Janet Rubin

List of Publications by Year
in descending order

72 papers	4,785 citations	101384 36 h-index	98622 67 g-index
76 all docs	76 docs citations	76 times ranked	5075 citing authors

#	Article	IF	Citations
1	Molecular pathways mediating mechanical signaling in bone. Gene, 2006, 367, 1-16.	1.0	406
2	Mechanical signals as anabolic agents in bone. Nature Reviews Rheumatology, 2010, 6, 50-59.	3.5	368
3	Mechanical regulation of signaling pathways in bone. Gene, 2012, 503, 179-193.	1.0	334
4	Mechanical Strain Inhibits Adipogenesis in Mesenchymal Stem Cells by Stimulating a Durable Î²-Catenin Signal. Endocrinology, 2008, 149, 6065-6075.	1.4	257
5	Effects of Iron Isomaltoside vs Ferric Carboxymaltose on Hypophosphatemia in Iron-Deficiency Anemia. JAMA - Journal of the American Medical Association, 2020, 323, 432.	3.8	162
6	Epigenetic Plasticity Drives Adipogenic and Osteogenic Differentiation of Marrow-derived Mesenchymal Stem Cells. Journal of Biological Chemistry, 2016, 291, 17829-17847.	1.6	150
7	Mechanical signal influence on mesenchymal stem cell fate is enhanced by incorporation of refractory periods into the loading regimen. Journal of Biomechanics, 2011, 44, 593-599.	0.9	140
8	Combating osteoporosis and obesity with exercise: leveraging cell mechanosensitivity. Nature Reviews Endocrinology, 2019, 15, 339-355.	4.3	140
9	Î²-Catenin Levels Influence Rapid Mechanical Responses in Osteoblasts. Journal of Biological Chemistry, 2008, 283, 29196-29205.	1.6	138
10	mTORC2 Regulates Mechanically Induced Cytoskeletal Reorganization and Lineage Selection in Marrow-Derived Mesenchymal Stem Cells. Journal of Bone and Mineral Research, 2014, 29, 78-89.	3.1	134
11	Mechanical Loading Regulates NFATc1 and Î²-Catenin Signaling through a GSK3Î² Control Node. Journal of Biological Chemistry, 2009, 284, 34607-34617.	1.6	125
12	Bone marrow fat accumulation accelerated by high fat diet is suppressed by exercise. Bone, 2014, 64, 39-46.	1.4	124
13	Mechanical strain inhibits expression of osteoclast differentiation factor by murine stromal cells. American Journal of Physiology - Cell Physiology, 2000, 278, C1126-C1132.	2.1	123
14	Cell Mechanosensitivity to Extremely Low-Magnitude Signals Is Enabled by a LINCed Nucleus. Stem Cells, 2015, 33, 2063-2076.	1.4	122
15	Activation of Extracellular Signal-Regulated Kinase Is Involved in Mechanical Strain Inhibition of RANKL Expression in Bone Stromal Cells. Journal of Bone and Mineral Research, 2002, 17, 1452-1460.	3.1	112
16	Intranuclear Actin Regulates Osteogenesis. Stem Cells, 2015, 33, 3065-3076.	1.4	100
17	Enucleated cells reveal differential roles of the nucleus in cell migration, polarity, and mechanotransduction. Journal of Cell Biology, 2018, 217, 895-914.	2.3	93
18	Mechanical Regulation of Glycogen Synthase Kinase 3Î² (GSK3Î²) in Mesenchymal Stem Cells Is Dependent on Akt Protein Serine 473 Phosphorylation via mTORC2 Protein. Journal of Biological Chemistry, 2011, 286, 39450-39456.	1.6	82

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19	Exercise Decreases Marrow Adipose Tissue Through ÃŸ-Oxidation in Obese Running Mice. Journal of Bone and Mineral Research, 2017, 32, 1692-1702.	3.1	78
20	Mechanical activation of Î²â€catenin regulates phenotype in adult murine marrowâ€derived mesenchymal stem cells. Journal of Orthopaedic Research, 2010, 28, 1531-1538.	1.2	71
21	Mechanically Induced Focal Adhesion Assembly Amplifies Anti-Adipogenic Pathways in Mesenchymal Stem Cells. Stem Cells, 2011, 29, 1829-1836.	1.4	71
22	Caveolin-1 Knockout Mice Have Increased Bone Size and Stiffness. Journal of Bone and Mineral Research, 2007, 22, 1408-1418.	3.1	70
23	Î²â€Cateninâ€"A supporting role in the skeleton. Journal of Cellular Biochemistry, 2010, 110, 545-553.	1.2	69
24	Mechanically activated fyn utilizes mTORC2 to regulate RhoA and adipogenesis in mesenchymal stem cells. Stem Cells, 2013, 31, 2528-2537.	1.4	64
25	Intranuclear Actin Structure Modulates Mesenchymal Stem Cell Differentiation. Stem Cells, 2017, 35, 1624-1635.	1.4	63
26	Response to mechanical strain in an immortalized pre-osteoblast cell is dependent on ERK1/2. Journal of Cellular Physiology, 2006, 207, 454-460.	2.0	62
27	Sun-mediated mechanical LINC between nucleus and cytoskeleton regulates Î²catenin nuclear access. Journal of Biomechanics, 2018, 74, 32-40.	0.9	60
28	Indomethacin promotes adipogenesis of mesenchymal stem cells through a cyclooxygenase independent mechanism. Journal of Cellular Biochemistry, 2010, 111, 1042-1050.	1.2	56
29	Vibration therapy. Current Opinion in Endocrinology, Diabetes and Obesity, 2014, 21, 447-453.	1.2	54
30	Exercise Regulation of Marrow Fat in the Setting of PPARÎ³ Agonist Treatment in Female C57BL/6 Mice. Endocrinology, 2015, 156, 2753-2761.	1.4	52
31	Gap Junctional Communication in Osteocytes Is Amplified by Low Intensity Vibrations In Vitro. PLoS ONE, 2014, 9, e90840.	1.1	49
32	Formation of osteoclast-like cells is suppressed by low frequency, low intensity electric fields. Journal of Orthopaedic Research, 1996, 14, 7-15.	1.2	48
33	Macrophage Colony Stimulating Factor Down-Regulates MCSF-Receptor Expression and Entry of Progenitors into the Osteoclast Lineage. Journal of Bone and Mineral Research, 1997, 12, 1387-1395.	3.1	43
34	Osteocyte specific responses to soluble and mechanical stimuli in a stem cell derived culture model. Scientific Reports, 2015, 5, 11049.	1.6	42
35	Î²â€Catenin Preserves the Stem State of Murine Bone Marrow Stromal Cells Through Activation of EZH2. Journal of Bone and Mineral Research, 2020, 35, 1149-1162.	3.1	42
36	Cell Mechanosensitivity Is Enabled by the LINC Nuclear Complex. Current Molecular Biology Reports, 2016, 2, 36-47.	0.8	41

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37	Low magnitude mechanical signals mitigate osteopenia without compromising longevity in an aged murine model of spontaneous granulosa cell ovarian cancer. Bone, 2012, 51, 570-577.	1.4	38
38	Mechanical input restrains PPARÎ³2 expression and action to preserve mesenchymal stem cell multipotentiality. Bone, 2013, 52, 454-464.	1.4	38
39	Low intensity vibration mitigates tumor progression and protects bone quantity and quality in a murine model of myeloma. Bone, 2016, 90, 69-79.	1.4	38
40	Functional Adaptation to Loading of a Single Bone Is Neuronally Regulated and Involves Multiple Bones. Journal of Bone and Mineral Research, 2008, 23, 1369-1371.	3.1	36
41	Cytoskeletal Configuration Modulates Mechanically Induced Changes in Mesenchymal Stem Cell Osteogenesis, Morphology, and Stiffness. Scientific Reports, 2016, 6, 34791.	1.6	36
42	Concise Review: Plasma and Nuclear Membranes Convey Mechanical Information to Regulate Mesenchymal Stem Cell Lineage. Stem Cells, 2016, 34, 1455-1463.	1.4	32
43	Osteogenic Stimulation of Human Adipose-Derived Mesenchymal Stem Cells Using a Fungal Metabolite That Suppresses the Polycomb Group Protein EZH2. Stem Cells Translational Medicine, 2018, 7, 197-209.	1.6	32
44	LARG GEF and ARHGAP18 orchestrate RhoA activity to control mesenchymal stem cell lineage. Bone, 2018, 107, 172-180.	1.4	31
45	Persistently Elevated PTH After Parathyroidectomy at One Year: Experience in a Tertiary Referral Center. Journal of Clinical Endocrinology and Metabolism, 2019, 104, 4473-4480.	1.8	30
46	Mechanical Strain Downregulates C/EBPÎ² in MSC and Decreases Endoplasmic Reticulum Stress. PLoS ONE, 2012, 7, e51613.	1.1	29
47	Exercise Increases and Browns Muscle Lipid in High-Fat Diet-Fed Mice. Frontiers in Endocrinology, 2016, 7, 80.	1.5	26
48	Validation of Osteogenic Properties of Cytochalasin D by High-Resolution RNA-Sequencing in Mesenchymal Stem Cells Derived from Bone Marrow and Adipose Tissues. Stem Cells and Development, 2018, 27, 1136-1145.	1.1	24
49	Marrow Adiposity and Hematopoiesis in Aging and Obesity: Exercise as an Intervention. Current Osteoporosis Reports, 2018, 16, 105-115.	1.5	23
50	Exercise Degrades Bone in Caloric Restriction, Despite Suppression of Marrow Adipose Tissue (MAT). Journal of Bone and Mineral Research, 2020, 35, 106-115.	3.1	23
51	Gene regulation through dynamic actin control of nuclear structure. Experimental Biology and Medicine, 2019, 244, 1345-1353.	1.1	21
52	cAMP promotion of osteoclast-like cell development from mouse bone marrow cells requires a permissive action of 1,25-(OH)2D3. Journal of Bone and Mineral Research, 1992, 7, 611-617.	3.1	18
53	Incorporating Refractory Period in Mechanical Stimulation Mitigates Obesityâ€Induced Adipose Tissue Dysfunction in Adult Mice. Obesity, 2017, 25, 1745-1753.	1.5	18
54	Physical Signals May Affect Mesenchymal Stem Cell Differentiation via Epigenetic Controls. Exercise and Sport Sciences Reviews, 2018, 46, 42-47.	1.6	17

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55	Regulation of Complement 5a Receptor Expression in U937 Cells by Phorbol Ester. Journal of Leukocyte Biology, 1991, 50, 502-508.	1.5	15
56	Ketoconazole and phorbol myristate acetate regulate osteoclast precursor fusion in primary murine marrow culture. Journal of Bone and Mineral Research, 1996, 11, 1274-1280.	3.1	14
57	Exercise to Mend Aged-tissue Crosstalk in Bone Targeting Osteoporosis & Osteoarthritis. Seminars in Cell and Developmental Biology, 2022, 123, 22-35.	2.3	14
58	Knockdown of formin mDia2 alters lamin B1 levels and increases osteogenesis in stem cells. Stem Cells, 2020, 38, 102-117.	1.4	13
59	Lowâ€Dose Tamoxifen Induces Significant Bone Formation in Mice. JBMR Plus, 2021, 5, e10450.	1.3	11
60	Lamin A/C Is Dispensable to Mechanical Repression of Adipogenesis. International Journal of Molecular Sciences, 2021, 22, 6580.	1.8	10
61	Expression of C5a Anaphylatoxin Receptor in Monoblastic Cells Involves Facilitation of an Adenosine 3â€²,5â€²-Monophosphate-Dependent Process*. Endocrinology, 1988, 123, 2424-2431.	1.4	9
62	Mechanically Induced Nuclear Shuttling of Î²-Catenin Requires Co-transfer of Actin. Stem Cells, 2022, 40, 423-434.	1.4	7
63	Stand UP!. Journal of Clinical Endocrinology and Metabolism, 2010, 95, 2050-2053.	1.8	6
64	Actin up in the Nucleus: Regulation of Actin Structures Modulates Mesenchymal Stem Cell Differentiation. Transactions of the American Clinical and Climatological Association, 2017, 128, 180-192.	0.9	5
65	Architectural control of mesenchymal stem cell phenotype through nuclear actin. Nucleus, 2022, 13, 35-48.	0.6	5
66	Rib Fractures and Death from Deletion of Osteoblast Î²catenin in Adult Mice Is Rescued by Corticosteroids. PLoS ONE, 2013, 8, e55757.	1.1	4
67	Mechanisms of exercise effects on bone quantity and quality. , 2020, , 1759-1784.		2
68	Exercise Increases Bone in SEIPIN Deficient Lipodystrophy, Despite Low Marrow Adiposity. Frontiers in Endocrinology, 2021, 12, 782194.	1.5	2
69	Prevention of Osteoporosis by Physical Signals. , 2013, , 517-535.		1
70	Lumbar Scoliosis in Postmenopausal Women Increases with Age but is not Associated with Osteoporosis. Journal of the Endocrine Society, 2021, 5, bvab018.	0.1	1
71	G protein-coupled receptor kinase 3 modulates mesenchymal stem cell proliferation and differentiation through sphingosine-1-phosphate receptor regulation. Stem Cell Research and Therapy, 2022, 13, 37.	2.4	1
72	Mechanisms of Exercise Effects on Bone Quantity and Quality. , 2008, , 1819-1837.		0