Nathan J Pavlos

List of Publications by Year in descending order

77 papers	5,003 citations	109137 35 h-index	98622 67 g-index
82 all docs	82 docs citations	82 times ranked	8027 citing authors

#	Article	IF	Citations
1	Rheumatoid arthritis: pathological mechanisms and modern pharmacologic therapies. Bone Research, 2018, 6, 15.	5.4	947
2	Subchondral bone in osteoarthritis: insight into risk factors and microstructural changes. Arthritis Research and Therapy, 2013, 15, 223.	1.6	563
3	Osteoclasts recycle via osteomorphs during RANKL-stimulated bone resorption. Cell, 2021, 184, 1330-1347.e13.	13.5	203
4	Quantitative Comparison of Glutamatergic and GABAergic Synaptic Vesicles Unveils Selectivity for Few Proteins Including MAL2, a Novel Synaptic Vesicle Protein. Journal of Neuroscience, 2010, 30, 2-12.	1.7	154
5	GPCR Signaling and Trafficking: The Long and Short of It. Trends in Endocrinology and Metabolism, 2017, 28, 213-226.	3.1	154
6	The GTPase Rab26 links synaptic vesicles to the autophagy pathway. ELife, 2015, 4, e05597.	2.8	138
7	A molecular code for endosomal recycling of phosphorylated cargos by the SNX27â€“retromer complex. Nature Structural and Molecular Biology, 2016, 23, 921-932.	3.6	131
8	V-ATPases in osteoclasts: Structure, function and potential inhibitors of bone resorption. International Journal of Biochemistry and Cell Biology, 2012, 44, 1422-1435.	1.2	125
9	Autologous Tenocyte Therapy for Experimental Achilles Tendinopathy in a Rabbit Model. Tissue Engineering - Part A, 2011, 17, 2037-2048.	1.6	103
10	In vitro Evaluation of Natural Marine Sponge Collagen as a Scaffold for Bone Tissue Engineering. International Journal of Biological Sciences, 2011, 7, 968-977.	2.6	103
11	EGFL6 Promotes Endothelial Cell Migration and Angiogenesis through the Activation of Extracellular Signal-regulated Kinase. Journal of Biological Chemistry, 2011, 286, 22035-22046.	1.6	95
12	Effects of Bafilomycin A1: An inhibitor of vacuolar H (+)-ATPases on endocytosis and apoptosis in RAW cells and RAW cell-derived osteoclasts. Journal of Cellular Biochemistry, 2003, 88, 1256-1264.	1.2	91
13	Myocyte Enhancer Factor 2 and Microphthalmia-associated Transcription Factor Cooperate with NFATc1 to Transactivate the V-ATPase d2 Promoter during RANKL-induced Osteoclastogenesis. Journal of Biological Chemistry, 2009, 284, 14667-14676.	1.6	87
14	Quantitative Analysis of Synaptic Vesicle Rabs Uncovers Distinct Yet Overlapping Roles for Rab3a and Rab27b in Ca²⁺-Triggered Exocytosis. Journal of Neuroscience, 2010, 30, 13441-13453.	1.7	87
15	Rab3D Regulates a Novel Vesicular Trafficking Pathway That Is Required for Osteoclastic Bone Resorption. Molecular and Cellular Biology, 2005, 25, 5253-5269.	1.1	86
16	p62 Ubiquitin Binding-Associated Domain Mediated the Receptor Activator of Nuclear Factor-Î¹B Ligand-Induced Osteoclast Formation. American Journal of Pathology, 2006, 169, 503-514.	1.9	70
17	M-CSF Potently Augments RANKL-Induced Resorption Activation in Mature Human Osteoclasts. PLoS ONE, 2011, 6, e21462.	1.1	66
18	Distinct yet overlapping roles of Rab GTPases on synaptic vesicles. Small GTPases, 2011, 2, 77-81.	0.7	66

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19	Caffeic acid phenethyl ester, an active component of honeybee propolis attenuates osteoclastogenesis and bone resorption via the suppression of RANKLâ€induced NFâ€ÎºB and NFAT activity. Journal of Cellular Physiology, 2009, 221, 642-649.	2.0	65
20	Staphylococcus aureus Infects Osteoclasts and Replicates Intracellularly. MBio, 2019, 10, .	1.8	64
21	Fibrin sealant promotes migration and proliferation of human articular chondrocytes: possible involvement of thrombin and protease-activated receptors. International Journal of Molecular Medicine, 2006, 17, 551-8.	1.8	64
22	Proteasome inhibitors impair RANKLâ€induced NFâ€ÎºB activity in osteoclastâ€like cells via disruption of p62, TRAF6, CYLD, and IÎºBÎ± signaling cascades. Journal of Cellular Physiology, 2009, 220, 450-459.	2.0	61
23	Prevention of Wear Particle-Induced Osteolysis by a Novel V-ATPase Inhibitor Saliphenylhalamide through Inhibition of Osteoclast Bone Resorption. PLoS ONE, 2012, 7, e34132.	1.1	61
24	Steroid-induced osteonecrosis of the femoral head reveals enhanced reactive oxygen species and hyperactive osteoclasts. International Journal of Biological Sciences, 2020, 16, 1888-1900.	2.6	58
25	PLEKHM1/DEF8/RAB7 complex regulates lysosome positioning and bone homeostasis. JCI Insight, 2016, 1, e86330.	2.3	57
26	Sorting nexin 27 couples PTHR trafficking to retromer for signal regulation in osteoblasts during bone growth. Molecular Biology of the Cell, 2016, 27, 1367-1382.	0.9	48
27	Cyanidin Chloride inhibits ovariectomyâ€induced osteoporosis by suppressing RANKLâ€mediated osteoclastogenesis and associated signaling pathways. Journal of Cellular Physiology, 2018, 233, 2502-2512.	2.0	48
28	Glucocorticoid impairs cell-cell communication by autophagy-mediated degradation of connexin 43 in osteocytes. Oncotarget, 2016, 7, 26966-26978.	0.8	48
29	Phosphorylation-regulated axonal dependent transport of syntaxin 1 is mediated by a Kinesin-1 adapter. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5862-5867.	3.3	44
30	Membrane trafficking in osteoclasts and implications for osteoporosis. Biochemical Society Transactions, 2019, 47, 639-650.	1.6	44
31	Gene expression of vascular endothelial growth factor in giant cell tumors of bone. Human Pathology, 2000, 31, 804-812.	1.1	43
32	Expression Quantitative Trait Locus Study of Bone Mineral Density GWAS Variants in Human Osteoclasts. Journal of Bone and Mineral Research, 2018, 33, 1044-1051.	3.1	43
33	Rab GTPases: Emerging Oncogenes and Tumor Suppressive Regulators for the Editing of Survival Pathways in Cancer. Cancers, 2020, 12, 259.	1.7	43
34	LIS1 Regulates Osteoclast Formation and Function through Its Interactions with Dynein/Dynactin and Plekhm1. PLoS ONE, 2011, 6, e27285.	1.1	42
35	SC-514, a selective inhibitor of IKKÎ² attenuates RANKL-induced osteoclastogenesis and NF-ÎºB activation. Biochemical Pharmacology, 2013, 86, 1775-1783.	2.0	42
36	Cytoplasmic Terminus of Vacuolar Type Proton Pump Accessory Subunit Ac45 Is Required for Proper Interaction with V0 Domain Subunits and Efficient Osteoclastic Bone Resorption. Journal of Biological Chemistry, 2008, 283, 13194-13204.	1.6	41

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37	Mutations of Vasopressin Receptor 2 Including Novel L312S Have Differential Effects on Trafficking. Molecular Endocrinology, 2016, 30, 889-904.	3.7	39
38	Triptolide inhibits osteoclast formation, bone resorption, RANKL-mediated NF-Ò›B activation and titanium particle-induced osteolysis in a mouse model. Molecular and Cellular Endocrinology, 2015, 399, 346-353.	1.6	37
39	Characterisation of genetic regulatory effects for osteoporosis risk variants in human osteoclasts. Genome Biology, 2020, 21, 80.	3.8	36
40	A highly sensitive prenylation assay reveals in vivo effects of bisphosphonate drug on the Rab prenylome of macrophages outside the skeleton. Small GTPases, 2015, 6, 202-211.	0.7	33
41	Influence of age and gender on microarchitecture and bone remodeling in subchondral bone of the osteoarthritic femoral head. Bone, 2015, 77, 91-97.	1.4	31
42	Alexidine Dihydrochloride Attenuates Osteoclast Formation and Bone Resorption and Protects Against LPS-Induced Osteolysis. Journal of Bone and Mineral Research, 2016, 31, 560-572.	3.1	31
43	Tctex-1, a Novel Interaction Partner of Rab3D, Is Required for Osteoclastic Bone Resorption. Molecular and Cellular Biology, 2011, 31, 1551-1564.	1.1	30
44	Disruption of the dynein-dynactin complex unveils motor-specific functions in osteoclast formation and bone resorption. Journal of Bone and Mineral Research, 2013, 28, 119-134.	3.1	29
45	Versatile Roles of V-ATPases Accessory Subunit Ac45 in Osteoclast Formation and Function. PLoS ONE, 2011, 6, e27155.	1.1	27
46	Identical subchondral bone microarchitecture pattern with increasedÂbone resorption in rheumatoid arthritis as comparedÂtoÂosteoarthritis. Osteoarthritis and Cartilage, 2014, 22, 2083-2092.	0.6	26
47	Circulating Lipocalin 2 Levels Predict Fracture-Related Hospitalizations in Elderly Women: A Prospective Cohort Study. Journal of Bone and Mineral Research, 2015, 30, 2078-2085.	3.1	26
48	A bioceramic with enhanced osteogenic properties to regulate the function of osteoblastic and osteocalastic cells for bone tissue regeneration. Biomedical Materials (Bristol), 2016, 11, 035018.	1.7	25
49	Parathyroid Hormone-Related Protein Negatively Regulates Tumor Cell Dormancy Genes in a PTHR1/Cyclic AMP-Independent Manner. Frontiers in Endocrinology, 2018, 9, 241.	1.5	25
50	Osteal macrophages support osteoclast-mediated resorption and contribute to bone pathology in a postmenopausal osteoporosis mouse model. Journal of Bone and Mineral Research, 2021, 36, 2214-2228.	3.1	25
51	Choline Kinase Î² Mutant Mice Exhibit Reduced Phosphocholine, Elevated Osteoclast Activity, and Low Bone Mass. Journal of Biological Chemistry, 2015, 290, 1729-1742.	1.6	24
52	Thonzonium bromide inhibits RANKL-induced osteoclast formation and bone resorption in vitro and prevents LPS-induced bone loss in vivo. Biochemical Pharmacology, 2016, 104, 118-130.	2.0	24
53	Genetic regulatory mechanisms in human osteoclasts suggest a role for the STMP1 and DCSTAMP genes in Pagetâ€™s disease of bone. Scientific Reports, 2019, 9, 1052.	1.6	23
54	Loss of Protein Kinase C-Î´ Protects against LPS-Induced Osteolysis Owing to an Intrinsic Defect in Osteoclastic Bone Resorption. PLoS ONE, 2013, 8, e70815.	1.1	23

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55	Fibrin sealant promotes migration and proliferation of human articular chondrocytes: Possible involvement of thrombin and protease-activated receptors. International Journal of Molecular Medicine, 2006, 17, 551.	1.8	22
56	Collagen-Derived Biomaterials in Bone and Cartilage Repair. Macromolecular Symposia, 2007, 253, 179-185.	0.4	22
57	Evidence of reciprocal regulation between the high extracellular calcium and RANKL signal transduction pathways in RAW cell derived osteoclasts. Journal of Cellular Physiology, 2005, 202, 554-562.	2.0	21
58	Paclitaxel inhibits osteoclast formation and bone resorption via influencing mitotic cell cycle arrest and RANKLâ€induced activation of NFâ€ÎºB and ERK. Journal of Cellular Biochemistry, 2012, 113, 946-955.	1.2	20
59	Osteoblast-derived EGFL6 couples angiogenesis to osteogenesis during bone repair. Theranostics, 2021, 11, 9738-9751.	4.6	20
60	Membrane Transport Proteins in Osteoclasts: The Ins and Outs. Frontiers in Cell and Developmental Biology, 2021, 9, 644986.	1.8	19
61	The oncogene AAMDC links PI3K-AKT-mTOR signaling with metabolic reprograming in estrogen receptor-positive breast cancer. Nature Communications, 2021, 12, 1920.	5.8	19
62	Evidence that human cartilage and chondrocytes do not express calcitonin receptor. Osteoarthritis and Cartilage, 2008, 16, 450-457.	0.6	18
63	Mutations within the TNF-Like Core Domain of RANKL Impair Osteoclast Differentiation and Activation. Molecular Endocrinology, 2009, 23, 35-46.	3.7	18
64	Septins are critical regulators of osteoclastic bone resorption. Scientific Reports, 2018, 8, 13016.	1.6	15
65	A missense mutation sheds light on a novel structureâ€“function relationship of RANKL. Journal of Cellular Physiology, 2021, 236, 2800-2816.	2.0	15
66	Natural Germacrane Sesquiterpenes Inhibit Osteoclast Formation, Bone Resorption, RANKL-Induced NF-ÎºB Activation, and IÎºBÎ± Degradation. International Journal of Molecular Sciences, 2015, 16, 26599-26607.	1.8	13
67	Calmodulin interacts with Rab3D and modulates osteoclastic bone resorption. Scientific Reports, 2016, 6, 37963.	1.6	13
68	Perspective of the GEMSTONE Consortium on Current and Future Approaches to Functional Validation for Skeletal Genetic Disease Using Cellular, Molecular and Animal-Modeling Techniques. Frontiers in Endocrinology, 2021, 12, 731217.	1.5	12
69	Bafilomycin A1 Attenuates Osteoclast Acidification and Formation, Accompanied by Increased Levels of SQSTM1/p62 Protein. Journal of Cellular Biochemistry, 2016, 117, 1464-1470.	1.2	9
70	Brief exposure to full length parathyroid hormone-related protein (PTHrP) causes persistent generation of cyclic AMP through an endocytosis-dependent mechanism. Biochemical Pharmacology, 2019, 169, 113627.	2.0	9
71	Disulfiram Attenuates Osteoclast Differentiation In Vitro: A Potential Antiresorptive Agent. PLoS ONE, 2015, 10, e0125696.	1.1	8
72	â€œFusion and Fissionâ€•Unveils Remarkable Insights into Osteoclast Plasticity. Calcified Tissue International, 2012, 91, 157-158.	1.5	6

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73	The molecular structure and function of sorting nexin 10 in skeletal disorders, cancers, and other pathological conditions. Journal of Cellular Physiology, 2021, 236, 4207-4215.	2.0	6
74	Longâ€term exposure of mice to 890Âppm atmospheric CO₂ alters growth trajectories and elicits hyperactive behaviours in young adulthood. Journal of Physiology, 2022, 600, 1439-1453.	1.3	5
75	Molecular cloning of the mouse homologue of Rab3c. Journal of Molecular Endocrinology, 2001, 27, 117-122.	1.1	4
76	The SQSTM1/p62 UBA domain regulates Ajuba localisation, degradation and NF-ÎºB signalling function. PLoS ONE, 2021, 16, e0259556.	1.1	4
77	Functional Assessment of Calcium-Sensing Receptor Variants Confirms Familial Hypocalciuric Hypercalcemia. Journal of the Endocrine Society, 2022, 6, bvac025.	0.1	3