Alan J. Barrett

List of Publications by Year
in descending order

149	22,526	14655 66	10445 139
papers	citations	h-index	g-index

162	162	162	17097
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	[41] Cathepsin B, cathepsin H, and cathepsin L. Methods in Enzymology, 1981, 80 Pt C, 535-561.	1.0	1,533
2	A Direct Spectrophotometric Microassay for Sulfated Glycosaminoglycans in Cartilage Cultures. Connective Tissue Research, 1982, 9, 247-248.	2.3	1,255
3	The MEROPS database of proteolytic enzymes, their substrates and inhibitors in 2017 and a comparison with peptidases in the PANTHER database. Nucleic Acids Research, 2018, 46, D624-D632.	14.5	1,234
4	MEROPS: the database of proteolytic enzymes, their substrates and inhibitors. Nucleic Acids Research, 2012, 40, D343-D350.	14.5	1,047
5	The interaction of Î±2-macroglobulin with proteinases. Characteristics and specificity of the reaction, and a hypothesis concerning its molecular mechanism. Biochemical Journal, 1973, 133, 709-724.	3.7	1,035
6	MEROPS: the peptidase database. Nucleic Acids Research, 2010, 38, D227-D233.	14.5	786
7	MEROPS: the database of proteolytic enzymes, their substrates and inhibitors. Nucleic Acids Research, 2014, 42, D503-D509.	14.5	782
8	[13] Evolutionary families of metallopeptidases. Methods in Enzymology, 1995, 248, 183-228.	1.0	707
9	Twenty years of theMEROPSdatabase of proteolytic enzymes, their substrates and inhibitors. Nucleic Acids Research, 2016, 44, D343-D350.	14.5	648
10	Evolutionary families of peptidase inhibitors. Biochemical Journal, 2004, 378, 705-716.	3.7	528
11	[2] Families of serine peptidases. Methods in Enzymology, 1994, 244, 19-61.	1.0	506
12	MEROPS: the peptidase database. Nucleic Acids Research, 2007, 36, D320-D325.	14.5	497
13	MEROPS: the peptidase database. Nucleic Acids Research, 2006, 34, D270-D272.	14.5	477
14	A new assay for cathepsin B1 and other thiol proteinases. Analytical Biochemistry, 1972, 47, 280-293.	2.4	425
15	MEROPS: the peptidase database. Nucleic Acids Research, 1999, 27, 325-331.	14.5	421
16	Cathepsin B1. A lysosomal enzyme that degrades native collagen. Biochemical Journal, 1974, 137, 387-398.	3.7	382
17	A rapid and reproducible assay for collagenase using [1-14C]acetylated collagen. Analytical Biochemistry, 1979, 99, 340-345.	2.4	364
18	MEROPS: the peptidase database. Nucleic Acids Research, 2004, 32, 160D-164.	14.5	355

#	Article	IF	Citations
19	An asparaginyl endopeptidase processes a microbial antigen for class II MHC presentation. Nature, 1998, 396, 695-699.	27.8	344
20	Human cathepsin B1. Purification and some properties of the enzyme. Biochemical Journal, 1973, 131, 809-822.	3.7	324
21	Cloning, Isolation, and Characterization of Mammalian Legumain, an Asparaginyl Endopeptidase. Journal of Biological Chemistry, 1997, 272, 8090-8098.	3.4	314
22	[32] Families of cysteine peptidases. Methods in Enzymology, 1994, 244, 461-486.	1.0	311
23	The place of human Î³-trace (cystatin C) amongst the cysteine proteinase inhibitors. Biochemical and Biophysical Research Communications, 1984, 120, 631-636.	2.1	282
24	Evolution of proteins of the cystatin superfamily. Journal of Molecular Evolution, 1990, 30, 60-71.	1.8	277
25	[54] Î±2-Macroglobulin. Methods in Enzymology, 1981, 80 Pt C, 737-754.	1.0	266
26	The cystatins: a new class of peptidase inhibitors. Trends in Biochemical Sciences, 1987, 12, 193-196.	7.5	262
27	Inhibition of Mammalian Legumain by Some Cystatins Is Due to a Novel Second Reactive Site. Journal of Biological Chemistry, 1999, 274, 19195-19203.	3.4	246
28	[1] Classification of peptidases. Methods in Enzymology, 1994, 244, 1-15.	1.0	209
29	Identification of the active site of legumain links it to caspases, clostripain and gingipains in a new clan of cysteine endopeptidases. FEBS Letters, 1998, 441, 361-365.	2.8	197
30	The interaction of Î±2-macroglobulin with proteinases. Binding and inhibition of mammalian collagenases and other metal proteinases. Biochemical Journal, 1974, 139, 359-368.	3.7	191
31	MEROPS: the protease database. Nucleic Acids Research, 2002, 30, 343-346.	14.5	190
32	CA074 methyl ester: A proinhibitor for intracellular cathepsin B. Archives of Biochemistry and Biophysics, 1992, 299, 377-380.	3.0	188
33	Evolutionary Lines of Cysteine Peptidases. Biological Chemistry, 2001, 382, 727-33.	2.5	179
34	The Two Cysteine Endopeptidases of Legume Seeds: Purification and Characterization by Use of Specific Fluorometric Assays. Archives of Biochemistry and Biophysics, 1993, 303, 208-213.	3.0	177
35	Families and Clans of Serine Peptidases. Archives of Biochemistry and Biophysics, 1995, 318, 247-250.	3.0	177
36	Evolutionary Lines of Cysteine Peptidases. Biological Chemistry, 2001, 382, 727-734.	2.5	177

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37	The degradation of articular collagen by neutrophil proteinases. Biochimica Et Biophysica Acta - Biomembranes, 1977, 483, 386-397.	2.6	167
38	The possible role of neutrophil proteinases in damage to articular cartilage. Agents and Actions, 1978, 8, 11-18.	0.7	156
39	Phosphorylation, glycosylation, and proteolytic activity of the 52-kD estrogen-induced protein secreted by MCF7 cells.. Journal of Cell Biology, 1987, 104, 253-262.	5.2	146
40	[7] Families of aspartic peptidases, and those of unknown catalytic mechanism. Methods in Enzymology, 1995, 248, 105-120.	1.0	131
41	Stem bromelain: Amino acid sequence and implications for weak binding of cystatin. FEBS Letters, 1989, 247, 419-424.	2.8	129
42	[44] Leukocyte Elastase. Methods in Enzymology, 1981, 80 Pt C, 581-588.	1.0	125
43	Cloning and expression of mouse legumain, a lysosomal endopeptidase. Biochemical Journal, 1998, 335, 111-117.	3.7	125
44	The MEROPS Database as a Protease Information System. Journal of Structural Biology, 2001, 134, 95-102.	2.8	124
45	Inhibition of cartilage proteoglycan release by a specific inactivator of cathepsin b and an inhibitor of matrix metalloproteinases. evidence for two converging pathways of chondrocyte-mediated proteoglycan degradation. Arthritis and Rheumatism, 1993, 36, 1709-1717.	6.7	122
46	The Degradation of Human Glomerular Basement Membrane with Purified Lysosomal Proteinases: Evidence for the Pathogenic Role of the Polymorphonuclear Leucocyte in Glomerulonephritis. Clinical Science and Molecular Medicine, 1978, 54, 233-240.	0.8	111
47	MEROPS: the peptidase database. Nucleic Acids Research, 2000, 28, 323-325.	14.5	109
48	Cathepsins B1 and D. Action on human cartilage proteoglycans. Biochimica Et Biophysica Acta - Biomembranes, 1973, 302, 411-419.	2.6	108
49	[57] Cystatin, the egg white inhibitor of cysteine proteinases. Methods in Enzymology, 1981, , 771-778.	1.0	108
50	Amino acid sequence of the intracellular cysteine proteinase inhibitor cystatin B from human liver. Biochemical and Biophysical Research Communications, 1985, 131, 1187-1192.	2.1	108
51	[42] Cathepsin G. Methods in Enzymology, 1981, 80 Pt C, 561-565.	1.0	100
52	Human cathepsin B1. Inhibition by Î±2-macroglobulin and other serum proteins. Biochemical Journal, 1973, 131, 823-831.	3.7	98
53	An improved color reagent for use in Barrett's assay of cathepsin B. Analytical Biochemistry, 1976, 76, 374-376.	2.4	94
54	The proteolytic activities of chymopapain, papain, and papaya proteinase III. BBA - Proteins and Proteomics, 1985, 828, 196-204.	2.1	92

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55	[32] Thimet oligopeptidase and oligopeptidase M or neurolysin. Methods in Enzymology, 1995, 248, 529-556.	1.0	92
56	Tripeptidyl-peptidase I is apparently the CLN2 protein absent in classical late-infantile neuronal ceroid lipofuscinosis. BBA - Proteins and Proteomics, 1999, 1429, 496-500.	2.1	89
57	Asparagine Peptide Lyases. Journal of Biological Chemistry, 2011, 286, 38321-38328.	3.4	89
58	Oligopeptidases, and the Emergence of the Prolyl Oligopeptidase Family. Biological Chemistry Hoppe-Seyler, 1992, 373, 353-360.	1.4	86
59	IMMUNOINHIBITION OF INTRACELLULAR PROTEIN DIGESTION IN MACROPHAGES. Journal of Experimental Medicine, 1973, 137, 1124-1141.	8.5	82
60	Activation of Progelatinase A by Mammalian Legumain, a Recently Discovered Cysteine Proteinase. Biological Chemistry, 2001, 382, 777-784.	2.5	82
61	Structure of membrane glutamate carboxypeptidase. BBA - Proteins and Proteomics, 1997, 1339, 247-252.	2.1	79
62	The effects of selective matrix degradation on the short-term compressive properties of adult human articular cartilage. Biochimica Et Biophysica Acta - General Subjects, 1992, 1116, 147-154.	2.4	78
63	Microassay for cathepsin D shows an unexpected effect of cycloheximide on limb-bone rudiments in organ culture. Experimental Cell Research, 1970, 61, 470-472.	2.6	76
64	Identification of plasma kallikrein as an activator of latent collagenase in rheumatoid synovial fluid. BBA - Proteins and Proteomics, 1982, 702, 133-142.	2.1	71
65	Pig kidney legumain: an asparaginyl endopeptidase with restricted specificity. Biochemical Journal, 1999, 339, 743-749.	3.7	69
66	Activation of Progelatinase A by Mammalian Legumain, a Recently Discovered Cysteine Proteinase. Biological Chemistry, 2001, 382, 777-83.	2.5	69
67	Characterization of a Mitochondrial Metallopeptidase Reveals Neurolysin as a Homologue of Thimet Oligopeptidase. Journal of Biological Chemistry, 1995, 270, 2092-2098.	3.4	63
68	Specific Inhibition of Cartilage Breakdown. Nature, 1969, 222, 285-286.	27.8	62
69	Ananain: A novel cysteine proteinase found in pineapple stem. Archives of Biochemistry and Biophysics, 1988, 267, 262-270.	3.0	60
70	The amino acid sequence of a novel inhibitor of cathepsin D from potato. FEBS Letters, 1990, 267, 13-15.	2.8	60
71	Aza-Peptide Epoxides:Â A New Class of Inhibitors Selective for Clan CD Cysteine Proteases. Journal of Medicinal Chemistry, 2002, 45, 4958-4960.	6.4	59
72	An alternative quenched fluorescence substrate for Pz-peptidase. Analytical Biochemistry, 1990, 186, 112-115.	2.4	54

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73	Families and clans of cysteine peptidases. Journal of Computer - Aided Molecular Design, 1996, 6, 1-11.	1.0	54
74	The disulphide bridges of human cystatin C (Î³-trace) and chicken cystatin. FEBS Letters, 1984, 170, 370-374.	2.8	51
75	THE IMMUNOCYTOCHEMICAL DEMONSTRATION OF CATHEPSIN D. Journal of Histochemistry and Cytochemistry, 1972, 20, 261-265.	2.5	50
76	Evolution of Î±2-macroglobulin. The structure of a protein homologous with human Î±2-macroglobulin from plaice (Pleuronectes platessa L.) plasma. Biochemical Journal, 1982, 205, 105-115.	3.7	48
77	Immunolocalization of human cystatins in neutrophils and lymphocytes. Histochemistry, 1984, 80, 373-377.	1.9	48
78	Selective cleavage of glycyl bonds by papaya proteinase IV. FEBS Letters, 1990, 260, 195-197.	2.8	42
79	Papaya proteinase IV amino acid sequence. FEBS Letters, 1989, 258, 109-112.	2.8	41
80	[21] Human kininogens. Methods in Enzymology, 1988, 163, 240-256.	1.0	40
81	Rapid isolation of human kininogens. Thrombosis Research, 1987, 48, 187-193.	1.7	39
82	Interactions of papaya proteinase IV with inhibitors. FEBS Letters, 1990, 262, 58-60.	2.8	39
83	Using the MEROPS Database for Proteolytic Enzymes and Their Inhibitors and Substrates. Current Protocols in Bioinformatics, 2014, 48, 1.25.1-33.	25.8	39
84	Effect of Cortisol on the Synthesis of Chondroitin Sulphate by Embryonic Cartilage. Nature, 1966, 211, 83-84.	27.8	38
85	Legumain Forms from Plants and Animals Differ in Their Specificity. Biological Chemistry, 2001, 382, 953-9.	2.5	37
86	Types and families of endopeptidases. Biochemical Society Transactions, 1991, 19, 707-715.	3.4	36
87	Managing Peptidases in the Genomic Era. Biological Chemistry, 2003, 384, 873-82.	2.5	36
88	Video enhanced imaging of the fluorescent Na+probe SBFI indicates that colonic crypts absorb fluid by generating a hypertonic interstitial fluid. FEBS Letters, 1990, 260, 187-194.	2.8	35
89	Neutral proteinase of rabbit skin: An enzyme capable of degrading skin protein and inducing an inflammatory response. Biochimica Et Biophysica Acta - Biomembranes, 1974, 350, 1-12.	2.6	34
90	Evidence that extracellular cathepsin D is not responsible for the resorption of cartilage matrix in culture. Biochimica Et Biophysica Acta - General Subjects, 1982, 714, 307-312.	2.4	34

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91	Inhibition of cysteine proteinases by a protein inhibitor from potato. FEBS Letters, 1990, 269, 328-330.	2.8	33
92	Colorimetric and Fluorimetric Microplate Assays for Legumain and a Staining Reaction for Detection of the Enzyme after Electrophoresis. Analytical Biochemistry, 1999, 273, 278-283.	2.4	33
93	â€˜Speciesâ€™ of peptidases. Biological Chemistry, 2007, 388, 1151-7.	2.5	32
94	The role of aspartic and cysteine proteinases in albumin degradation by rat kidney cortical lysosomes. Archives of Biochemistry and Biophysics, 1987, 256, 687-691.	3.0	31
95	Clostripain: Characterization of the active site. FEBS Letters, 1991, 283, 277-280.	2.8	31
96	Pig kidney legumain: an asparaginyl endopeptidase with restricted specificity. Biochemical Journal, 1999, 339, 743.	3.7	31
97	Introduction: metallopeptidases and their clans. , 2004, , 231-267.		31
98	Chicken Î±2-proteinase inhibitor: A serum protein homologous with ovoinhibitor of egg white. Biochimica Et Biophysica Acta (BBA) - Protein Structure, 1974, 371, 52-62.	1.7	29
99	Inhibition of Mammalian Legumain by Michael Acceptors and AzaAsn-Halomethylketones. Biological Chemistry, 2002, 383, 1205-14.	2.5	29
100	Human Cathepsin D. Advances in Experimental Medicine and Biology, 1977, 95, 291-300.	1.6	29
101	Proteolytic and other metabolic pathways in lysosomes. Biochemical Society Transactions, 1984, 12, 899-902.	3.4	28
102	Inhibition of distant caspase homologues by natural caspase inhibitors. Biochemical Journal, 2001, 357, 575-580.	3.7	28
103	The Preparation of Fully Active Chymopapain Free of Contaminating Proteinases. Biological Chemistry Hoppe-Seyler, 1990, 371, 1083-1088.	1.4	27
104	Activation of human prolegumain by cleavage at a C-terminal asparagine residue. Biochemical Journal, 2000, 352, 327.	3.7	27
105	Aza-Peptide Epoxides: Potent and Selective Inhibitors of Schistosoma mansoni and Pig Kidney Legumains (Asparaginyl Endopeptidases). Biological Chemistry, 2003, 384, 1613-1618.	2.5	27
106	Preparation of antibody fragments: Conditions for proteolysis compared by SDS slab-gel electrophoresis and quantitation of antibody yield. Journal of Immunological Methods, 1978, 21, 305-315.	1.4	26
107	Enzyme Nomenclature. Recommendations 1992. Supplement 2: Corrections and Additions (1994). FEBS Journal, 1995, 232, 1-1.	0.2	25
108	Chondromucoprotein-degrading Enzymes. Nature, 1966, 211, 1188-1189.	27.8	24

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109	Unsuitability of Leucine Naphthylamide for the Histochemical Demonstration of Lysosomal Proteolytic Activity. Nature, 1969, 224, 279-280.	27.8	23
110	The biochemistry and function of mucosubstances. The Histochemical Journal, 1971, 3, 213-221.	0.6	23
111	Purification and characterization of Pz-peptidase from rabbit muscle. Archives of Biochemistry and Biophysics, 1989, 274, 138-144.	3.0	23
112	Pyroglutamyl-peptidase I: cloning, sequencing, and characterisation of the recombinant human enzyme. Protein Expression and Purification, 2003, 28, 111-119.	1.3	23
113	Activity of Pz-peptidase and endo-oligopeptidase are due to the same enzyme. Biochemical and Biophysical Research Communications, 1989, 162, 1460-1464.	2.1	22
114	Distribution of Cystatin C (Î³-Trace), an Inhibitor of Lysosomal Cysteine Proteinases, in the Anterior Lobe of Simian and Human Pituitary Glands. Neuroendocrinology, 1985, 41, 400-404.	2.5	21
115	Tosyl-Lysyl Chloromethane Alters Glucocorticoid- Receptor Complex Nuclear Binding and Physical Properties*. Endocrinology, 1984, 115, 65-72.	2.8	19
116	FLUSYS: a software package for the collection and analysis of kinetic and scanning data from Perkin-Elmer fluorimeters. Bioinformatics, 1990, 6, 118-119.	4.1	19
117	A distinct thimet peptidase from rat liver mitochondria. FEBS Letters, 1990, 264, 84-86.	2.8	18
118	Cathepsin D: The Lysosomal Aspartic Proteinase. Novartis Foundation Symposium, 1980, , 37-50.	1.1	18
119	The Biochemistry of the Action of Chymopapain in Relief of Sciatica. Spine, 1986, 11, 688-694.	2.0	17
120	Dipeptidyl-peptidase II is related to lysosomal Pro-X carboxypeptidase. BBA - Proteins and Proteomics, 1996, 1298, 1-3.	2.1	17
121	Proteases. Current Protocols in Protein Science, 2000, 21, Unit 21.1.	2.8	16
122	Inhibition of distant caspase homologues by natural caspase inhibitors. Biochemical Journal, 2001, 357, 575.	3.7	16
123	Quantitative Assessment of Human Proteinases as Agents for Chemonucleolysis. Spine, 1988, 13, 188-192.	2.0	14
124	Structure/function relationships in the inhibition of thimet oligopeptidase by carboxyphenylpropyl-peptides. FEBS Letters, 1991, 294, 183-186.	2.8	14
125	The characterization of calpains and calpain inhibitors from chicken gizzard smooth muscle. Biochemical Society Transactions, 1984, 12, 1106-1107.	3.4	11
126	Immunoglobulin E Antibodies to Papaya Proteinases and Their Relevance to Chemonucleolysis. Spine, 1995, 20, 981-985.	2.0	11

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127	[43] Pitrilysin. Methods in Enzymology, 1995, 248, 684-692.	1.0	11
128	Immunolocalization of Thimet Oligopeptidase in Chicken Embryonic Fibroblasts. Experimental Cell Research, 1995, 216, 80-85.	2.6	10
129	An Introduction to Peptidases and the Merops Database. , 2007, , 161-179.		10
130	Which proteinases degrade cartilage matrix ?. Seminars in Arthritis and Rheumatism, 1981, 11, 52-56.	3.4	9
131	The possible role of neutrophil proteinases in damage to articular cartilage. Agents and Actions, 1994, 43, 194-201.	0.7	9
132	Effect of X-ray contrast media on the action of chymopapain on the intervertebral disc: anin vitrostudy of cartilage degradation. British Journal of Radiology, 1984, 57, 475-477.	2.2	8
133	A comparison of Pfam and MEROPS: two databases, one comprehensive, and one specialised. BMC Bioinformatics, 2003, 4, 17.	2.6	7
134	Thimet oligopeptidase. , 2004, , 352-356.		7
135	Plasma Arginine Esterase in Cystic Fibrosis: Kinetics of Activation, Identification as Plasma Kallikrein, Reaction with Î¼2-Macroglobulin and Comparison with Levels in Normal Plasma. Pediatric Research, 1982, 16, 613-620.	2.3	5
136	Thimet oligopeptidase: site-directed mutagenesis disproves previous assumptions about the nature of the catalytic site. FEBS Letters, 1998, 435, 16-20.	2.8	5
137	Potential metal ligands in the insulinase superfamily of endopeptidases. Biochemical Society Transactions, 1991, 19, 289S-289S.	3.4	4
138	Peptidases: a view of classification and nomenclature. , 1999, , 1-12.		4
139	Influence of proteinase inhibitors on glucocoticoid receptor binding. Biochimica Et Biophysica Acta - General Subjects, 1984, 798, 187-191.	2.4	3
140	Plasma from rheumatoid arthritis patients does not contain abnormally high levels of Î±2-macroglobulinâ€“proteinase complexes. Arthritis and Rheumatism, 1987, 30, 872-877.	6.7	3
141	N-[1(RS)-Carboxy-3-phenylpropyl]peptides as inhibitors of thimet oligopeptidase. Biochemical Society Transactions, 1991, 19, 290S-290S.	3.4	1
142	Quantification of peptide aldehyde ligands immobilized for the affinity chromatography of endopeptidases. Analytical Biochemistry, 1992, 204, 328-331.	2.4	1
143	The inhibition by antisera of the lysosomal proteinase cathepsin D. Immunochemistry, 1970, 7, 878.	1.2	0
144	Aza-Peptide Epoxides: A New Class of Inhibitors Selective for Clan CD Cysteine Proteases. ChemInform, 2003, 34, no.	0.0	0

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145	Peptidases, families, and clans. , 2005, , .		0
146	Animal Legumain. , 2013, , 2309-2314.		0
147	Thimet Oligopeptidase. , 2013, , 504-509.		0
148	Neurolysin. , 2013, , 509-513.		0
149	Neurolysin. , 2004, , 356-359.		0