <i>Blood</i> , 2013, 122, 357-366.	0.6	77
39	Human Developmental Chondrogenesis as a Basis for Engineering Chondrocytes from Pluripotent Stem Cells. <i>Stem Cell Reports</i> , 2013, 1, 575-589.	2.3	113
40	Smad7 regulates terminal maturation of chondrocytes in the growth plate. <i>Developmental Biology</i> , 2013, 382, 375-384.	0.9	35
41	Hypoxia-inducible Factor (HIF)-1 α and CCN2 Form a Regulatory Circuit in Hypoxic Nucleus Pulposus Cells. <i>Journal of Biological Chemistry</i> , 2013, 288, 12654-12666.	1.6	40
42	Hemizygous deletion of CTGF/CCN2 does not suffice to prevent fibrosis of the severely injured kidney. <i>Matrix Biology</i> , 2012, 31, 421-431.	1.5	27
43	CCN2/Connective Tissue Growth Factor Is Essential for Pericyte Adhesion and Endothelial Basement Membrane Formation during Angiogenesis. <i>PLoS ONE</i> , 2012, 7, e30562.	1.1	114
44	Connective Tissue Growth Factor Is Required for Normal Follicle Development and Ovulation. <i>Molecular Endocrinology</i> , 2011, 25, 1740-1759.	3.7	85
45	Roles for CCN2 in normal physiological processes. <i>Cellular and Molecular Life Sciences</i> , 2011, 68, 3209-3217.	2.4	96
46	CCN family 2/connective tissue growth factor (CCN2/CTGF) promotes osteoclastogenesis via induction of and interaction with dendritic cell-specific transmembrane protein (DC-STAMP). <i>Journal of Bone and Mineral Research</i> , 2011, 26, 351-363.	3.1	70
47	Systems genetics analysis of mouse chondrocyte differentiation. <i>Journal of Bone and Mineral Research</i> , 2011, 26, 747-760.	3.1	14
48	Smad6 is essential to limit BMP signaling during cartilage development. <i>Journal of Bone and Mineral Research</i> , 2011, 26, 2498-2510.	3.1	60
49	Effect of localization, length and orientation of chondrocytic primary cilium on murine growth plate organization. <i>Journal of Theoretical Biology</i> , 2011, 285, 147-155.	0.8	19
50	Expression of connective tissue growth factor (CTGF/CCN2) in breast cancer cells is associated with increased migration and angiogenesis. <i>International Journal of Oncology</i> , 2011, 38, 1741-7.	1.4	43
51	Stage-specific Control of Connective Tissue Growth Factor (CTGF/CCN2) Expression in Chondrocytes by Sox9 and β -Catenin. <i>Journal of Biological Chemistry</i> , 2010, 285, 27702-27712.	1.6	34
52	BMP Signaling Is Necessary for Patterning the Sensory and Nonsensory Regions of the Developing Mammalian Cochlea. <i>Journal of Neuroscience</i> , 2010, 30, 15044-15051.	1.7	143
53	Granulosa Cell-Expressed BMPRI1A and BMPRI1B Have Unique Functions in Regulating Fertility but Act Redundantly to Suppress Ovarian Tumor Development. <i>Molecular Endocrinology</i> , 2010, 24, 1251-1266.	3.7	97
54	Cooperative Regulation of Cell Proliferation and Differentiation by CCN2 and CCN3. , 2010, , 105-109.		0

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55	BMPs in Development. , 2010, , 1905-1912.		1
56	BMP Signaling in Skeletogenesis. , 2010, , 125-136.		1
57	Connective Tissue Growth Factor (CTGF) Inactivation Leads to Defects in Islet Cell Lineage Allocation and β -Cell Proliferation during Embryogenesis. Molecular Endocrinology, 2009, 23, 324-336.	3.7	77
58	Molecular Regulation of Limb Growth. Journal of Bone and Joint Surgery - Series A, 2009, 91, 47-52.	1.4	14
59	BMP Signaling and Podocyte Markers are Decreased in Human Diabetic Nephropathy in Association with CTGF Overexpression. Journal of Histochemistry and Cytochemistry, 2009, 57, 623-631.	1.3	50
60	BMP canonical Smad signaling through <i>Smad1</i> and <i>Smad5</i> is required for endochondral bone formation. Development (Cambridge), 2009, 136, 1093-1104.	1.2	304
61	Smad signaling in skeletal development and regeneration. Cytokine and Growth Factor Reviews, 2009, 20, 379-388.	3.2	132
62	CCN family 2/connective tissue growth factor (CCN2/CTGF) regulates the expression of Vegf through Hif-1 α expression in a chondrocytic cell line, HCS-2/8, under hypoxic condition. Bone, 2009, 44, 24-31.	1.4	42
63	Cooperative Regulation of Chondrocyte Differentiation by CCN2 and CCN3 Shown by a Comprehensive Analysis of the CCN Family Proteins in Cartilage. Journal of Bone and Mineral Research, 2008, 23, 1751-1764.	3.1	107
64	Connective tissue growth factor/CCN2-null mouse embryonic fibroblasts retain intact transforming growth factor- β responsiveness. Experimental Cell Research, 2008, 314, 1094-1104.	1.2	34
65	CCN Family 2/Connective Tissue Growth Factor Modulates BMP Signalling as a Signal Conductor, Which Action Regulates the Proliferation and Differentiation of Chondrocytes. Journal of Biochemistry, 2008, 145, 207-216.	0.9	82
66	Bone Morphogenetic Proteins and the Skeleton. , 2008, , 1167-1175.		1
67	A New Model for Growth Factor Activation: Type II Receptors Compete with the Prodomain for BMP-7. Journal of Molecular Biology, 2008, 381, 1025-1039.	2.0	94
68	Functional requirement of CCN2 for intramembranous bone formation in embryonic mice. Biochemical and Biophysical Research Communications, 2008, 366, 450-456.	1.0	50
69	Dynamic Analysis of the Expression of the TGF β 2/SMAD2 Pathway and CCN2/CTGF during Early Steps of Tooth Development. Cells Tissues Organs, 2008, 187, 199-210.	1.3	16
70	Focal Adhesion Kinase/Src Suppresses Early Chondrogenesis. Journal of Biological Chemistry, 2008, 283, 9239-9247.	1.6	49
71	Connective Tissue Growth Factor Is Necessary for Retinal Capillary Basal Lamina Thickening in Diabetic Mice. Journal of Histochemistry and Cytochemistry, 2008, 56, 785-792.	1.3	56
72	CTGF Inhibits BMP-7 Signaling in Diabetic Nephropathy. Journal of the American Society of Nephrology: JASN, 2008, 19, 2098-2107.	3.0	123

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73	Angiogenesis Is Not Impaired in Connective Tissue Growth Factor (CTGF) Knock-out Mice. <i>Journal of Histochemistry and Cytochemistry</i> , 2007, 55, 1139-1147.	1.3	41
74	The 5' untranslated regions (UTRs) of CCN1, CCN2, and CCN4 exhibit cryptic promoter activity. <i>Journal of Cell Communication and Signaling</i> , 2007, 1, 17-32.	1.8	8
75	CCN2 (Connective Tissue Growth Factor) is essential for extracellular matrix production and integrin signaling in chondrocytes. <i>Journal of Cell Communication and Signaling</i> , 2007, 1, 45-58.	1.8	83
76	BMP Signaling in the Cartilage Growth Plate. <i>Current Topics in Developmental Biology</i> , 2006, 76, 1-48.	1.0	104
77	Tracking Expression of Virally Mediated BMP-2 in Gene Therapy for Bone Repair. <i>Clinical Orthopaedics and Related Research</i> , 2006, 450, 238-245.	0.7	24
78	Cell mixing at a neural crest-mesoderm boundary and deficient ephrin-Eph signaling in the pathogenesis of craniosynostosis. <i>Human Molecular Genetics</i> , 2006, 15, 1319-1328.	1.4	184
79	Osteogenic differentiation of mouse adipose-derived adult stromal cells requires retinoic acid and bone morphogenetic protein receptor type IB signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 12335-12340.	3.3	130
80	BMPs regulate multiple aspects of growth-plate chondrogenesis through opposing actions on FGF pathways. <i>Development (Cambridge)</i> , 2006, 133, 4667-4678.	1.2	186
81	CCN2 Is Necessary for Adhesive Responses to Transforming Growth Factor- β 1 in Embryonic Fibroblasts. <i>Journal of Biological Chemistry</i> , 2006, 281, 10715-10726.	1.6	140
82	Distinct developmental programs require different levels of Bmp signaling during mouse retinal development. <i>Development (Cambridge)</i> , 2005, 132, 913-923.	1.2	104
83	Sirenomelia in Bmp7 and Tsg compound mutant mice: requirement for Bmp signaling in the development of ventral posterior mesoderm. <i>Development (Cambridge)</i> , 2005, 132, 2489-2499.	1.2	75
84	BMP signaling stimulates cellular differentiation at multiple steps during cartilage development. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 18023-18027.	3.3	160
85	Bmpr1a and Bmpr1b have overlapping functions and are essential for chondrogenesis in vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 5062-5067.	3.3	403
86	GENETIC ANALYSIS OF CCN GENE FUNCTION IN MAMMALIAN DEVELOPMENT. , 2005, , 135-152.		1
87	A phylogenetically conserved cis-regulatory module in the Msx2 promoter is sufficient for BMP-dependent transcription in murine and Drosophila embryos. <i>Development (Cambridge)</i> , 2004, 131, 5153-5165.	1.2	114
88	Signaling through BMP type 1 receptors is required for development of interneuron cell types in the dorsal spinal cord. <i>Development (Cambridge)</i> , 2004, 131, 5393-5403.	1.2	135
89	Epithelial Bmpr1a regulates differentiation and proliferation in postnatal hair follicles and is essential for tooth development. <i>Development (Cambridge)</i> , 2004, 131, 2257-2268.	1.2	344
90	CCN2 (Connective Tissue Growth Factor) Promotes Fibroblast Adhesion to Fibronectin. <i>Molecular Biology of the Cell</i> , 2004, 15, 5635-5646.	0.9	152

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91	Connective tissue growth factor expression and Smad signaling during mouse heart development and myocardial infarction. <i>Developmental Dynamics</i> , 2004, 231, 542-550.	0.8	95
92	Multiple functions of BMPs in chondrogenesis. <i>Journal of Cellular Biochemistry</i> , 2004, 93, 93-103.	1.2	276
93	Tempting fate: BMP signals for cardiac morphogenesis. <i>Cytokine and Growth Factor Reviews</i> , 2003, 14, 1-4.	3.2	62
94	BMP signaling is required for septation of the outflow tract of the mammalian heart. <i>Development (Cambridge)</i> , 2003, 130, 209-220.	1.2	181
95	Connective tissue growth factor coordinates chondrogenesis and angiogenesis during skeletal development. <i>Development (Cambridge)</i> , 2003, 130, 2779-2791.	1.2	637
96	BMPs in Development. , 2003, , 833-837.		1
97	Bone morphogenetic protein-3 is a negative regulator of bone density. <i>Nature Genetics</i> , 2001, 27, 84-88.	9.4	365
98	Muellerian Inhibiting Substance Signaling Uses a Bone Morphogenetic Protein (BMP)-Like Pathway Mediated by ALK2 and Induces Smad6 Expression. <i>Molecular Endocrinology</i> , 2001, 15, 946-959.	3.7	148
99	BMP3: To Be or Not To Be a BMP. <i>Journal of Bone and Joint Surgery - Series A</i> , 2001, 83, S1-56â€“S1â€“62.	1.4	61
100	Mice lacking Bmp6 function. <i>Genesis</i> , 1998, 22, 321-339.	3.1	319
101	Structure and sequence of the mouse bmp6 gene. <i>Mammalian Genome</i> , 1997, 8, 212-214.	1.0	15
102	Signaling Pathways in Skeletal Formation: A Role for BMP Receptors. <i>Annals of the New York Academy of Sciences</i> , 1996, 785, 59-69.	1.8	39
103	Bone Morphogenetic Protein-2. <i>Clinical Orthopaedics and Related Research</i> , 1996, 324, 39-46.	0.7	261
104	Colocalization of BMP 7 and BMP 2 RNAs suggests that these factors cooperatively mediate tissue interactions during murine development. <i>Mechanisms of Development</i> , 1995, 50, 71-83.	1.7	412
105	The DVR Gene Family in Embryonic Development. , 1993, , 125-137.		1