Alexander G Robling

List of Publications by Year
in descending order

109	8,889	76326 40	42399 92
papers	citations	h-index	g-index

114	114	114	7779
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nmp4, a Regulator of Induced Osteoanabolism, Also Influences Insulin Secretion and Sensitivity. Calcified Tissue International, 2022, 110, 244-259.	3.1	3
2	A high-fat diet catalyzes progression to hyperglycemia in mice with selective impairment of insulin action in Glut4-expressing tissues. Journal of Biological Chemistry, 2022, 298, 101431.	3.4	8
3	The role of Meteorinâ€like in skeletal development and bone fracture healing. Journal of Orthopaedic Research, 2022, 40, 2510-2521.	2.3	10
4	Transiently increased serotonin has modest or no effects on bone mass accrual in growing female C57BL6/J or growing male and female Lrp5A214V mice. Bone, 2022, 158, 116307.	2.9	0
5	The Effect of Overexpression of Lrp5 on the Temporomandibular Joint. Cartilage, 2021, 13, 419S-426S.	2.7	2
6	Sensitive detection of Cre-mediated recombination using droplet digital PCR reveals Tg(BGLAP-Cre) and Tg(DMP1-Cre) are active in multiple non-skeletal tissues. Bone, 2021, 142, 115674.	2.9	10
7	Co-deletion of Lrp5 and Lrp6 in the skeleton severely diminishes bone gain from sclerostin antibody administration. Bone, 2021, 143, 115708.	2.9	11
8	Mechanical Loading-Driven Tumor Suppression Is Mediated by Lrp5-Dependent and Independent Mechanisms. Cancers, 2021, 13, 267.	3.7	8
9	Skeletal Functions of Voltage Sensitive Calcium Channels. Current Osteoporosis Reports, 2021, 19, 206-221.	3.6	9
10	Improving Bone Health by Optimizing the Anabolic Action of <scp>Wnt</scp> Inhibitor Multitargeting. JBMR Plus, 2021, 5, e10462.	2.7	7
11	Overexpression of Lrp5 enhanced the anti-breast cancer effects of osteocytes in bone. Bone Research, 2021, 9, 32.	11.4	25
12	Sclerostin Depletion Induces Inflammation in the Bone Marrow of Mice. International Journal of Molecular Sciences, 2021, 22, 9111.	4.1	5
13	The Wnt pathway: An important control mechanism in bone's response to mechanical loading. Bone, 2021, 153, 116087.	2.9	34
14	The effect of overexpression of Lrp5 on orthodontic tooth movement. Orthodontics and Craniofacial Research, 2021, 24, 430-437.	2.8	2
15	Generation and Characterization of Mouse Models for Skeletal Disease. Methods in Molecular Biology, 2021, 2221, 165-191.	0.9	3
16	YAP and TAZ Mediate Osteocyte Perilacunar/Canalicular Remodeling. Journal of Bone and Mineral Research, 2020, 35, 196-210.	2.8	53
17	Combination therapy in the Col1a2G610C mouse model of Osteogenesis Imperfecta reveals an additive effect of enhancing LRP5 signaling and inhibiting TGFÎ² signaling on trabecular bone but not on cortical bone. Bone, 2020, 131, 115084.	2.9	6
18	The <scp>mTORC2</scp> Component Rictor Is Required for Loadâ€Induced Bone Formation in Lateâ€Stage Skeletal Cells. JBMR Plus, 2020, 4, e10366.	2.7	10

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19	Mechanical stimulations can inhibit local and remote tumor progression by downregulating WISP1. FASEB Journal, 2020, 34, 12847-12859.	0.5	9
20	An osteocalcin-deficient mouse strain without endocrine abnormalities. PLoS Genetics, 2020, 16, e1008361.	3.5	81
21	Pten deletion in Dmp1â€expressing cells does not rescue the osteopenic effects of Wnt/Î²â€catenin suppression. Journal of Cellular Physiology, 2020, 235, 9785-9794.	4.1	0
22	Independent validation of experimental results requires timely and unrestricted access to animal models and reagents. PLoS Genetics, 2020, 16, e1008940.	3.5	3
23	Skeletal loading regulates breast cancer-associated osteolysis in a loading intensity-dependent fashion. Bone Research, 2020, 8, 9.	11.4	40
24	The Osteocyte: New Insights. Annual Review of Physiology, 2020, 82, 485-506.	13.1	286
25	Notum Deletion From Late-Stage Skeletal Cells Increases Cortical Bone Formation and Potentiates Skeletal Effects of Sclerostin Inhibition. Journal of Bone and Mineral Research, 2020, 36, 2413-2425.	2.8	5
26	Suppression of Sost/Sclerostin and Dickkopf-1 Augment Intervertebral Disc Structure in Mice. Journal of Bone and Mineral Research, 2020, 37, 1156-1169.	2.8	5
27	An osteocalcin-deficient mouse strain without endocrine abnormalities. , 2020, 16, e1008361.		0
28	An osteocalcin-deficient mouse strain without endocrine abnormalities. , 2020, 16, e1008361.		0
29	An osteocalcin-deficient mouse strain without endocrine abnormalities. , 2020, 16, e1008361.		0
30	An osteocalcin-deficient mouse strain without endocrine abnormalities. , 2020, 16, e1008361.		0
31	Finite-element analysis of the mouse proximal ulna in response to elbow loading. Journal of Bone and Mineral Metabolism, 2019, 37, 419-429.	2.7	0
32	Twist1 Inactivation in Dmp1-Expressing Cells Increases Bone Mass but Does Not Affect the Anabolic Response to Sclerostin Neutralization. International Journal of Molecular Sciences, 2019, 20, 4427.	4.1	7
33	Lrp4 Mediates Bone Homeostasis and Mechanotransduction through Interaction with Sclerostin InÂVivo. IScience, 2019, 20, 205-215.	4.1	20
34	Expression of a Degradation-Resistant Î²-Catenin Mutant in Osteocytes Protects the Skeleton From Mechanodeprivation-Induced Bone Wasting. Journal of Bone and Mineral Research, 2019, 34, 1964-1975.	2.8	10
35	Osteocytes and mechanical loading: The Wnt connection. Orthodontics and Craniofacial Research, 2019, 22, 175-179.	2.8	21
36	Differential changes in bone strength of two inbred mouse strains following administration of a sclerostin-neutralizing antibody during growth. PLoS ONE, 2019, 14, e0214520.	2.5	1

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37	Mechanical Adaptation. , 2019, , 203-233.		2
38	Loss of <i>Nmp4</i> optimizes osteogenic metabolism and secretion to enhance bone quality. American Journal of Physiology - Endocrinology and Metabolism, 2019, 316, E749-E772.	3.5	12
39	Induction of Lrp5 HBM-causing mutations in Cathepsin-K expressing cells alters bone metabolism. Bone, 2019, 120, 166-175.	2.9	12
40	SAT-337 Disruption Of The Circadian Melatonin Signal By Dim Light At Night Promotes Bone-lytic Breast Cancer Metastases. Journal of the Endocrine Society, 2019, 3, .	0.2	1
41	The skeletal phenotype of Achondrogenesis type 1A is caused exclusively by cartilage defects. Development (Cambridge), 2018, 145, .	2.5	12
42	Inhibition of CaMKK2 Enhances Fracture Healing by Stimulating Indian Hedgehog Signaling and Accelerating Endochondral Ossification. Journal of Bone and Mineral Research, 2018, 33, 930-944.	2.8	29
43	Loss of mechanosensitive sclerostin may accelerate cranial bone growth and regeneration. Journal of Neurosurgery, 2018, 129, 1085-1091.	1.6	11
44	Vhl deficiency in osteocytes produces high bone mass and hematopoietic defects. Bone, 2018, 116, 307-314.	2.9	32
45	Skeletal cell YAP and TAZ combinatorially promote bone development. FASEB Journal, 2018, 32, 2706-2721.	0.5	121
46	Conditional Deletion of <i>Sost</i> in MSC-Derived Lineages Identifies Specific Cell-Type Contributions to Bone Mass and B-Cell Development. Journal of Bone and Mineral Research, 2018, 33, 1748-1759.	2.8	39
47	Sclerostin neutralization unleashes the osteoanabolic effects of Dkk1 inhibition. JCI Insight, 2018, 3, .	5.0	63
48	Finite Element Analysis of the Mouse Distal Femur with Tumor Burden in Response to Knee Loading. International Journal of Orthopaedics (Hong Kong), 2018, 5, 863-871.	0.1	1
49	Bone Mass and Strength are Significantly Improved in Mice Overexpressing Human WNT16 in Osteocytes. Calcified Tissue International, 2017, 100, 361-373.	3.1	16
50	Sclerostin: From bedside to bench, and back to bedside. Bone, 2017, 96, 1-2.	2.9	4
51	Quick and inexpensive paraffin-embedding method for dynamic bone formation analyses. Scientific Reports, 2017, 7, 42505.	3.3	25
52	WNT-mediated Modulation of Bone Metabolism: Implications for WNT Targeting to Treat Extraskeletal Disorders. Toxicologic Pathology, 2017, 45, 864-868.	1.8	7
53	Improving Combination Osteoporosis Therapy in a Preclinical Model of Heightened Osteoanabolism. Endocrinology, 2017, 158, 2722-2740.	2.8	9
54	Control of Bone Anabolism in Response to Mechanical Loading and PTH by Distinct Mechanisms Downstream of the PTH Receptor. Journal of Bone and Mineral Research, 2017, 32, 522-535.	2.8	89

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55	Old age causes de novo intracortical bone remodeling and porosity in mice. JCI Insight, 2017, 2, .	5.0	132
56	Enhanced Wnt signaling improves bone mass and strength, but not brittleness, in the Col1a1 +/mov13 mouse model of type I Osteogenesis Imperfecta. Bone, 2016, 90, 127-132.	2.9	18
57	Sostdc1 deficiency accelerates fracture healing by promoting the expansion of periosteal mesenchymal stem cells. Bone, 2016, 88, 20-30.	2.9	32
58	Sost, independent of the non-coding enhancer ECR5, is required for bone mechanoadaptation. Bone, 2016, 92, 180-188.	2.9	18
59	Adult-Onset Deletion of Î²-Catenin in 10kbDmp1-Expressing Cells Prevents Intermittent PTH-Induced Bone Gain. Endocrinology, 2016, 157, 3047-3057.	2.8	21
60	Bone Matrix Composition Following PTH Treatment is Not Dependent on Sclerostin Status. Calcified Tissue International, 2016, 98, 149-157.	3.1	8
61	Postnatal Î²-catenin deletion from Dmp1-expressing osteocytes/osteoblasts reduces structural adaptation to loading, but not periosteal load-induced bone formation. Bone, 2016, 88, 138-145.	2.9	24
62	Osteoblast-Specific Overexpression of Human WNT16 Increases Both Cortical and Trabecular Bone Mass and Structure in Mice. Endocrinology, 2016, 157, 722-736.	2.8	43
63	Differential Bone Loss in Mouse Models of Colon Cancer Cachexia. Frontiers in Physiology, 2016, 7, 679.	2.8	44
64	Bone and skeletal muscle: Key players in mechanotransduction and potential overlapping mechanisms. Bone, 2015, 80, 24-36.	2.9	114
65	High Bone Massâ€“Causing Mutant LRP5 Receptors Are Resistant to Endogenous Inhibitors <i>In Vivo</i>. Journal of Bone and Mineral Research, 2015, 30, 1822-1830.	2.8	20
66	Genome-Wide Mapping and Interrogation of the Nmp4 Antianabolic Bone Axis. Molecular Endocrinology, 2015, 29, 1269-1285.	3.7	12
67	Missense Mutations in LRP5 Associated with High Bone Mass Protect the Mouse Skeleton from Disuse- and Ovariectomy-Induced Osteopenia. PLoS ONE, 2015, 10, e0140775.	2.5	21
68	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
69	Reply to Lrp5 regulation of bone mass and gut serotonin synthesis. Nature Medicine, 2014, 20, 1229-1230.	30.7	26
70	Mechanosignaling in Bone Health, Trauma and Inflammation. Antioxidants and Redox Signaling, 2014, 20, 970-985.	5.4	45
71	Targeting the LRP5 Pathway Improves Bone Properties in a Mouse Model of Osteogenesis Imperfecta. Journal of Bone and Mineral Research, 2014, 29, 2297-2306.	2.8	72
72	New Insights into WntÃ¢â,¬â€œLrp5/6Ã¢â,¬â€œÃŽÂ²-Catenin Signaling in Mechanotransduction. Frontiers in Endocrinology, 2014, 5, 246.	3.5	44

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73	Sclerostin Inhibition Reverses Skeletal Fragility in an Lrp5-Deficient Mouse Model of OPPG Syndrome. Science Translational Medicine, 2013, 5, 211ra158.	12.4	76
74	Reduced gravitational loading does not account for the skeletal effect of botulinum toxin-induced muscle inhibition suggesting a direct effect of muscle on bone. Bone, 2013, 54, 98-105.	2.9	34
75	Inactivation of Lrp5 in osteocytes reduces Young's modulus and responsiveness to the mechanical loading. Bone, 2013, 54, 35-43.	2.9	56
76	The expanding role of Wnt signaling in bone metabolism. Bone, 2013, 55, 256-257.	2.9	14
77	An RNA-seq protocol to identify mRNA expression changes in mouse diaphyseal bone: Applications in mice with bone property altering <i>Lrp5</i> mutations. Journal of Bone and Mineral Research, 2013, 28, 2081-2093.	2.8	76
78	Absence of Cx43 selectively from osteocytes enhances responsiveness to mechanical force in mice. Journal of Orthopaedic Research, 2013, 31, 1075-1081.	2.3	97
79	Sost downregulation and local Wnt signaling are required for the osteogenic response to mechanical loading. Bone, 2012, 50, 209-217.	2.9	396
80	Mechanotransduction in bone tissue: The A214V and G171V mutations in Lrp5 enhance load-induced osteogenesis in a surface-selective manner. Bone, 2012, 51, 459-465.	2.9	51
81	The Interaction of Biological Factors with Mechanical Signals in Bone Adaptation: Recent Developments. Current Osteoporosis Reports, 2012, 10, 126-131.	3.6	28
82	High-bone-mass-producing mutations in the Wnt signaling pathway result in distinct skeletal phenotypes. Bone, 2011, 49, 1010-1019.	2.9	62
83	Lrp5 functions in bone to regulate bone mass. Nature Medicine, 2011, 17, 684-691.	30.7	404
84	Charles Hall Turner 1961â€“2010. Journal of Bone and Mineral Research, 2011, 26, 1-2.	2.8	18
85	Anabolic and Catabolic Regimens of Human Parathyroid Hormone 1â€“34 Elicit Bone- and Envelope-Specific Attenuation of Skeletal Effects in Sost-Deficient Mice. Endocrinology, 2011, 152, 2963-2975.	2.8	63
86	Mechanical Stimulation and Intermittent Parathyroid Hormone Treatment Induce Disproportional Osteogenic, Geometric, and Biomechanical Effects in Growing Mouse Bone. Calcified Tissue International, 2010, 86, 389-396.	3.1	10
87	Muscle loss and bone loss: Master and slave?. Bone, 2010, 46, 272-273.	2.9	7
88	Is Bone's Response to Mechanical Signals Dominated by Muscle Forces?. Medicine and Science in Sports and Exercise, 2009, 41, 2044-2049.	0.4	114
89	Mechanical Signaling for Bone Modeling and Remodeling. Critical Reviews in Eukaryotic Gene Expression, 2009, 19, 319-338.	0.9	286
90	Genetically engineered missense mutations in Î²â€propeller 1 of the lowâ€densityâ€lipoprotein receptorâ€related protein 5 (LRP5) induce high bone mass and strength. FASEB Journal, 2009, 23, LB16.	0.5	0

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91	Mechanical Stimulation of Bone in Vivo Reduces Osteocyte Expression of Sost/Sclerostin. Journal of Biological Chemistry, 2008, 283, 5866-5875.	3.4	1,136
92	Control of Bone Mass and Remodeling by PTH Receptor Signaling in Osteocytes. PLoS ONE, 2008, 3, e2942.	2.5	331
93	Nmp4/CIZ contributes to fluid shear stress inducedMMP-13 gene induction in osteoblasts. Journal of Cellular Biochemistry, 2007, 102, 1202-1213.	2.6	24
94	Genetic Effects on Bone Mechanotransduction in Congenic Mice Harboring Bone Size and Strength Quantitative Trait Loci. Journal of Bone and Mineral Research, 2007, 22, 984-991.	2.8	45
95	BIOMECHANICAL AND MOLECULAR REGULATION OF BONE REMODELING. Annual Review of Biomedical Engineering, 2006, 8, 455-498.	12.3	1,007
96	The Wnt Co-receptor LRP5 Is Essential for Skeletal Mechanotransduction but Not for the Anabolic Bone Response to Parathyroid Hormone Treatment. Journal of Biological Chemistry, 2006, 281, 23698-23711.	3.4	364
97	Regulation of bone cell sensitivity to mechanical stimulation. FASEB Journal, 2006, 20, A417.	0.5	0
98	Hyperactivation of p21ras and PI3-K Cooperate To Alter Murine and Human NF1 Haploinsufficient Osteoclast Functions.. Blood, 2006, 108, 675-675.	1.4	0
99	A comparison of mechanical properties derived from multiple skeletal sites in mice. Journal of Biomechanics, 2005, 38, 467-475.	2.1	153
100	Cellular accommodation and the response of bone to mechanical loading. Journal of Biomechanics, 2005, 38, 1838-1845.	2.1	127
101	Mechanisms by which exercise improves bone strength. Journal of Bone and Mineral Metabolism, 2005, 23, 16-22.	2.7	99
102	Evidence for a skeletal mechanosensitivity gene on mouse chromosome 4. FASEB Journal, 2003, 17, 324-326.	0.5	54
103	Designing Exercise Regimens to Increase Bone Strength. Exercise and Sport Sciences Reviews, 2003, 31, 45-50.	3.0	375
104	Shorter, more frequent mechanical loading sessions enhance bone mass. Medicine and Science in Sports and Exercise, 2002, 34, 196-202.	0.4	181
105	Improved Bone Structure and Strength After Long-Term Mechanical Loading Is Greatest if Loading Is Separated Into Short Bouts. Journal of Bone and Mineral Research, 2002, 17, 1545-1554.	2.8	445
106	Mechanical Loading of Diaphyseal Bone In Vivo: The Strain Threshold for an Osteogenic Response Varies with Location. Journal of Bone and Mineral Research, 2001, 16, 2291-2297.	2.8	214
107	Recovery periods restore mechanosensitivity to dynamically loaded bone. Journal of Experimental Biology, 2001, 204, 3389-3399.	1.7	277
108	Partitioning a Daily Mechanical Stimulus into Discrete Loading Bouts Improves the Osteogenic Response to Loading. Journal of Bone and Mineral Research, 2000, 15, 1596-1602.	2.8	188

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109	Histomorphometry of Human Cortical Bone: Applications to Age Estimation. , 0, , 149-182.		33