Jukka MÃ¶nkkÃ¶nen

List of Publications by Year
in descending order

97 papers	8,247 citations	44069 48 h-index	46799 89 g-index
98 all docs	98 docs citations	98 times ranked	9117 citing authors

#	Article	IF	Citations
1	Key implication of CD277/butyrophilin-3 (BTN3A) in cellular stress sensing by a major human Î³Î´ T-cell subset. Blood, 2012, 120, 2269-2279.	1.4	443
2	Biochemical and molecular mechanisms of action of bisphosphonates. Bone, 2011, 49, 34-41.	2.9	426
3	Clodronate and Liposome-Encapsulated Clodronate Are Metabolized to a Toxic ATP Analog, Adenosine 5â€²-(Î²,Î³-Dichloromethylene) Triphosphate, by Mammalian Cells In Vitro. Journal of Bone and Mineral Research, 1997, 12, 1358-1367.	2.8	388
4	Further Insight into Mechanism of Action of Clodronate: Inhibition of Mitochondrial ADP/ATP Translocase by a Nonhydrolyzable, Adenine-Containing Metabolite. Molecular Pharmacology, 2002, 61, 1255-1262.	2.3	291
5	Human breast cancer cells educate macrophages toward the M2 activation status. Breast Cancer Research, 2015, 17, 101.	5.0	291
6	Peripheral blood monocytes are responsible for Î³Î´ T cell activation induced by zoledronic acid through accumulation of IPP/DMAPP. British Journal of Haematology, 2009, 144, 245-250.	2.5	260
7	A new endogenous ATP analog (AppppI) inhibits the mitochondrial adenine nucleotide translocase (ANT) and is responsible for the apoptosis induced by nitrogen-containing bisphosphonates. British Journal of Pharmacology, 2006, 147, 437-445.	5.4	242
8	Farnesol and Geranylgeraniol Prevent Activation of Caspases by Aminobisphosphonates: Biochemical Evidence for Two Distinct Pharmacological Classes of Bisphosphonate Drugs. Molecular Pharmacology, 1999, 56, 131-140.	2.3	238
9	Transferrin mediated solid lipid nanoparticles containing curcumin: Enhanced in vitro anticancer activity by induction of apoptosis. International Journal of Pharmaceutics, 2010, 398, 190-203.	5.2	236
10	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, 2201-2210.	6.7	233
11	Macrophage Depletion by Clodronate-Containing Liposomes Reduces Neointimal Formation After Balloon Injury in Rats and Rabbits. Circulation, 2002, 106, 599-605.	1.6	221
12	Comparison of drug transporter gene expression and functionality in Caco-2 cells from 10 different laboratories. European Journal of Pharmaceutical Sciences, 2008, 35, 383-396.	4.0	220
13	Interaction of liposomes with human skin in vitro â€" The influence of lipid composition and structure. Lipids and Lipid Metabolism, 1996, 1304, 179-189.	2.6	210
14	Effect of liposomal and free bisphosphonates on the IL-1 beta, IL-6 and TNF alpha secretion from RAW 264 cells in vitro. Pharmaceutical Research, 1995, 12, 916-922.	3.5	188
15	Liposomeâ€“skin interactions and their effects on the skin permeation of drugs. European Journal of Pharmaceutical Sciences, 1999, 7, 279-286.	4.0	146
16	Butyrophilin 3A1 Plays an Essential Role in Prenyl Pyrophosphate Stimulation of Human VÎ³2VÎ´2 T Cells. Journal of Immunology, 2013, 191, 1029-1042.	0.8	142
17	Bone metastasis targeting: A novel approach to reach bone using Zoledronate anchored PLGA nanoparticle as carrier system loaded with Docetaxel. Journal of Controlled Release, 2012, 158, 470-478.	9.9	140
18	High Phosphoantigen Levels in Bisphosphonate-Treated Human Breast Tumors Promote VÎ³9VÎ´2 T-Cell Chemotaxis and Cytotoxicity In Vivo. Cancer Research, 2011, 71, 4562-4572.	0.9	134

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19	Phospholipids affect stratum corneum lipid bilayer fluidity and drug partitioning into the bilayers. Journal of Controlled Release, 1999, 58, 207-214.	9.9	127
20	ApoE3 Mediated Poly(butyl) Cyanoacrylate Nanoparticles Containing Curcumin: Study of Enhanced Activity of Curcumin against Beta Amyloid Induced Cytotoxicity Using In Vitro Cell Culture Model. Molecular Pharmaceutics, 2010, 7, 815-825.	4.6	121
21	Drug adsorption to plastic containers and retention of drugs in cultured cells under in vitro conditions. European Journal of Pharmaceutics and Biopharmaceutics, 2006, 64, 369-378.	4.3	118
22	Tissue Distribution, Metabolism, and Excretion of ¹⁴Câ€TCDD in a TCDDâ€Susceptible and a TCDDâ€Resistant Rat Strain^a. Basic and Clinical Pharmacology and Toxicology, 1990, 66, 93-100.	0.0	106
23	A Peptide Prodrug Approach for Improving Bisphosphonate Oral Absorption. Journal of Medicinal Chemistry, 2000, 43, 3641-3652.	6.4	104
24	Contrasting effects of alendronate and clodronate on RAW 264 macrophages: the role of a bisphosphonate metabolite. European Journal of Pharmaceutical Sciences, 1999, 8, 109-118.	4.0	101
25	Analysis of Unstirred Water Layer in In Vitro Permeability Experiments. Journal of Pharmaceutical Sciences, 2009, 98, 4469-4479.	3.3	100
26	Oligonucleotide-cationic liposome interactions. A physicochemical study. Biochimica Et Biophysica Acta - Biomembranes, 1994, 1195, 115-123.	2.6	93
27	Identification of adenine nucleotide-containing metabolites of bisphosphonate drugs using ion-pair liquid chromatographyâ€“electrospray mass spectrometry. Biomedical Applications, 1997, 704, 187-195.	1.7	91
28	Lipid fusion in oligonucleotide and gene delivery with cationic lipids. Advanced Drug Delivery Reviews, 1998, 34, 37-49.	13.7	91
29	Growth Inhibition of Macrophage-Like and Other Cell Types by Liposome-Encapsulated, Calcium-Bound, and Free BisphosphonatesIn Vitro. Journal of Drug Targeting, 1994, 2, 299-308.	4.4	90
30	Molecular mechanisms of action of bisphosphonates and new insights into their effects outside the skeleton. Bone, 2020, 139, 115493.	2.9	86
31	Opsonization, Biodistribution, Cellular Uptake and Apoptosis Study of PEGylated PBCA Nanoparticle as Potential Drug Delivery Carrier. Pharmaceutical Research, 2012, 29, 53-68.	3.5	85
32	Indirect Stimulation of Human Vγ2Vδ2 T Cells through Alterations in Isoprenoid Metabolism. Journal of Immunology, 2011, 187, 5099-5113.	0.8	79
33	Aminobisphosphonate-pretreated dendritic cells trigger successful Vγ9Vδ2 T cell amplification for immunotherapy in advanced cancer patients. Cancer Immunology, Immunotherapy, 2010, 59, 1611-1619.	4.2	77
34	Zoledronic acid induces formation of a proâ€apoptotic ATP analogue and isopentenyl pyrophosphate in osteoclasts in vivo and in MCFâ€7 cells in vitro. British Journal of Pharmacology, 2009, 157, 427-435.	5.4	73
35	Activation of γδ T Cells by Bisphosphonates. Advances in Experimental Medicine and Biology, 2009, 658, 11-20.	1.6	70
36	A lipid carrier with a membrane active component and a small complex size are required for efficient cellular delivery of anti-sense phosphorothioate oligonucleotides. European Journal of Pharmaceutical Sciences, 2000, 10, 187-193.	4.0	65

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37	Systemic Depletion of Macrophages by Liposomal Bisphosphonates Reduces Neointimal Formation Following Balloon-Injury in the Rat Carotid Artery. Journal of Cardiovascular Pharmacology, 2003, 42, 671-679.	1.9	65
38	Bisphosphonate-induced ATP analog formation and its effect on inhibition of cancer cell growth. Anti-Cancer Drugs, 2008, 19, 391-399.	1.4	65
39	Inhibition of growth of Dictyostelium discoideum amoebae by bisphosphonate drugs is dependent on cellular uptake. Pharmaceutical Research, 1997, 14, 625-630.	3.5	64
40	Effects of tiludronate and ibandronate on the secretion of proinflammatory cytokines and nitric oxide from macrophages in vitro. Life Sciences, 1998, 62, PL95-PL102.	4.3	64
41	Calcitonin promotes osteoclast survival in vitro. Molecular and Cellular Endocrinology, 1996, 122, 119-129.	3.2	62
42	In vitro Comparison of Clodronate, Pamidronate and Zoledronic Acid Effects on Rat Osteoclasts and Human Stem Cell-Derived Osteoblasts. Basic and Clinical Pharmacology and Toxicology, 2005, 97, 382-391.	2.5	59
43	Effects of low-dose, noncytotoxic, intraarticular liposomal clodronate on development of erosions and proteoglycan loss in established antigen-induced arthritis in rabbits. Arthritis and Rheumatism, 2001, 44, 1908-1916.	6.7	58
44	siRNA Transfection with Calcium Phosphate Nanoparticles Stabilized with PEGylated Chelators. Advanced Healthcare Materials, 2013, 2, 134-144.	7.6	57
45	Zoledronic acid-induced IPP/ApppI production in vivo. Life Sciences, 2007, 81, 1066-1070.	4.3	55
46	The level of ATP analog and isopentenyl pyrophosphate correlates with zoledronic acid-induced apoptosis in cancer cells in vitro. Bone, 2009, 45, 1153-1160.	2.9	55
47	Comparison of in vitro cell models in predicting in vivo brain entry of drugs. International Journal of Pharmaceutics, 2010, 402, 27-36.	5.2	55
48	Comparison of the Distribution of Three Bisphosphonates in Mice. Basic and Clinical Pharmacology and Toxicology, 1990, 66, 294-298.	0.0	54
49	ApoE3 mediated polymeric nanoparticles containing curcumin: Apoptosis induced in vitro anticancer activity against neuroblastoma cells. International Journal of Pharmaceutics, 2012, 437, 29-41.	5.2	51
50	Accumulation of bisphosphonates in the aorta and some other tissues of healthy and atherosclerotic rabbits. Translational Research, 1996, 127, 200-206.	2.3	49
51	Quantitative determination of cholesterol, sitosterol, and sitostanol in cultured Caco-2 cells by liquid chromatographyâ€“atmospheric pressure chemical ionization mass spectrometry. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2005, 821, 144-152.	2.3	48
52	In vitroâ€“in vivo correlation in p-glycoprotein mediated transport in intestinal absorption. European Journal of Pharmaceutical Sciences, 2009, 36, 200-211.	4.0	48
53	Enhancement of percutaneous absorption of naproxen by phospholipids. International Journal of Pharmaceutics, 1998, 175, 225-230.	5.2	47
54	Mevalonate pathway intermediates downregulate zoledronic acid-induced isopentenyl pyrophosphate and ATP analog formation in human breast cancer cells. Biochemical Pharmacology, 2010, 79, 777-783.	4.4	47

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55	In VivoPhosphoantigen Levels in Bisphosphonate-Treated Human Breast Tumors Trigger Vî³9Vî´2 T-cell Antitumor Cytotoxicity through ICAM-1 Engagement. Clinical Cancer Research, 2012, 18, 6249-6259.	7.0	46
56	Streptomyces spores from mouldy houses induce nitric oxide, TNFÎ± and IL-6 secretion from RAW264.7 macrophage cell line without causing subsequent cell death. Environmental Toxicology and Pharmacology, 1997, 3, 57-63.	4.0	43
57	A One Year Followâ€Up Study of the Distribution of ¹⁴Câ€Clodronate in Mice and Rats. Basic and Clinical Pharmacology and Toxicology, 1988, 62, 51-53.	0.0	42
58	The Asymmetry of the Unstirred Water Layer in Permeability Experiments. Pharmaceutical Research, 2008, 25, 1714-1722.	3.5	42
59	Physicochemical and morphological properties of complexes made of cationic liposomes and oligonucleotides. International Journal of Pharmaceutics, 1998, 167, 191-203.	5.2	41
60	Effects of various absorption enhancers on transport of clodronate through Caco-2 cells. International Journal of Pharmaceutics, 2003, 261, 129-136.	5.2	40
61	Absorption properties and P-glycoprotein activity of modified Caco-2 cell lines. European Journal of Pharmaceutical Sciences, 2005, 26, 266-279.	4.0	40
62	Analysis of endogenous ATP analogs and mevalonate pathway metabolites in cancer cell cultures using liquid chromatographyâ€“electrospray ionization mass spectrometry. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2009, 877, 2967-2975.	2.3	39
63	The cellular uptake and metabolism of clodronate in RAW 264 macrophages. Pharmaceutical Research, 2001, 18, 1550-1555.	3.5	38
64	Clodronate (dichloromethylene bisphosphonate) inhibits LPS-stimulated IL-6 and TNF production by raw 264 cells. Life Sciences, 1994, 54, PL229-PL234.	4.3	37
65	Macrophage-like RAW 264 cell line and time-resolved fluoroimmunoassay (TRFIA) as tools in screening drug effects on cytokine secretion. International Journal of Immunopharmacology, 1995, 17, 475-480.	1.1	37
66	Induced Production of Nitric Oxide, Tumor Necrosis Factor, and Interleukin-6 in RAW 264.7 Macrophages by Streptomycetes from Indoor Air of Moldy Houses. Archives of Environmental Health, 1997, 52, 426-432.	0.4	36
67	Analysis of an adenine nucleotide-containing metabolite of clodronate using ion pair high-performance liquid chromatographyâ€“electrospray ionisation mass spectrometry. Biomedical Applications, 2000, 738, 395-403.	1.7	35
68	Inhibition of mevalonate pathway is involved in alendronate-induced cell growth inhibition, but not in cytokine secretion from macrophages in vitro. European Journal of Pharmaceutical Sciences, 2003, 19, 223-230.	4.0	35
69	Decrease in Intracellular Concentration Causes the Shift in Km Value of Efflux Pump Substrates. Drug Metabolism and Disposition, 2007, 35, 1574-1579.	3.3	35
70	Studies on liposome formulations for intra-articular delivery of clodronate. Journal of Controlled Release, 1995, 35, 145-154.	9.9	32
71	Kinetics of Cellular Retention during Caco-2 Permeation Experiments: Role of Lysosomal Sequestration and Impact on Permeability Estimates. Journal of Pharmacology and Experimental Therapeutics, 2009, 328, 882-892.	2.5	32
72	Liposome encapsulated zoledronate favours M1-like behaviour in murine macrophages cultured with soluble factors from breast cancer cells. BMC Cancer, 2015, 15, 4.	2.6	31

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73	Modelling of Drug Disposition Kinetics in In Vitro Intestinal Absorption Cell Models. Basic and Clinical Pharmacology and Toxicology, 2010, 106, 180-188.	2.5	27
74	Apoptosis-induced anticancer effect of transferrin-conjugated solid lipid nanoparticles of curcumin. Cancer Nanotechnology, 2012, 3, 65-81.	3.7	27
75	Transdermal delivery of levosimendan. European Journal of Pharmaceutical Sciences, 2000, 11, 343-350.	4.0	26
76	Influence of lipids on the mannitol flux during transdermal iontophoresis in vitro. European Journal of Pharmaceutical Sciences, 2000, 10, 97-102.	4.0	26
77	Metabolic and Efflux Properties of Caco-2 Cells Stably Transfected with Nuclear Receptors. Pharmaceutical Research, 2006, 23, 1991-2001.	3.5	25
78	Targeting Efficiency and Biodistribution of Zoledronate Conjugated Docetaxel Loaded Pegylated PBCA Nanoparticles for Bone Metastasis. Advanced Functional Materials, 2012, 22, 4101-4114.	14.9	25
79	Effects of Clodronate and Pamidronate on Splenic and Hepatic Phagocytic Cells of Mice. Basic and Clinical Pharmacology and Toxicology, 1991, 68, 284-286.	0.0	24
80	The effects of liposome surface charge and size on the intracellular delivery of clodronate and gallium in vitro. International Journal of Pharmaceutics, 1994, 107, 189-197.	5.2	23
81	EFFECTS OF LIPOSOME-ENCAPSULATED BISPHOSPHONATES ON ACETYLATED LDL METABOLISM, LIPID ACCUMULATION AND VIABILITY OF PHAGOCYTING CELLS. Life Sciences, 1997, 62, 413-422.	4.3	22
82	Characterization of Caco-2 cell monolayer drug transport properties by cassette dosing using UV/fluorescence HPLC. European Journal of Pharmaceutics and Biopharmaceutics, 2004, 57, 319-328.	4.3	22
83	Selective Calcium-Dependent Inhibition of ATP-Gated P2X3 Receptors by Bisphosphonate-Induced Endogenous ATP Analog ApppI. Journal of Pharmacology and Experimental Therapeutics, 2017, 361, 472-481.	2.5	21
84	Synthesis and preclinical pharmacology of 2-(2-aminopyrimidinio) ethylidene-1,1-bisphosphonic acid betaine (ISA-13-1)-a novel bisphosphonate. Pharmaceutical Research, 1999, 16, 1399-1406.	3.5	19
85	Effects of Experimental Setup on the Apparent Concentration Dependency of Active Efflux Transport in in Vitro Cell Permeation Experiments. Molecular Pharmaceutics, 2010, 7, 605-617.	4.6	19
86	Lysosomal-Mitochondrial Axis in Zoledronic Acid-induced Apoptosis in Human Follicular Lymphoma Cells. Journal of Biological Chemistry, 2010, 285, 1967-1979.	3.4	18
87	Effects of calcium and lipophilicity on transport of clodronate and its esters through Caco-2 cells. International Journal of Pharmaceutics, 2001, 213, 135-142.	5.2	17
88	Correlation between time-dependent inhibition of human farnesyl pyrophosphate synthase and blockade of mevalonate pathway by nitrogen-containing bisphosphonates in cultured cells. Biochemical and Biophysical Research Communications, 2011, 407, 663-667.	2.1	15
89	Liposome-mediated delivery of gallium to macrophage-like cells in vitro: demonstration of a transferrin-independent route for intracellular delivery of metal ions. Pharmaceutical Research, 1993, 10, 1130-1135.	3.5	14
90	Cellular uptake and metabolism of clodronate and its derivatives in Caco-2 cells: a possible correlation with bisphosphonate-induced gastrointestinal side-effects. European Journal of Pharmaceutical Sciences, 2003, 19, 23-29.	4.0	14

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91	Uptake of free, calcium-bound and liposomal encapsulated nitrogen containing bisphosphonates by breast cancer cells. European Journal of Pharmaceutical Sciences, 2016, 86, 58-66.	4.0	12
92	In Vitro and In Vivo Effects of Tetrakisphosphonates on Bone Resorption, Tumor Osteolysis, Ectopic Calcification, and Macrophages. Journal of Pharmaceutical Sciences, 1997, 86, 283-289.	3.3	10
93	Determination of permeation resistance distribution in in vitro cell monolayer permeation experiments. European Journal of Pharmaceutical Sciences, 2010, 40, 132-142.	4.0	10
94	Protein concentration and pH affect the apparent P-glycoproteinâ€“ATPase activation kinetics. International Journal of Pharmaceutics, 2008, 346, 169-172.	5.2	6
95	Effect of N-betainate and N-piperazine derivatives of chitosan on the paracellular transport of mannitol in Caco-2 cells. European Journal of Pharmaceutical Sciences, 2008, 35, 226-234.	4.0	6
96	Effects of Bisphosphonates on the Inflammatory Processes of Activated Macrophages. Phosphorus, Sulfur and Silicon and the Related Elements, 1999, 144, 321-324.	1.6	5
97	Growth Inhibition of Macrophage-like and Other Cell Types by Liposome-encapsulated, Calcium-bound, and Free BisphosphonatesIn Vitro. Journal of Drug Targeting, 2003, 11, 279-286.	4.4	3