Kurt David Hankenson

List of Publications by Year
in descending order

126 papers	9,310 citations	50276 46 h-index	43889 91 g-index
134 all docs	134 docs citations	134 times ranked	15772 citing authors

#	Article	IF	Citations
1	Bioactive glass particles as multiâ€functional therapeutic carriers against antibioticâ€resistant bacteria. Journal of the American Ceramic Society, 2022, 105, 1778-1789.	3.8	2
2	Notch signaling enhances bone regeneration in the zebrafish mandible. Development (Cambridge), 2022, 149, .	2.5	10
3	Silver-doped bioactive glass particles for in vivo bone tissue regeneration and enhanced methicillin-resistant Staphylococcus aureus (MRSA) inhibition. Materials Science and Engineering C, 2021, 120, 111693.	7.3	21
4	Genome-wide association study implicates novel loci and reveals candidate effector genes for longitudinal pediatric bone accrual. Genome Biology, 2021, 22, 1.	8.8	239
5	<scp>CRISPRâ€Cas9</scp>â€"Mediated Genome Editing Confirms <scp><i>EPDR1</i></scp> as an Effector Gene at the <scp>BMD GWAS</scp>â€Implicated â€˜<scp><i>STARD3NL</i></scp>â€™ Locus. JBMR Plus, 2021, 5, e10531.	2.7	5
6	Compound deletion of thrombospondin-1 and -2 results in a skeletal phenotype not predicted by the single gene knockouts. Bone, 2021, 153, 116156.	2.9	2
7	Biological constraints on GWAS SNPs at suggestive significance thresholds reveal additional BMI loci. ELife, 2021, 10, .	6.0	27
8	Thrombospondinâ€2 spatiotemporal expression in skeletal fractures. Journal of Orthopaedic Research, 2021, 39, 30-41.	2.3	3
9	CTRP3 Regulates Endochondral Ossification and Bone Remodeling During Fracture Healing. Journal of Orthopaedic Research, 2020, 38, 996-1006.	2.3	9
10	Calvaria critical-size defects in rats using piezoelectric equipment: a comparison with the classic trephine. Injury, 2020, 51, 1509-1514.	1.7	2
11	Solâ€"Gel-Derived Bioactive and Antibacterial Multi-Component Thin Films by the Spin-Coating Technique. ACS Biomaterials Science and Engineering, 2020, 6, 5549-5562.	5.2	17
12	Canonical Notch signaling is required for bone morphogenetic protein-mediated human osteoblast differentiation. Stem Cells, 2020, 38, 1332-1347.	3.2	22
13	Modulation of Notch1 signaling regulates bone fracture healing. Journal of Orthopaedic Research, 2020, 38, 2350-2361.	2.3	24
14	Evaluation of global gene expression in regenerate tissues during Masquelet treatment. Journal of Orthopaedic Research, 2020, 38, 2120-2130.	2.3	4
15	A PDGFRÎ²-PI3K signaling axis mediates periosteal cell activation during fracture healing. PLoS ONE, 2019, 14, e0223846.	2.5	9
16	An anionic, endosome-escaping polymer to potentiate intracellular delivery of cationic peptides, biomacromolecules, and nanoparticles. Nature Communications, 2019, 10, 5012.	12.8	58
17	Review of Animal Models of Comorbidities in Fractureâ€Healing Research. Journal of Orthopaedic Research, 2019, 37, 2491-2498.	2.3	27
18	Suppression of Notch Signaling in Osteoclasts Improves Bone Regeneration and Healing. Journal of Orthopaedic Research, 2019, 37, 2089-2103.	2.3	12

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19	Contextual Regulation of Skeletal Physiology by Notch Signaling. Current Osteoporosis Reports, 2019, 17, 217-225.	3.6	7
20	Genome-scale Capture C promoter interactions implicate effector genes at GWAS loci for bone mineral density. Nature Communications, 2019, 10, 1260.	12.8	101
21	Cellular biology of fracture healing. Journal of Orthopaedic Research, 2019, 37, 35-50.	2.3	304
22	Bone healing in an aged murine fracture model is characterized by sustained callus inflammation and decreased cell proliferation. Journal of Orthopaedic Research, 2018, 36, 149-158.	2.3	34
23	Chemokine receptorâ€7 (CCR7) deficiency leads to delayed development of joint damage and functional deficits in a murine model of osteoarthritis. Journal of Orthopaedic Research, 2018, 36, 864-875.	2.3	19
24	Deficiency of the pattern-recognition receptor CD14 protects against joint pathology and functional decline in a murine model of osteoarthritis. PLoS ONE, 2018, 13, e0206217.	2.5	21
25	Skeletal Involvement in Alagille Syndrome. , 2018, , 121-135.		1
26	Fracture Apparatus Design and Protocol Optimization for Closed-stabilized Fractures in Rodents. Journal of Visualized Experiments, 2018, , .	0.3	7
27	R-spondin-2 is a Wnt agonist that regulates osteoblast activity and bone mass. Bone Research, 2018, 6, 24.	11.4	39
28	Ethical use of animal models in musculoskeletal research. Journal of Orthopaedic Research, 2017, 35, 740-751.	2.3	15
29	Wnt10b and Dkk-1 gene therapy differentially influenced trabecular bone architecture, soft tissue integrity, and osteophytosis in a skeletally mature rat model of osteoarthritis. Connective Tissue Research, 2017, 58, 542-552.	2.3	11
30	Implicating candidate genes at GWAS signals by leveraging topologically associating domains. European Journal of Human Genetics, 2017, 25, 1286-1289.	2.8	18
31	Stimulation of Notch Signaling in Mouse Osteoclast Precursors. Journal of Visualized Experiments, 2017, , .	0.3	6
32	Intraoperative delivery of the Notch ligand Jagged-1 regenerates appendicular and craniofacial bone defects. Npj Regenerative Medicine, 2017, 2, 32.	5.2	39
33	Stimulating Fracture Healing in Ischemic Environments: Does Oxygen Direct Stem Cell Fate during Fracture Healing?. Frontiers in Cell and Developmental Biology, 2017, 5, 45.	3.7	26
34	An Injured <i>Psittacosaurus</i> (Dinosauria: Ceratopsia) From the Yixian Formation (Liaoning, China): Implications for <i>Psittacosaurus</i> Biology. Anatomical Record, 2016, 299, 897-906.	1.4	21
35	THBS2 Is a Candidate Modifier of Liver Disease Severity in Alagille Syndrome. Cellular and Molecular Gastroenterology and Hepatology, 2016, 2, 663-675.e2.	4.5	35
36	Jagged1 expression by osteoblast-lineage cells regulates trabecular bone mass and periosteal expansion in mice. Bone, 2016, 91, 64-74.	2.9	56

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37	A computational model to explore the role of angiogenic impairment on endochondral ossification during fracture healing. Biomechanics and Modeling in Mechanobiology, 2016, 15, 1279-1294.	2.8	23
38	Notch Signaling Promotes Osteoclast Maturation and Resorptive Activity. Journal of Cellular Biochemistry, 2015, 116, 2598-2609.	2.6	50
39	Synergistic Effects of SDF-1Î± and BMP-2 Delivery from Proteolytically Degradable Hyaluronic Acid Hydrogels for Bone Repair. Macromolecular Bioscience, 2015, 15, 1218-1223.	4.1	61
40	Extracellular matrix networks in bone remodeling. International Journal of Biochemistry and Cell Biology, 2015, 65, 20-31.	2.8	231
41	Type III collagen modulates fracture callus bone formation and early remodeling. Journal of Orthopaedic Research, 2015, 33, 675-684.	2.3	24
42	Thrombospondin-2 Expression During Retinal Vascular Development and Neovascularization. Journal of Ocular Pharmacology and Therapeutics, 2015, 31, 429-444.	1.4	7
43	Extracellular signaling molecules to promote fracture healing and bone regeneration. Advanced Drug Delivery Reviews, 2015, 94, 3-12.	13.7	237
44	Osteopathology in the Equine Distal Phalanx Associated With the Development and Progression of Laminitis. Veterinary Pathology, 2015, 52, 928-944.	1.7	24
45	Mutation in Osteoactivin Promotes Receptor Activator of NFÎºB Ligand (RANKL)-mediated Osteoclast Differentiation and Survival but Inhibits Osteoclast Function. Journal of Biological Chemistry, 2015, 290, 20128-20146.	3.4	32
46	Bone Regeneration. , 2015, , 313-333.		19
47	Immunomodulation by mesenchymal stem cells combats the foreign body response to cell-laden synthetic hydrogels. Biomaterials, 2015, 41, 79-88.	11.4	122
48	Osseointegrative Properties of Electrospun Hydroxyapatite-Containing Nanofibrous Chitosan Scaffolds. Tissue Engineering - Part A, 2015, 21, 970-981.	3.1	36
49	Mouse models of telomere dysfunction phenocopy skeletal changes found in human age-related osteoporosis. DMM Disease Models and Mechanisms, 2014, 7, 583-92.	2.4	30
50	Fractures in Geriatric Mice Show Decreased Callus Expansion and Bone Volume. Clinical Orthopaedics and Related Research, 2014, 472, 3523-3532.	1.5	51
51	R-spondins: Novel matricellular regulators of the skeleton. Matrix Biology, 2014, 37, 157-161.	3.6	38
52	Jagged1 immobilization to an osteoconductive polymer activates the Notch signaling pathway and induces osteogenesis. Journal of Biomedical Materials Research - Part A, 2014, 102, 1558-1567.	4.0	50
53	Notch Signaling in Mesenchymal Stem Cells Harvested From Geriatric Mice. Journal of Orthopaedic Trauma, 2014, 28, S20-S23.	1.4	18
54	A ChIP-seq-Defined Genome-Wide Map of MEF2C Binding Reveals Inflammatory Pathways Associated with Its Role in Bone Density Determination. Calcified Tissue International, 2014, 94, 396-402.	3.1	17

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55	Type III Collagen Regulates Osteoblastogenesis and the Quantity of Trabecular Bone. Calcified Tissue International, 2014, 94, 621-631.	3.1	60
56	Megakaryocytes are mechanically responsive and influence osteoblast proliferation and differentiation. Bone, 2014, 66, 111-120.	2.9	35
57	Biological perspectives of delayed fracture healing. Injury, 2014, 45, S8-S15.	1.7	103
58	Cyp1B1 expression promotes angiogenesis by suppressing NF-Î°B activity. American Journal of Physiology - Cell Physiology, 2013, 305, C1170-C1184.	4.6	48
59	Brief Report: Long-Term Functional Engraftment of Mesenchymal Progenitor Cells in a Mouse Model of Accelerated Aging. Stem Cells, 2013, 31, 607-611.	3.2	22
60	PKCÎ´ Is Required for Jagged-1 Induction of Human Mesenchymal Stem Cell Osteogenic Differentiation. Stem Cells, 2013, 31, 1181-1192.	3.2	60
61	Disruption of thrombospondinâ€2 accelerates ischemic fracture healing. Journal of Orthopaedic Research, 2013, 31, 935-943.	2.3	21
62	Osteoblast-Targeted suppression of PPARÎ³ increases osteogenesis through activation of mTOR signaling. Stem Cells, 2013, 31, 2183-2192.	3.2	72
63	Multiple Recombinant Adeno-Associated Viral Vector Serotypes Display PersistentIn VivoGene Expression in Vector-Transduced Rat Stifle Joints. Human Gene Therapy Methods, 2013, 24, 185-194.	2.1	6
64	The role of oxygen as a regulator of stem cell fate during fracture repair in TSP2â€null mice. Journal of Orthopaedic Research, 2013, 31, 1585-1596.	2.3	32
65	Mesenchymal Stem Cells in Bone Regeneration. Advances in Wound Care, 2013, 2, 306-316.	5.1	228
66	Systemic Inhibition of Canonical Notch Signaling Results in Sustained Callus Inflammation and Alters Multiple Phases of Fracture Healing. PLoS ONE, 2013, 8, e68726.	2.5	56
67	A Potential Role for the Myeloid Lineage in Leptin-regulated Bone Metabolism. Hormone and Metabolic Research, 2012, 44, 01-05.	1.5	16
68	Effects of Donor Characteristics and Ex Vivo Expansion on Canine Mesenchymal Stem Cell Properties: Implications for MSC-Based Therapies. Cell Transplantation, 2012, 21, 2189-2200.	2.5	47
69	The transcription factor osterix (SP7) regulates BMP6â€induced human osteoblast differentiation. Journal of Cellular Physiology, 2012, 227, 2677-2685.	4.1	84
70	Notch signaling components are upregulated during both endochondral and intramembranous bone regeneration. Journal of Orthopaedic Research, 2012, 30, 296-303.	2.3	65
71	Notch signaling through the Jaggedâ€1 ligand regulates mesenchymal progenitor differentiation and tissue regeneration. FASEB Journal, 2012, 26, .	0.5	0
72	Angiogenesis in bone regeneration. Injury, 2011, 42, 556-561.	1.7	396

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73	Time series gene expression profiling and temporal regulatory pathway analysis of BMP6 induced osteoblast differentiation and mineralization. BMC Systems Biology, 2011, 5, 82.	3.0	16
74	The Muenke syndrome mutation (<i>FgfR3^{P244R}</i>) causes cranial base shortening associated with growth plate dysfunction and premature perichondrial ossification in murine basicranial synchondroses. Developmental Dynamics, 2011, 240, 2584-2596.	1.8	33
75	Zoledronic acid inhibits macrophage SOCS3 expression and enhances cytokine production. Journal of Cellular Biochemistry, 2011, 112, 3364-3372.	2.6	31
76	Integration of BMP, Wnt, and notch signaling pathways in osteoblast differentiation. Journal of Cellular Biochemistry, 2011, 112, 3491-3501.	2.6	410
77	Evaluation of equine peripheral blood apheresis product, bone marrow, and adipose tissue as sources of mesenchymal stem cells and their differentation potential. American Journal of Veterinary Research, 2011, 72, 127-133.	0.6	23
78	Ectopic Expression of Col2.3 and Col3.6 Promoters in the Brain and Association with Leptin Signaling. Cells Tissues Organs, 2011, 194, 268-273.	2.3	23
79	Growth Factors: Beyond Bone Morphogenetic Proteins. Journal of Orthopaedic Trauma, 2010, 24, 543-546.	1.4	59
80	Use of quantitative polymerase chain reaction analysis to compare quantity and stability of isolated murine DNA. Lab Animal, 2010, 39, 283-289.	0.4	5
81	Increased Marrow-Derived Osteoprogenitor Cells and Endosteal Bone Formation in Mice Lacking Thrombospondin 2. Journal of Bone and Mineral Research, 2010, 15, 851-862.	2.8	85
82	Thrombospondins and Novel TSR-containing Proteins, R-spondins, Regulate Bone Formation and Remodeling. Current Osteoporosis Reports, 2010, 8, 68-76.	3.6	37
83	Identification of osteoconductive and biodegradable polymers from a combinatorial polymer library. Journal of Biomedical Materials Research - Part A, 2010, 93A, 807-816.	4.0	12
84	Leptin Functions Peripherally to Regulate Differentiation of Mesenchymal Progenitor Cells. Stem Cells, 2010, 28, 1071-1080.	3.2	95
85	Thrombospondin-2 is an endogenous adipocyte inhibitor. Matrix Biology, 2010, 29, 549-556.	3.6	29
86	Thrombospondin-2 regulates matrix mineralization in MC3T3-E1 pre-osteoblasts. Bone, 2010, 46, 464-471.	2.9	41
87	Wnt11 Promotes Osteoblast Maturation and Mineralization through R-spondin 2. Journal of Biological Chemistry, 2009, 284, 14117-14125.	3.4	96
88	Thrombospondin 2 Potentiates Notch3/Jagged1 Signaling. Journal of Biological Chemistry, 2009, 284, 7866-7874.	3.4	58
89	GAGE: generally applicable gene set enrichment for pathway analysis. BMC Bioinformatics, 2009, 10, 161.	2.6	1,132
90	Thrombospondin-2 and SPARC/osteonectin are critical regulators of bone remodeling. Journal of Cell Communication and Signaling, 2009, 3, 227-238.	3.4	80

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91	Thrombospondin-2 Influences the Proportion of Cartilage and Bone During Fracture Healing. Journal of Bone and Mineral Research, 2009, 24, 1043-1054.	2.8	67
92	Screening of a Biodegradable Polymer Library for Optimal Scaffolding for Mineralized Tissue Engineering. , 2009, , .		0
93	Critical Role of Activating Transcription Factor 4 in the Anabolic Actions of Parathyroid Hormone in Bone. PLoS ONE, 2009, 4, e7583.	2.5	67
94	Disruption of cellâ€"matrix interactions by heparin enhances mesenchymal progenitor adipocyte differentiation. Experimental Cell Research, 2008, 314, 3382-3391.	2.6	38
95	Learning transcriptional regulatory networks from high throughput gene expression data using continuous three-way mutual information. BMC Bioinformatics, 2008, 9, 467.	2.6	60
96	Skeletal Abnormalities in Mice Lacking Extracellular Matrix Proteins, Thrombospondin-1, Thrombospondin-3, Thrombospondin-5, and Type IX Collagen. American Journal of Pathology, 2008, 172, 1664-1674.	3.8	84
97	What Is Your Diagnosis?. Journal of the American Veterinary Medical Association, 2008, 232, 839-840.	0.5	2
98	Systemic Mesenchymal Stem Cell Delivery and Axial Mechanical Stimulation Accelerate Fracture Healing. , 2008, , .		0
99	Wnt Signaling Stimulates Osteoblastogenesis of Mesenchymal Precursors by Suppressing CCAAT/Enhancer-binding Protein Î± and Peroxisome Proliferator-activated Receptor Î³. Journal of Biological Chemistry, 2007, 282, 14515-14524.	3.4	350
100	Ectopic expression of Wnt10b decreases adiposity and improves glucose homeostasis in obese rats. American Journal of Physiology - Endocrinology and Metabolism, 2007, 293, E726-E736.	3.5	39
101	Wnt10b Increases Postnatal Bone Formation by Enhancing Osteoblast Differentiation. Journal of Bone and Mineral Research, 2007, 22, 1924-1932.	2.8	244
102	Mice lacking thrombospondin 2 show an atypical pattern of endocortical and periosteal bone formation in response to mechanical loading. Bone, 2006, 38, 310-316.	2.9	22
103	Matricellular proteins: Extracellular modulators of bone development, remodeling, and regeneration. Bone, 2006, 38, 749-757.	2.9	221
104	Osteogenic differentiation of human mesenchymal stem cells is regulated by bone morphogenetic proteinâ€6. Journal of Cellular Biochemistry, 2006, 98, 538-554.	2.6	189
105	Novel explant model to study mechanotransduction and cellâ€"cell communication. Journal of Orthopaedic Research, 2006, 24, 1687-1698.	2.3	19
106	Pleiotropic Phenotype of a Genomic Knock-In of an RGS-Insensitive G184S Gnai2 Allele. Molecular and Cellular Biology, 2006, 26, 6870-6879.	2.3	75
107	Reduced Expression of Thrombospondins and Craniofacial Dysmorphism in Mice Overexpressing Fra1. Journal of Bone and Mineral Research, 2005, 21, 596-604.	2.8	17
108	Mice with a Disruption of the Thrombospondin 3 Gene Differ in Geometric and Biomechanical Properties of Bone and Have Accelerated Development of the Femoral Head. Molecular and Cellular Biology, 2005, 25, 5599-5606.	2.3	54

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109	Regulation of osteoblastogenesis and bone mass by Wnt10b. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 3324-3329.	7.1	778
110	Increased osteoblastogenesis and decreased bone resorption protect against ovariectomy-induced bone loss in thrombospondin-2-null mice. Matrix Biology, 2005, 24, 362-370.	3.6	22
111	A simple method for stem cell labeling with fluorine 18. Nuclear Medicine and Biology, 2005, 32, 701-705.	0.6	51
112	Huntingtin Interacting Protein 1 mutations lead to abnormal hematopoiesis, spinal defects and cataracts. Human Molecular Genetics, 2004, 13, 851-867.	2.9	32
113	Animal models of tendon and ligament injuries for tissue engineering applications. Biomaterials, 2004, 25, 1715-1722.	11.4	57
114	Gene Targeting in Stem Cells from Individuals with Osteogenesis Imperfecta. Science, 2004, 303, 1198-1201.	12.6	271
115	Skeletal dysplasia and male infertility locus on mouse chromosome 9. Genomics, 2004, 83, 951-960.	2.9	6
116	Megakaryocytes require thrombospondin-2 for normal platelet formation and function. Blood, 2003, 101, 3915-3923.	1.4	45
117	Diminished Callus Size and Cartilage Synthesis in Î±1Î²1 Integrin-Deficient Mice during Bone Fracture Healing. American Journal of Pathology, 2002, 160, 1779-1785.	3.8	86
118	Thrombospondin 2 Inhibits Microvascular Endothelial Cell Proliferation by a Caspase-independent Mechanism. Molecular Biology of the Cell, 2002, 13, 1893-1905.	2.1	108
119	The Secreted Protein Thrombospondin 2 Is an Autocrine Inhibitor of Marrow Stromal Cell Proliferation. Journal of Bone and Mineral Research, 2002, 17, 415-425.	2.8	63
120	Thrombospondin 2, a matricellular protein with diverse functions. Matrix Biology, 2000, 19, 557-568.	3.6	156
121	Omega-3 Fatty Acids Enhance Ligament Fibroblast Collagen Formation in Association with Changes in Interleukin-6 Production. Proceedings of the Society for Experimental Biology and Medicine, 2000, 223, 88-95.	1.8	64
122	Omegaâ€3 Fatty Acids Enhance Ligament Fibroblast Collagen Formation in Association with Changes in Interleukinâ€6â€ƒProduction. Proceedings of the Society for Experimental Biology and Medicine, 2000, 223, 88-95.	1.8	9
123	Porcine Anterior Cruciate Ligament Fibroblasts are Similar to Cells Derived from the Ligamentum Teres, Another Non-healing Intra-articular Ligament. Connective Tissue Research, 1999, 40, 13-21.	2.3	12
124	Microtox assay of trinitrotoluene, diaminonitrotoluene, and dinitromethylaniline mixtures. Bulletin of Environmental Contamination and Toxicology, 1991, 46, 550-553.	2.7	22
125	Evaluation of the â€œreference toxicantâ€• addition procedure for testing the toxicity of environmental samples. Bulletin of Environmental Contamination and Toxicology, 1991, 47, 540-546.	2.7	1
126	Lipolysis of bone marrow adipocytes is required to fuel bone and the marrow niche during energy deficits. ELife, 0, 11, .	6.0	27