Michael J Rogers

List of Publications by Year in Descending Order

131 papers	15,517 citations	59 h-index	124 g-index
138 ext. papers	16,739 ext. citations	7 avg, IF	6.36 L-index

#	Paper	IF	Citations
131	Cellular and molecular actions of bisphosphonates **2022**, 921-942		
130	Oxysterols: From physiological tuners to pharmacological opportunities. *British Journal of Pharmacology*, **2021**, 178, 3089-3103	8.6	26
129	Osteoclasts recycle via osteomorphs during RANKL-stimulated bone resorption. *Cell*, **2021**, 184, 1330-1347.e13	36.2	49
128	Bisphosphonate drugs have actions in the lung and inhibit the mevalonate pathway in alveolar macrophages.. *ELife*, **2021**, 10,	8.9	1
127	Molecular mechanisms of action of bisphosphonates and new insights into their effects outside the skeleton. *Bone*, **2020**, 139, 115493	4.7	34
126	Bisphosphonates and Bone Cells Molecular Mechanisms **2020**, 565-578		0
125	Clinical and translational pharmacology of bisphosphonates **2020**, 1671-1687		
124	Lack of protein prenylation promotes NLRP3 inflammasome assembly in human monocytes. *Journal of Allergy and Clinical Immunology*, **2019**, 143, 2315-2317.e3	11.5	7
123	Defective Protein Prenylation in a Spectrum of Patients With Mevalonate Kinase Deficiency. *Frontiers in Immunology*, **2019**, 10, 1900	8.4	10
122	Osteoglycin, a novel coordinator of bone and glucose homeostasis. *Molecular Metabolism*, **2018**, 13, 30-44	8.8	25
121	From vesicle to cytosol. *ELife*, **2018**, 7,	8.9	4
120	Melphalan modifies the bone microenvironment by enhancing osteoclast formation. *Oncotarget*, **2017**, 8, 68047-68058	3.3	8
119	Defective protein prenylation is a diagnostic biomarker of mevalonate kinase deficiency. *Journal of Allergy and Clinical Immunology*, **2017**, 140, 873-875.e6	11.5	19
118	Mevalonate kinase deficiency leads to decreased prenylation of Rab GTPases. *Immunology and Cell Biology*, **2016**, 94, 994-999	5	20
117	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, 202-11	2.7	20
116	Real-time intravital imaging establishes tumor-associated macrophages as the extraskeletal target of bisphosphonate action in cancer. *Cancer Discovery*, **2015**, 5, 35-42	24.4	104
115	Osteoclasts control reactivation of dormant myeloma cells by remodelling the endosteal niche. *Nature Communications*, **2015**, 6, 8983	17.4	232

114	Cellular and molecular actions of bisphosphonates **2015**, 615-627		1
113	Upregulation of endogenous farnesyl diphosphate synthase overcomes the inhibitory effect of bisphosphonate on protein prenylation in Hela cells. *Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids*, **2014**, 1841, 569-73	5	9
112	Osteoclasts on bone and dentin in vitro: mechanism of trail formation and comparison of resorption behavior. *Calcified Tissue International*, **2013**, 93, 526-39	3.9	37
111	Synergistic inhibitory effect of apomine and lovastatin on osteosarcoma cell growth. *Cancer*, **2012**, 118, 750-60	6.4	13
110	A class III semaphorin (Sema3e) inhibits mouse osteoblast migration and decreases osteoclast formation in vitro. *Calcified Tissue International*, **2012**, 90, 151-62	3.9	32
109	Cannabinoids and bone: endocannabinoids modulate human osteoclast function in vitro. *British Journal of Pharmacology*, **2012**, 165, 2584-97	8.6	42
108	The mesenchymal stem cell marker CD248 (endosialin) is a negative regulator of bone formation in mice. *Arthritis and Rheumatism*, **2012**, 64, 3334-43		31
107	Influence of bone affinity on the skeletal distribution of fluorescently labeled bisphosphonates in vivo. *Journal of Bone and Mineral Research*, **2012**, 27, 835-47	6.3	85
106	The ADP receptor P2RY12 regulates osteoclast function and pathologic bone remodeling. *Journal of Clinical Investigation*, **2012**, 122, 3579-92	15.9	71
105	Isolation and purification of rabbit osteoclasts. *Methods in Molecular Biology*, **2012**, 816, 145-58	1.4	8
104	Fluvastatin does not prevent the acute-phase response to intravenous zoledronic acid in post-menopausal women. *Bone*, **2011**, 49, 140-5	4.7	24
103	Biochemical and molecular mechanisms of action of bisphosphonates. *Bone*, **2011**, 49, 34-41	4.7	359
102	The gunmetal mouse reveals Rab geranylgeranyl transferase to be the major molecular target of phosphonocarboxylate analogues of bisphosphonates. *Bone*, **2011**, 49, 111-21	4.7	8
101	Synthesis, stereochemistry and SAR of a series of minodronate analogues as RGGT inhibitors. *European Journal of Medicinal Chemistry*, **2011**, 46, 4820-6	6.8	24
100	Synthesis and characterization of novel fluorescent nitrogen-containing bisphosphonate imaging probes for bone active drugs. *Phosphorus, Sulfur and Silicon and the Related Elements*, **2011**, 186, 970-971	1	15
99	Signal peptide mutations in RANK prevent downstream activation of NF-B. *Journal of Bone and Mineral Research*, **2011**, 26, 1926-38	6.3	24
98	The regulation of osteoclast function and bone resorption by small GTPases. *Small GTPases*, **2011**, 2, 117-130	2.7	103
97	Impaired prenylation of Rab GTPases in the gunmetal mouse causes defects in bone cell function. *Small GTPases*, **2011**, 2, 131-142	2.7	22

96	Bone remodelling at a glance. *Journal of Cell Science*, **2011**, 124, 991-8	5.3	320
95	A role for L-alpha-lysophosphatidylinositol and GPR55 in the modulation of migration, orientation and polarization of human breast cancer cells. *British Journal of Pharmacology*, **2010**, 160, 762-71	8.6	110
94	Bisphosphonates: molecular mechanisms of action and effects on bone cells, monocytes and macrophages. *Current Pharmaceutical Design*, **2010**, 16, 2950-60	3.3	140
93	Functional interaction between sequestosome-1/p62 and autophagy-linked FYVE-containing protein WDFY3 in human osteoclasts. *Biochemical and Biophysical Research Communications*, **2010**, 402, 543-8	3.4	27
92	Synthesis, chiral high performance liquid chromatographic resolution and enantiospecific activity of a potent new geranylgeranyl transferase inhibitor, 2-hydroxy-3-imidazo[1,2-a]pyridin-3-yl-2-phosphonopropionic acid. *Journal of Medicinal Chemistry*, **2010**, 53, 3454-64	8.3	56
91	Fluorescent risedronate analogues reveal bisphosphonate uptake by bone marrow monocytes and localization around osteocytes in vivo. *Journal of Bone and Mineral Research*, **2010**, 25, 606-16	6.3	135
90	The bisphosphonate zoledronic acid has antimyeloma activity in vivo by inhibition of protein prenylation. *International Journal of Cancer*, **2010**, 126, 239-46	7.5	110
89	Activation of □T cells by bisphosphonates. *Advances in Experimental Medicine and Biology*, **2010**, 658, 11-20	3.6	54
88	The putative cannabinoid receptor GPR55 affects osteoclast function in vitro and bone mass in vivo. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 16511-6	11.5	225
87	Zoledronic acid induces formation of a pro-apoptotic ATP analogue and isopentenyl pyrophosphate in osteoclasts in vivo and in MCF-7 cells in vitro. *British Journal of Pharmacology*, **2009**, 157, 427-35	8.6	68
86	Peripheral blood monocytes are responsible for gammadelta T cell activation induced by zoledronic acid through accumulation of IPP/DMAPP. *British Journal of Haematology*, **2009**, 144, 245-50	4.5	214
85	Phosphonocarboxylates inhibit the second geranylgeranyl addition by Rab geranylgeranyl transferase. *Journal of Biological Chemistry*, **2009**, 284, 6861-8	5.4	48
84	The bisphosphonate zoledronic acid decreases tumor growth in bone in mice with defective osteoclasts. *Bone*, **2009**, 44, 908-16	4.7	55
83	RANKL increases the level of Mcl-1 in osteoclasts and reduces bisphosphonate-induced osteoclast apoptosis in vitro. *Arthritis Research and Therapy*, **2009**, 11, R58	5.7	41
82	Farnesyl diphosphate synthase is involved in the resistance to zoledronic acid of osteosarcoma cells. *Journal of Cellular and Molecular Medicine*, **2008**, 12, 928-41	5.6	27
81	Structure-activity relationships among the nitrogen containing bisphosphonates in clinical use and other analogues: time-dependent inhibition of human farnesyl pyrophosphate synthase. *Journal of Medicinal Chemistry*, **2008**, 51, 2187-95	8.3	125
80	Visualizing mineral binding and uptake of bisphosphonate by osteoclasts and non-resorbing cells. *Bone*, **2008**, 42, 848-60	4.7	186
79	CMT3 alters mitochondrial function in murine osteoclast lineage cells. *Biochemical and Biophysical Research Communications*, **2008**, 365, 840-5	3.4	7

78	Fluorescently labeled risedronate and related analogues: "magic linker" synthesis. *Bioconjugate Chemistry*, **2008**, 19, 2308-10	6.3	47
77	Lowering bone mineral affinity of bisphosphonates as a therapeutic strategy to optimize skeletal tumor growth inhibition in vivo. *Cancer Research*, **2008**, 68, 8945-53	10.1	39
76	Bisphosphonates: Mechanisms of Action **2008**, 1737-1767		5
75	Mechanisms of action of bisphosphonates: similarities and differences and their potential influence on clinical efficacy. *Osteoporosis International*, **2008**, 19, 733-59	5.3	1008
74	Human osteoclast-poor osteopetrosis with hypogammaglobulinemia due to TNFRSF11A (RANK) mutations. *American Journal of Human Genetics*, **2008**, 83, 64-76	11	231
73	Mechanisms of osteopontin and CD44 as metastatic principles in prostate cancer cells. *Molecular Cancer*, **2007**, 6, 18	42.1	104
72	Actin polymerization modulates CD44 surface expression, MMP-9 activation, and osteoclast function. *Journal of Cellular Physiology*, **2007**, 213, 710-20	7	55
71	Osteoclast-poor human osteopetrosis due to mutations in the gene encoding RANKL. *Nature Genetics*, **2007**, 39, 960-2	36.3	303
70	Bisphosphonates: an update on mechanisms of action and how these relate to clinical efficacy. *Annals of the New York Academy of Sciences*, **2007**, 1117, 209-57	6.5	291
69	A novel method for efficient generation of transfected human osteoclasts. *Calcified Tissue International*, **2007**, 80, 132-6	3.9	21
68	A comparison between the effects of hydrophobic and hydrophilic statins on osteoclast function in vitro and ovariectomy-induced bone loss in vivo. *Calcified Tissue International*, **2007**, 81, 403-13	3.9	46
67	The Molecular Mechanisms of Action of Bisphosphonates. *Clinical Reviews in Bone and Mineral Metabolism*, **2007**, 5, 130-144	2.5	6
66	Apomine enhances the antitumor effects of lovastatin on myeloma cells by down-regulating 3-hydroxy-3-methylglutaryl-coenzyme A reductase. *Journal of Pharmacology and Experimental Therapeutics*, **2007**, 322, 228-35	4.7	8
65	The matricellular protein CYR61 inhibits osteoclastogenesis by a mechanism independent of alphavbeta3 and alphavbeta5. *Endocrinology*, **2007**, 148, 5761-8	4.8	48
64	Involvement of PLEKHM1 in osteoclastic vesicular transport and osteopetrosis in incisors absent rats and humans. *Journal of Clinical Investigation*, **2007**, 117, 919-30	15.9	164
63	Bisphosphonates and □t-cells: New insights into old drugs. *BoneKEy Osteovision*, **2006**, 3, 5-13		9
62	Cytosolic entry of bisphosphonate drugs requires acidification of vesicles after fluid-phase endocytosis. *Molecular Pharmacology*, **2006**, 69, 1624-32	4.3	188
61	The molecular mechanism of nitrogen-containing bisphosphonates as antiosteoporosis drugs. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 7829-34	11.5	423

60	Mechanisms of Action of Bisphosphonates **2006**, 323-343		
59	Molecular mechanisms of action of bisphosphonates: current status. *Clinical Cancer Research*, **2006**, 12, 6222s-6230s	12.9	393
58	Recent advances in understanding the mechanism of action of bisphosphonates. *Current Opinion in Pharmacology*, **2006**, 6, 307-12	5.1	195
57	Alkylamines cause Vgamma9Vdelta2 T-cell activation and proliferation by inhibiting the mevalonate pathway. *Blood*, **2006**, 107, 651-4	2.2	75
56	Inhibition of protein prenylation by bisphosphonates causes sustained activation of Rac, Cdc42, and Rho GTPases. *Journal of Bone and Mineral Research*, **2006**, 21, 684-94	6.3	140
55	Phosphonocarboxylate inhibitors of Rab geranylgeranyl transferase disrupt the prenylation and membrane localization of Rab proteins in osteoclasts in vitro and in vivo. *Bone*, **2005**, 37, 349-58	4.7	88
54	Molecular interactions of nitrogen-containing bisphosphonates within farnesyl diphosphate synthase. *Journal of Organometallic Chemistry*, **2005**, 690, 2679-2687	2.3	28
53	JBMR anniversary classic. Nitrogen-containing biophosphonates inhibit the mevalonate pathway and prevent post-translational prenylation of GTP-binding proteins, including Ras. Originally published in Volume 7, number 4, pp 581-9 (1998). *Journal of Bone and Mineral Research*, **2005**, 20, 1265-74	6.3	10
52	Bacterial toxins and bone remodelling **2005**, 147-168		1
51	From molds and macrophages to mevalonate: a decade of progress in understanding the molecular mode of action of bisphosphonates. *Calcified Tissue International*, **2004**, 75, 451-61	3.9	126
50	Statins prevent bisphosphonate-induced gamma,delta-T-cell proliferation and activation in vitro. *Journal of Bone and Mineral Research*, **2004**, 19, 278-88	6.3	174
49	Zoledronic Acid Inhibits Protein Prenylation in Plasmacytoma Tumors In Vivo and Enhances Survival in the INA-6 SCID Mouse Model.. *Blood*, **2004**, 104, 3360-3360	2.2	
48	Isolation and purification of rabbit osteoclasts. *Methods in Molecular Medicine*, **2003**, 80, 89-99		5
47	New insights into the molecular mechanisms of action of bisphosphonates. *Current Pharmaceutical Design*, **2003**, 9, 2643-58	3.3	475
46	The ability of statins to inhibit bone resorption is directly related to their inhibitory effect on HMG-CoA reductase activity. *Journal of Bone and Mineral Research*, **2003**, 18, 88-96	6.3	136
45	Antagonistic effects of different classes of bisphosphonates in osteoclasts and macrophages in vitro. *Journal of Bone and Mineral Research*, **2003**, 18, 204-12	6.3	66
44	The role of prenylated small GTP-binding proteins in the regulation of osteoclast function. *Calcified Tissue International*, **2003**, 72, 80-4	3.9	80
43	Development of a postnatal 3-day-old rat model of mild hypoxic-ischemic brain injury. *Brain Research*, **2003**, 993, 101-10	3.7	45

42	Bisphosphonates **2002**, 1361-XLIII		8
41	Pharmacologic profile of zoledronic acid: A highly potent inhibitor of bone resorption. *Drug Development Research*, **2002**, 55, 210-224	5.1	71
40	Pamidronate causes apoptosis of plasma cells in vivo in patients with multiple myeloma. *British Journal of Haematology*, **2002**, 119, 475-83	4.5	48
39	Further insight into mechanism of action of clodronate: inhibition of mitochondrial ADP/ATP translocase by a nonhydrolyzable, adenine-containing metabolite. *Molecular Pharmacology*, **2002**, 61, 1255-62	4.3	250
38	Identification of a bisphosphonate that inhibits isopentenyl diphosphate isomerase and farnesyl diphosphate synthase. *Biochemical and Biophysical Research Communications*, **2002**, 290, 869-73	3.4	52
37	Identification of a novel phosphonocarboxylate inhibitor of Rab geranylgeranyl transferase that specifically prevents Rab prenylation in osteoclasts and macrophages. *Journal of Biological Chemistry*, **2001**, 276, 48213-22	5.4	137
36	The molecular mechanism of action of the antiresorptive and antiinflammatory drug clodronate: evidence for the formation in vivo of a metabolite that inhibits bone resorption and causes osteoclast and macrophage apoptosis. *Arthritis and Rheumatism*, **2001**, 44, 2201-10		210
35	The cellular uptake and metabolism of clodronate in RAW 264 macrophages. *Pharmaceutical Research*, **2001**, 18, 1550-5	4.5	36
34	Visualization of bisphosphonate-induced caspase-3 activity in apoptotic osteoclasts in vitro. *Bone*, **2001**, 28, 465-73	4.7	205
33	Nitrogen-containing bisphosphonates induce apoptosis of Caco-2 cells in vitro by inhibiting the mevalonate pathway: a model of bisphosphonate-induced gastrointestinal toxicity. *Bone*, **2001**, 29, 336-43	4.7	94
32	Cellular and molecular mechanisms of action of bisphosphonates. *Cancer*, **2000**, 88, 2961-2978	6.4	743
31	Analysis of an adenine nucleotide-containing metabolite of clodronate using ion pair high-performance liquid chromatography-electrospray ionisation mass spectrometry. *Biomedical Applications*, **2000**, 738, 395-403		33
30	The potent bisphosphonate ibandronate does not induce myeloma cell apoptosis in a murine model of established multiple myeloma. *British Journal of Haematology*, **2000**, 111, 283-286	4.5	
29	Protein geranylgeranylation is required for osteoclast formation, function, and survival: inhibition by bisphosphonates and GGTI-298. *Journal of Bone and Mineral Research*, **2000**, 15, 1467-76	6.3	283
28	Bisphosphonates--mechanisms of action in multiple myeloma. *Acta Oncologica*, **2000**, 39, 829-35	3.2	19
27	The potent bisphosphonate ibandronate does not induce myeloma cell apoptosis in a murine model of established multiple myeloma. *British Journal of Haematology*, **2000**, 111, 283-6	4.5	31
26	. *Cancer*,	6.4	
25	Cellular and molecular mechanisms of action of bisphosphonates. *Cancer*, **2000**, 88, 2961-78	6.4	222

24	Farnesol and geranylgeraniol prevent activation of caspases by aminobisphosphonates: biochemical evidence for two distinct pharmacological classes of bisphosphonate drugs. *Molecular Pharmacology*, **1999**, 56, 131-40	4.3	218
23	Alendronate mechanism of action: geranylgeraniol, an intermediate in the mevalonate pathway, prevents inhibition of osteoclast formation, bone resorption, and kinase activation in vitro. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 133-8	11.5	578
22	Contrasting effects of alendronate and clodronate on RAW 264 macrophages: the role of a bisphosphonate metabolite. *European Journal of Pharmaceutical Sciences*, **1999**, 8, 109-18	5.1	94
21	The pharmacology of bisphosphonates and new insights into their mechanisms of action. *Journal of Bone and Mineral Research*, **1999**, 14 Suppl 2, 53-65	6.3	188
20	Effects of Bisphosphonates on the Inflammatory Processes of Activated Macrophages. *Phosphorus, Sulfur and Silicon and the Related Elements*, **1999**, 144, 321-324	1	4
19	Bisphosphonates: from the laboratory to the clinic and back again. *Bone*, **1999**, 25, 97-106	4.7	687
18	Heterocycle-containing bisphosphonates cause apoptosis and inhibit bone resorption by preventing protein prenylation: evidence from structure-activity relationships in J774 macrophages. *Journal of Bone and Mineral Research*, **1998**, 13, 1668-78	6.3	198
17	Nitrogen-containing bisphosphonates inhibit the mevalonate pathway and prevent post-translational prenylation of GTP-binding proteins, including Ras. *Journal of Bone and Mineral Research*, **1998**, 13, 581-9	6.3	898
16	Effects of tiludronate and ibandronate on the secretion of proinflammatory cytokines and nitric oxide from macrophages in vitro. *Life Sciences*, **1998**, 62, PL95-102	6.8	55
15	Anti-tumour activity of bisphosphonates in human myeloma cells. *Leukemia and Lymphoma*, **1998**, 32, 129-38	1.9	21
14	Clodronate and liposome-encapsulated clodronate are metabolized to a toxic ATP analog, adenosine 5Ŧ(beta, gamma-dichloromethylene) triphosphate, by mammalian cells in vitro. *Journal of Bone and Mineral Research*, **1997**, 12, 1358-67	6.3	331
13	Inhibition of growth of Dictyostelium discoideum amoebae by bisphosphonate drugs is dependent on cellular uptake. *Pharmaceutical Research*, **1997**, 14, 625-30	4.5	58
12	Identification of adenine nucleotide-containing metabolites of bisphosphonate drugs using ion-pair liquid chromatography-electrospray mass spectrometry. *Biomedical Applications*, **1997**, 704, 187-95		85
11	Bisphosphonates induce apoptosis in human myeloma cell lines: a novel anti-tumour activity. *British Journal of Haematology*, **1997**, 98, 665-72	4.5	358
10	Overview of bisphosphonates. *Cancer*, **1997**, 80, 1652-60	6.4	209
9	Overview of bisphosphonates. *Cancer*, **1997**, 80, 1652-1660	6.4	162
8	Bisphosphonates induce apoptosis in mouse macrophage-like cells in vitro by a nitric oxide-independent mechanism. *Journal of Bone and Mineral Research*, **1996**, 11, 1482-91	6.3	154
7	Bisphosphonates are incorporated into adenine nucleotides by human aminoacyl-tRNA synthetase enzymes. *Biochemical and Biophysical Research Communications*, **1996**, 224, 863-9	3.4	105

6	THE ANTI-RESORPTIVE DRUG CLODRONATE IS METABOLISED TO A NON-HYDROLYSABLE ATP ANALOGUE BY MAMMALIAN CELLS IN VITRO. *Biochemical Society Transactions*, **1996**, 24, 562S-562S	5.1	1
5	MOLECULAR STUDIES OF APOPTOSIS INDUCED BY ANTI-RESORPTIVE BISPHOSPHONATE DRUGS. *Biochemical Society Transactions*, **1996**, 24, 568S-568S	5.1	
4	Mechanisms of Action of Bisphosphonates as Inhibitors of Bone Resorption. *Medical Intelligence Unit*, **1996**, 147-177		2
3	Inhibitory effects of bisphosphonates on growth of amoebae of the cellular slime mold Dictyostelium discoideum. *Journal of Bone and Mineral Research*, **1994**, 9, 1029-39	6.3	58
2	Metabolism of halogenated bisphosphonates by the cellular slime mould Dictyostelium discoideum. *Biochemical and Biophysical Research Communications*, **1992**, 189, 414-23	3.4	68
1	Application of phosphonate and thiophosphate analogues of nucleotides to studies of some enzyme reactions. *Heteroatom Chemistry*, **1991**, 2, 163-170	1.2	7