Dieter BrÃ¶mme

List of Publications by Year
in descending order

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84	7,777	66343	58581
papers	citations	42 h-index	82 g-index

89	89	89	6697
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Lycopene Improves Bone Quality and Regulates AGE/RAGE/NF-ÐºB Signaling Pathway in High-Fat Diet-Induced Obese Mice. Oxidative Medicine and Cellular Longevity, 2022, 2022, 1-14.	4.0	12
2	Antibody-induced pain-like behavior and bone erosion: links to subclinical inflammation, osteoclast activity, and acid-sensing ion channel 3â€“dependent sensitization. Pain, 2022, 163, 1542-1559.	4.2	21
3	The abnormal accumulation of heparan sulfate in patients with mucopolysaccharidosis prevents the elastolytic activity of cathepsin V. Carbohydrate Polymers, 2021, 253, 117261.	10.2	13
4	Green asymmetric synthesis of epoxypeptidomimetics and evaluation as human cathepsin K inhibitors. Bioorganic and Medicinal Chemistry, 2020, 28, 115597.	3.0	3
5	Expression of elastolytic cathepsins in human skin and their involvement in age-dependent elastin degradation. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129544.	2.4	21
6	Characterization of cathepsin S exosites that govern its elastolytic activity. Biochemical Journal, 2020, 477, 227-242.	3.7	6
7	Elastolytic activity of cysteine cathepsins K, S, and V promotes vascular calcification. Scientific Reports, 2019, 9, 9682.	3.3	22
8	A Mild Inhibition of Cathepsin K Paradoxically Stimulates the Resorptive Activity of Osteoclasts in Culture. Calcified Tissue International, 2019, 104, 92-101.	3.1	6
9	Identification of substrate-specific inhibitors of cathepsin K through high-throughput screening. Biochemical Journal, 2019, 476, 499-512.	3.7	4
10	Fructus Ligustri Lucidi preserves bone quality through the regulation of gut microbiota diversity, oxidative stress, TMAO and Sirt6 levels in aging mice. Aging, 2019, 11, 9348-9368.	3.1	72
11	Tanshinones that selectively block the collagenase activity of cathepsin K provide a novel class of ectosteric antiresorptive agents for bone. British Journal of Pharmacology, 2018, 175, 902-923.	5.4	20
12	Substrate-derived triazolo- and azapeptides as inhibitors of cathepsins K and S. European Journal of Medicinal Chemistry, 2018, 144, 201-210.	5.5	17
13	Aging-associated modifications of collagen affect its degradation by matrix metalloproteinases. Matrix Biology, 2018, 65, 30-44.	3.6	109
14	Collagen type I degradation fragments act through the collagen receptor LAIR-1 to provide a negative feedback for osteoclast formation. Bone, 2018, 117, 23-30.	2.9	20
15	Leupeptazin, a highly modified tripeptide isolated from cultures of a Streptomyces sp. inhibits cathepsin K. Bioorganic and Medicinal Chemistry Letters, 2017, 27, 1397-1400.	2.2	2
16	Identification of mouse cathepsin K structural elements that regulate the potency of odanacatib. Biochemical Journal, 2017, 474, 851-864.	3.7	24
17	An Ectosteric Inhibitor of Cathepsin K Inhibits Bone Resorption in Ovariectomized Mice. Journal of Bone and Mineral Research, 2017, 32, 2415-2430.	2.8	36
18	Effect of conditioning solutions containing ferric chloride on dentin bond strength and collagen degradation. Dental Materials, 2017, 33, 1093-1102.	3.5	9

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19	A composite docking approach for the identification and characterization of ectosteric inhibitors of cathepsin K. PLoS ONE, 2017, 12, e0186869.	2.5	8
20	The Unusual Resistance of Avian Defensin AvBD7 to Proteolytic Enzymes Preserves Its Antibacterial Activity. PLoS ONE, 2016, 11, e0161573.	2.5	7
21	Cathepsin K osteoporosis trials, pycnodysostosis and mouse deficiency models: Commonalities and differences. Expert Opinion on Drug Discovery, 2016, 11, 457-472.	5.0	51
22	Affinity Crystallography: A New Approach to Extracting High-Affinity Enzyme Inhibitors from Natural Extracts. Journal of Natural Products, 2016, 79, 1962-1970.	3.0	16
23	A novel approach to inhibit bone resorption: exosite inhibitors against cathepsin K. British Journal of Pharmacology, 2016, 173, 396-410.	5.4	46
24	Development and characterization of a eukaryotic expression system for human type II procollagen. BMC Biotechnology, 2015, 15, 112.	3.3	21
25	Structural requirements for the collagenase and elastase activity of cathepsin K and its selective inhibition by an exosite inhibitor. Biochemical Journal, 2015, 465, 163-173.	3.7	40
26	Antimicrobial Peptide LL-37 Is Both a Substrate of Cathepsins S and K and a Selective Inhibitor of Cathepsin L. Biochemistry, 2015, 54, 2785-2798.	2.5	38
27	Changes in Structural-Mechanical Properties and Degradability of Collagen during Aging-associated Modifications. Journal of Biological Chemistry, 2015, 290, 23291-23306.	3.4	81
28	Structural basis of collagen fiber degradation by cathepsin K. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17474-17479.	7.1	110
29	Salvia miltiorrhiza: An ancient Chinese herbal medicine as a source for anti-osteoporotic drugs. Journal of Ethnopharmacology, 2014, 155, 1401-1416.	4.1	150
30	Anti-inflammatory and anti-osteoporotic lignans from Vitex negundo seeds. FÃ¬toterapÃ¬Ã¢, 2014, 93, 31-38.	2.2	31
31	Elastin Degradation by Cathepsin V Requires Two Exosites. Journal of Biological Chemistry, 2013, 288, 34871-34881.	3.4	37
32	The Role of Basic Amino Acid Surface Clusters on the Collagenase Activity of Cathepsin K. Biochemistry, 2013, 52, 7742-7752.	2.5	15
33	Effects of Cysteine Proteases on the Structural and Mechanical Properties of Collagen Fibers. Journal of Biological Chemistry, 2013, 288, 5940-5950.	3.4	80
34	Cathepsin V. , 2013, , 1831-1834.		0
35	Cleavage of Nidogen-1 by Cathepsin S Impairs Its Binding to Basement Membrane Partners. PLoS ONE, 2012, 7, e43494.	2.5	37
36	Cysteine Cathepsins and the Skeleton. Clinical Reviews in Bone and Mineral Metabolism, 2011, 9, 83-93.	0.8	7

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37	Lack of cathepsin activities alter or prevent the development of lung granulomas in a mouse model of sarcoidosis. Respiratory Research, 2011, 12, 13.	3.6	15
38	Antifibrotic effects of curcumin are associated with overexpression of cathepsins K and L in bleomycin treated mice and human fibroblasts. Respiratory Research, 2011, 12, 154.	3.6	65
39	The effect of cathepsin K deficiency on airway development and TGF-Î²1 degradation. Respiratory Research, 2011, 12, 72.	3.6	40
40	Acridone alkaloids as potent inhibitors of cathepsin V. Bioorganic and Medicinal Chemistry, 2011, 19, 1477-1481.	3.0	31
41	Structure-Activity Analysis of Cathepsin K/Chondroitin 4-Sulfate Interactions. Journal of Biological Chemistry, 2011, 286, 8988-8998.	3.4	33
42	Role of Cysteine Cathepsins in Extracellular Proteolysis. , 2011, , 23-51.		24
43	Pharmacological Inhibition of Cathepsin S Decreases Atherosclerotic Lesions in Apoe-/- Mice. Journal of Cardiovascular Pharmacology, 2010, 56, 98-105.	1.9	54
44	Cathepsin K inhibitors for osteoporosis and potential off-target effects. Expert Opinion on Investigational Drugs, 2009, 18, 585-600.	4.1	177
45	Monitoring compartment-specific substrate cleavage by cathepsins B, K, L, and S at physiological pH and redox conditions. BMC Biochemistry, 2009, 10, 23.	4.4	134
46	Glycosaminoglycan-Mediated Loss of Cathepsin K Collagenolytic Activity in MPS I Contributes to Osteoclast and Growth Plate Abnormalities. American Journal of Pathology, 2009, 175, 2053-2062.	3.8	80
47	The Crystal and Molecular Structures of a Cathepsin K:Chondroitin Sulfate Complex. Journal of Molecular Biology, 2008, 383, 78-91.	4.2	95
48	Role of cathepsin K in structural changes in brachiocephalic artery during progression of atherosclerosis in apoE-deficient mice. Atherosclerosis, 2008, 200, 58-68.	0.8	57
49	Cathepsin V, but not cathepsins L, B and K, may release angiostatin-like fragments from plasminogen. Biological Chemistry, 2008, 389, 195-200.	2.5	16
50	Regulation of cathepsin K activity by hydrogen peroxide. Biological Chemistry, 2008, 389, 1123-1126.	2.5	30
51	Selective Inhibition of the Collagenase Activity of Cathepsin K. Journal of Biological Chemistry, 2007, 282, 16492-16501.	3.4	23
52	The S2 subsites of cathepsins K and L and their contribution to collagen degradation. Protein Science, 2007, 16, 662-670.	7.6	58
53	Substrate Profiling of Cysteine Proteases Using a Combinatorial Peptide Library Identifies Functionally Unique Specificities. Journal of Biological Chemistry, 2006, 281, 12824-12832.	3.4	370
54	Osteoclastic Bone Degradation and the Role of Different Cysteine Proteinases and Matrix Metalloproteinases: Differences Between Calvaria and Long Bone. Journal of Bone and Mineral Research, 2006, 21, 1399-1408.	2.8	156

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55	The role of cathepsins in osteoporosis and arthritis: Rationale for the design of new therapeutics. Advanced Drug Delivery Reviews, 2005, 57, 973-993.	13.7	270
56	Cathepsin V, a Novel and Potent Elastolytic Activity Expressed in Activated Macrophages. Journal of Biological Chemistry, 2004, 279, 36761-36770.	3.4	165
57	The human cysteine protease cathepsin V can compensate for murine cathepsin L in mouse epidermis and hair follicles. European Journal of Cell Biology, 2004, 83, 775-780.	3.6	48
58	Pivotal Role of Cathepsin K in Lung Fibrosis. American Journal of Pathology, 2004, 164, 2203-2216.	3.8	167
59	Comparative substrate specificity analysis of recombinant human cathepsin V and cathepsin L. Archives of Biochemistry and Biophysics, 2004, 430, 274-283.	3.0	60
60	Regulation of Collagenase Activities of Human Cathepsins by Glycosaminoglycans. Journal of Biological Chemistry, 2004, 279, 5470-5479.	3.4	194
61	Production and activation of recombinant papain-like cysteine proteases. Methods, 2004, 32, 199-206.	3.8	104
62	Cathepsin K: a cysteine protease with unique kinin-degrading properties. Biochemical Journal, 2004, 383, 501-506.	3.7	37
63	Cathepsin V is involved in the degradation of invariant chain in human thymus and is overexpressed in myasthenia gravis. Journal of Clinical Investigation, 2003, 112, 517-526.	8.2	105
64	Collagenase Activity of Cathepsin K Depends on Complex Formation with Chondroitin Sulfate. Journal of Biological Chemistry, 2002, 277, 28669-28676.	3.4	153
65	Human and Parasitic Papain-Like Cysteine Proteases:Â Their Role in Physiology and Pathology and Recent Developments in Inhibitor Design. Chemical Reviews, 2002, 102, 4459-4488.	47.7	468
66	Thiol-Dependent Cathepsins: Pathophysiological Implications and Recent Advances in Inhibitor Design. Current Pharmaceutical Design, 2002, 8, 1639-1658.	1.9	87
67	Comparison of cathepsins K and S expression within the rheumatoid and osteoarthritic synovium. Arthritis and Rheumatism, 2002, 46, 663-674.	6.7	168
68	Cathepsin K Is a Critical Protease in Synovial Fibroblast-Mediated Collagen Degradation. American Journal of Pathology, 2001, 159, 2167-2177.	3.8	169
69	Role for Cathepsin F in Invariant Chain Processing and Major Histocompatibility Complex Class II Peptide Loading by Macrophages. Journal of Experimental Medicine, 2000, 191, 1177-1186.	8.5	216
70	Collagenolytic Activity of Cathepsin K Is Specifically Modulated by Cartilage-Resident Chondroitin Sulfates. Biochemistry, 2000, 39, 529-536.	2.5	155
71	Papainâ€like Cysteine Proteases. Current Protocols in Protein Science, 2000, 21, Unit 21.2.	2.8	26
72	Human Cathepsin V Functional Expression, Tissue Distribution, Electrostatic Surface Potential, Enzymatic Characterization, and Chromosomal Localizationâ€¡. Biochemistry, 1999, 38, 2377-2385.	2.5	213

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73	Characterization of novel cathepsin K mutations in the pro and mature polypeptide regions causing pycnodysostosis. Journal of Clinical Investigation, 1999, 103, 731-738.	8.2	132
74	Human cathepsin K cleaves native type I and II collagens at the N-terminal end of the triple helix. Biochemical Journal, 1998, 331, 727-732.	3.7	318
75	Crystal structure of human cathepsin K complexed with a potent inhibitor. Nature Structural Biology, 1997, 4, 105-109.	9.7	142
76	Expression of human cathepsin K in Pichia pastoris and preliminary crystallographic studies of an inhibitor complex. Protein Science, 1997, 6, 919-921.	7.6	99
77	Human Cathepsin O2, a Matrix Protein-degrading Cysteine Protease Expressed in Osteoclasts. Journal of Biological Chemistry, 1996, 271, 2126-2132.	3.4	387
78	Essential Role for Cathepsin S in MHC Class IIâ€“Associated Invariant Chain Processing and Peptide Loading. Immunity, 1996, 4, 357-366.	14.3	502
79	Human Cathepsin O2, a Novel Cysteine Protease Highly Expressed in Osteoclastomas and Ovary Molecular Cloning, Sequencing and Tissue Distribution. Biological Chemistry Hoppe-Seyler, 1995, 376, 379-384.	1.4	215
80	Vinyl Sulfones as Mechanism-Based Cysteine Protease Inhibitors. Journal of Medicinal Chemistry, 1995, 38, 3193-3196.	6.4	487
81	N -Peptidyl-O -carbamoyl amino acid hydroxamates: Irreversible inhibitors for the study of the S2 â€² specificity of cysteine proteinases. FEBS Letters, 1993, 322, 211-214.	2.8	16
82	Peptide Methyl Ketones as Reversible Inhibitors of Cysteine Proteinases. Journal of Enzyme Inhibition and Medicinal Chemistry, 1989, 3, 13-21.	0.5	17
83	Action of rat liver cathepsin B on bradykinin and on the oxidized insulin A-chain. FEBS Letters, 1987, 219, 441-444.	2.8	1
84	New Synthetic Quinolines as Cathepsin K Inhibitors. Journal of the Brazilian Chemical Society, 0, , .	0.6	1