Alfred L Goldberg

List of Publications by Year
in descending order

215 papers	52,702 citations	1697 104 h-index	1974 206 g-index
220 all docs	220 docs citations	220 times ranked	38654 citing authors

#	Article	IF	Citations
1	Foxo Transcription Factors Induce the Atrophy-Related Ubiquitin Ligase Atrogin-1 and Cause Skeletal Muscle Atrophy. Cell, 2004, 117, 399-412.	13.5	2,490
2	Inhibitors of the proteasome block the degradation of most cell proteins and the generation of peptides presented on MHC class I molecules. Cell, 1994, 78, 761-771.	13.5	2,417
3	Structure and Functions of the 20S and 26S Proteasomes. Annual Review of Biochemistry, 1996, 65, 801-847.	5.0	2,357
4	The ubiquitinproteasome pathway is required for processing the NF-Î°B1 precursor protein and the activation of NF-Î°B. Cell, 1994, 78, 773-785.	13.5	2,117
5	Protein degradation and protection against misfolded or damaged proteins. Nature, 2003, 426, 895-899.	13.7	1,862
6	FoxO3 Controls Autophagy in Skeletal Muscle In Vivo. Cell Metabolism, 2007, 6, 458-471.	7.2	1,614
7	Proteasome inhibitors: valuable new tools for cell biologists. Trends in Cell Biology, 1998, 8, 397-403.	3.6	1,331
8	Multiple types of skeletal muscle atrophy involve a common program of changes in gene expression. FASEB Journal, 2004, 18, 39-51.	0.2	1,329
9	FoxO3 Coordinately Activates Protein Degradation by the Autophagic/Lysosomal and Proteasomal Pathways in Atrophying Muscle Cells. Cell Metabolism, 2007, 6, 472-483.	7.2	1,269
10	Mechanisms of Muscle Wasting â€" The Role of the Ubiquitinâ€"Proteasome Pathway. New England Journal of Medicine, 1996, 335, 1897-1905.	13.9	1,054
11	Proteasome inhibitors: from research tools to drug candidates. Chemistry and Biology, 2001, 8, 739-758.	6.2	1,053
12	Protein Degradation by the Ubiquitinâ€"Proteasome Pathway in Normal and Disease States. Journal of the American Society of Nephrology: JASN, 2006, 17, 1807-1819.	3.0	1,013
13	Cellular Defenses against Unfolded Proteins. Neuron, 2001, 29, 15-32.	3.8	948
14	DEGRADATION OF CELL PROTEINS AND THE GENERATION OF MHC CLASS I-PRESENTED PEPTIDES. Annual Review of Immunology, 1999, 17, 739-779.	9.5	863
15	PGC-1Â protects skeletal muscle from atrophy by suppressing FoxO3 action and atrophy-specific gene transcription. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16260-16265.	3.3	841
16	Reversal of Cancer Cachexia and Muscle Wasting by ActRIIB Antagonism Leads to Prolonged Survival. Cell, 2010, 142, 531-543.	13.5	811
17	Muscle wasting in disease: molecular mechanisms and promising therapies. Nature Reviews Drug Discovery, 2015, 14, 58-74.	21.5	792
18	The Logic of the 26S Proteasome. Cell, 2017, 169, 792-806.	13.5	667

#	ARTICLE	IF	CITATIONS
19	Muscle Protein Breakdown and the Critical Role of the Ubiquitin-Proteasome Pathway in Normal and Disease States. Journal of Nutrition, 1999, 129, 227S-237S.	1.3	611
20	Proteolysis, proteasomes and antigen presentation. Nature, 1992, 357, 375-379.	13.7	596
21	Î³-Interferon and expression of MHC genes regulate peptide hydrolysis by proteasomes. Nature, 1993, 365, 264-267.	13.7	589
22	Regulation of autophagy and the ubiquitinâ€"proteasome system by the FoxO transcriptional network during muscle atrophy. Nature Communications, 2015, 6, 6670.	5.8	522
23	IGF-I stimulates muscle growth by suppressing protein breakdown and expression of atrophy-related ubiquitin ligases, atrogin-1 and MuRF1. American Journal of Physiology - Endocrinology and Metabolism, 2004, 287, E591-E601.	1.8	516
24	During muscle atrophy, thick, but not thin, filament components are degraded by MuRF1-dependent ubiquitylation. Journal of Cell Biology, 2009, 185, 1083-1095.	2.3	499
25	Rapid disuse and denervation atrophy involve transcriptional changes similar to those of muscle wasting during systemic diseases. FASEB Journal, 2007, 21, 140-155.	0.2	495
26	The Sizes of Peptides Generated from Protein by Mammalian 26 and 20 S Proteasomes. Journal of Biological Chemistry, 1999, 274, 3363-3371.	1.6	490
27	An IFN-Î³â€"induced aminopeptidase in the ER, ERAP1, trims precursors to MHC class Iâ€"presented peptides. Nature Immunology, 2002, 3, 1169-1176.	7.0	486
28	Docking of the Proteasomal ATPases' Carboxyl Termini in the 20S Proteasome's Î± Ring Opens the Gate for Substrate Entry. Molecular Cell, 2007, 27, 731-744.	4.5	460
29	The mechanism and functions of ATP-dependent proteases in bacterial and animal cells. FEBS Journal, 1992, 203, 9-23.	0.2	436
30	Altered peptidase and viral-specific T cell response in LMP2 mutant mice. Immunity, 1994, 1, 533-541.	6.6	418
31	Identity of the 19S 'prosome' particle with the large multifunctional protease complex of mammalian cells (the proteasome). Nature, 1988, 331, 192-194.	13.7	415
32	Proteasome Inhibition Leads to a Heat-shock Response, Induction of Endoplasmic Reticulum Chaperones, and Thermotolerance. Journal of Biological Chemistry, 1997, 272, 9086-9092.	1.6	412
33	BMP signaling controls muscle mass. Nature Genetics, 2013, 45, 1309-1318.	9.4	379
34	The Axial Channel of the Proteasome Core Particle Is Gated by the Rpt2 ATPase and Controls Both Substrate Entry and Product Release. Molecular Cell, 2001, 7, 1143-1152.	4.5	378
35	Certain Pairs of Ubiquitin-conjugating Enzymes (E2s) and Ubiquitin-Protein Ligases (E3s) Synthesize Nondegradable Forked Ubiquitin Chains Containing All Possible Isopeptide Linkages*. Journal of Biological Chemistry, 2007, 282, 17375-17386.	1.6	371
36	Eukaryotic Proteasomes Cannot Digest Polyglutamine Sequences and Release Them during Degradation of Polyglutamine-Containing Proteins. Molecular Cell, 2004, 14, 95-104.	4.5	363

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37	Importance of the Different Proteolytic Sites of the Proteasome and the Efficacy of Inhibitors Varies with the Protein Substrate. Journal of Biological Chemistry, 2006, 281, 8582-8590.	1.6	359
38	Lactacystin and clasto-Lactacystin Î²-Lactone Modify Multiple Proteasome Î²-Subunits and Inhibit Intracellular Protein Degradation and Major Histocompatibility Complex Class I Antigen Presentation. Journal of Biological Chemistry, 1997, 272, 13437-13445.	1.6	357
39	Tau-driven 26S proteasome impairment and cognitive dysfunction can be prevented early in disease by activating cAMP-PKA signaling. Nature Medicine, 2016, 22, 46-53.	15.2	352
40	What do we really know about the ubiquitin-proteasome pathway in muscle atrophy?. Current Opinion in Clinical Nutrition and Metabolic Care, 2001, 4, 183-190.	1.3	348
41	Lassomycin, a Ribosomally Synthesized Cyclic Peptide, Kills Mycobacterium tuberculosis by Targeting the ATP-Dependent Protease ClpC1P1P2. Chemistry and Biology, 2014, 21, 509-518.	6.2	344
42	Importance of the ATP-Ubiquitin-Proteasome Pathway in the Degradation of Soluble and Myofibrillar Proteins in Rabbit Muscle Extracts. Journal of Biological Chemistry, 1996, 271, 26690-26697.	1.6	343
43	Mechanism of Gate Opening in the 20S Proteasome by the Proteasomal ATPases. Molecular Cell, 2008, 30, 360-368.	4.5	334
44	A role for the ubiquitin-dependent proteolytic pathway in MHC class l-restricted antigen presentation. Nature, 1993, 363, 552-554.	13.7	333
45	Functions of the proteasome: from protein degradation and immune surveillance to cancer therapy. Biochemical Society Transactions, 2007, 35, 12-17.	1.6	328
46	PAN, the proteasome-activating nucleotidase from archaebacteria, is a protein-unfolding molecular chaperone. Nature Cell Biology, 2000, 2, 833-839.	4.6	323
47	The FOXO3a Transcription Factor Regulates Cardiac Myocyte Size Downstream of AKT Signaling. Journal of Biological Chemistry, 2005, 280, 20814-20823.	1.6	308
48	The importance of the proteasome and subsequent proteolytic steps in the generation of antigenic peptides. Molecular Immunology, 2002, 39, 147-164.	1.0	299
49	Monitoring Activity and Inhibition of 26S Proteasomes with Fluorogenic Peptide Substrates. Methods in Enzymology, 2005, 398, 364-378.	0.4	294
50	Patterns of gene expression in atrophying skeletal muscles: response to food deprivation. FASEB Journal, 2002, 16, 1697-1712.	0.2	292
51	The ER aminopeptidase, ERAP1, trims precursors to lengths of MHC class I peptides by a "molecular ruler" mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 17107-17112.	3.3	283
52	Acetylation-Mediated Proteasomal Degradation of Core Histones during DNA Repair and Spermatogenesis. Cell, 2013, 153, 1012-1024.	13.5	272
53	Interferon-Î³ Can Stimulate Post-proteasomal Trimming of the N Terminus of an Antigenic Peptide by Inducing Leucine Aminopeptidase. Journal of Biological Chemistry, 1998, 273, 18734-18742.	1.6	258
54	ATP Hydrolysis by the Proteasome Regulatory Complex PAN Serves Multiple Functions in Protein Degradation. Molecular Cell, 2003, 11, 69-78.	4.5	237

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55	Development of proteasome inhibitors as research tools and cancer drugs. Journal of Cell Biology, 2012, 199, 583-588.	2.3	232
56	Myostatin/activin pathway antagonism: Molecular basis and therapeutic potential. International Journal of Biochemistry and Cell Biology, 2013, 45, 2333-2347.	1.2	232
57	ATP Binding to PAN or the 26S ATPases Causes Association with the 20S Proteasome, Gate Opening, and Translocation of Unfolded Proteins. Molecular Cell, 2005, 20, 687-698.	4.5	230
58	Post-proteasomal antigen processing for major histocompatibility complex class I presentation. Nature Immunology, 2004, 5, 670-677.	7.0	229
59	Proteins Are Unfolded on the Surface of the ATPase Ring before Transport into the Proteasome. Molecular Cell, 2001, 8, 1339-1349.	4.5	227
60	Proteasome Inhibitors Cause Induction of Heat Shock Proteins and Trehalose, Which Together Confer Thermotolerance in <i>Saccharomyces cerevisiae</i>. Molecular and Cellular Biology, 1998, 18, 30-38.	1.1	221
61	TNFâ€Î± increases ubiquitinâ€conjugating activity in skeletal muscle by upâ€regulating UbcH2/E220k. FASEB Journal, 2003, 17, 1048-1057.	0.2	218
62	Ubiquitin ligase Nedd4 promotes Î±-synuclein degradation by the endosomalâ€"lysosomal pathway. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17004-17009.	3.3	215
63	Why do cellular proteins linked to K63-polyubiquitin chains not associate with proteasomes?. EMBO Journal, 2013, 32, 552-565.	3.5	209
64	Proteolysis and class I major histocompatibility complex antigen presentation. Immunological Reviews, 1999, 172, 49-66.	2.8	208
65	hRpn13/ADRM1/GP110 is a novel proteasome subunit that binds the deubiquitinating enzyme, UCH37. EMBO Journal, 2006, 25, 5742-5753.	3.5	208
66	Mechanisms of skeletal muscle aging: insights from <i>Drosophila</i> and mammalian models. DMM Disease Models and Mechanisms, 2013, 6, 1339-52.	1.2	201
67	Processive Degradation of Proteins and Other Catalytic Properties of the Proteasome from Thermoplasma acidophilum. Journal of Biological Chemistry, 1997, 272, 1791-1798.	1.6	200
68	Peroxisome Proliferator-activated Receptor Î³ Coactivator 1Î± or 1Î² Overexpression Inhibits Muscle Protein Degradation, Induction of Ubiquitin Ligases, and Disuse Atrophy. Journal of Biological Chemistry, 2010, 285, 19460-19471.	1.6	191
69	Proteasome-Mediated Processing of Nrf1 Is Essential for Coordinate Induction of All Proteasome Subunits and p97. Current Biology, 2014, 24, 1573-1583.	1.8	190
70	Properties of the hybrid form of the 26S proteasome containing both 19S and PA28 complexes. EMBO Journal, 2002, 21, 2636-2645.	3.5	188
71	Ubiquitinated Proteins Activate the Proteasome by Binding to Usp14/Ubp6, which Causes 20S Gate Opening. Molecular Cell, 2009, 36, 794-804.	4.5	188
72	Muscle Wasting in Aged, Sarcopenic Rats Is Associated with Enhanced Activity of the Ubiquitin Proteasome Pathway. Journal of Biological Chemistry, 2010, 285, 39597-39608.	1.6	188

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73	Range of Sizes of Peptide Products Generated during Degradation of Different Proteins by Archaeal Proteasomes. Journal of Biological Chemistry, 1998, 273, 1982-1989.	1.6	187
74	The ATP-dependent HslVU protease from Escherichia coli is a four-ring structure resembling the proteasome. Nature Structural Biology, 1997, 4, 133-139.	9.7	181
75	The influence of skeletal muscle on systemic aging and lifespan. Aging Cell, 2013, 12, 943-949.	3.0	179
76	Structural basis for antigenic peptide precursor processing by the endoplasmic reticulum aminopeptidase ERAP1. Nature Structural and Molecular Biology, 2011, 18, 604-613.	3.6	176
77	Endocrine regulation of protein breakdown in skeletal muscle. Diabetes/metabolism Reviews, 1988, 4, 751-772.	0.2	175
78	ATP Binds to Proteasomal ATPases in Pairs with Distinct Functional Effects, Implying an Ordered Reaction Cycle. Cell, 2011, 144, 526-538.	13.5	174
79	[25] ATP-dependent protease La (Lon) from Escherichia coli. Methods in Enzymology, 1994, 244, 350-375.	0.4	170
80	Heat shock and oxygen radicals stimulate ubiquitin-dependent degradation mainly of newly synthesized proteins. Journal of Cell Biology, 2008, 182, 663-673.	2.3	168
81	The Caspase-like Sites of Proteasomes, Their Substrate Specificity, New Inhibitors and Substrates, and Allosteric Interactions with the Trypsin-like Sites. Journal of Biological Chemistry, 2003, 278, 35869-35877.	1.6	167
82	Ubiquitylation by Trim32 causes coupled loss of desmin, Z-bands, and thin filaments in muscle atrophy. Journal of Cell Biology, 2012, 198, 575-589.	2.3	165
83	The effect of protease inhibitors and decreased temperature on the degradation of different classes of proteins in cultured hepatocytes. Journal of Cellular Physiology, 1979, 101, 439-457.	2.0	164
84	Identification of the gal4 suppressor Sug1 as a subunit of the yeast 26S proteasome. Nature, 1996, 379, 655-657.	13.7	164
85	Pathway for Degradation of Peptides Generated by Proteasomes. Journal of Biological Chemistry, 2004, 279, 46723-46732.	1.6	164
86	Isolation of Mammalian 26S Proteasomes and p97/VCP Complexes Using the Ubiquitin-like Domain from HHR23B Reveals Novel Proteasome-Associated Proteins. Biochemistry, 2009, 48, 2538-2549.	1.2	161
87	Mycobacterium tuberculosis ClpP1 and ClpP2 Function Together in Protein Degradation and Are Required for Viability in vitro and During Infection. PLoS Pathogens, 2012, 8, e1002511.	2.1	161
88	ATP-Dependent Steps in the Binding of Ubiquitin Conjugates to the 26S Proteasome that Commit to Degradation. Molecular Cell, 2010, 40, 671-681.	4.5	160
89	SIRT1 Protein, by Blocking the Activities of Transcription Factors FoxO1 and FoxO3, Inhibits Muscle Atrophy and Promotes Muscle Growth. Journal of Biological Chemistry, 2013, 288, 30515-30526.	1.6	160
90	Ubiquitin conjugation by the N-end rule pathway and mRNAs for its components increase in muscles of diabetic rats. Journal of Clinical Investigation, 1999, 104, 1411-1420.	3.9	155

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91	An Archaebacterial ATPase, Homologous to ATPases in the Eukaryotic 26 S Proteasome, Activates Protein Breakdown by 20 S Proteasomes. Journal of Biological Chemistry, 1999, 274, 26008-26014.	1.6	154
92	The Cyclic Peptide Ecumicin Targeting ClpC1 Is Active against Mycobacterium tuberculosis In Vivo. Antimicrobial Agents and Chemotherapy, 2015, 59, 880-889.	1.4	148
93	E. coli contains eight soluble proteolytic activities, one being ATP dependent. Nature, 1981, 292, 652-654.	13.7	145
94	Proteasome Subunits X and Y Alter Peptidase Activities in Opposite Ways to the Interferon-Î³-induced Subunits LMP2 and LMP7. Journal of Biological Chemistry, 1996, 271, 17275-17280.	1.6	145
95	Coordinate activation of autophagy and the proteasome pathway by FoxO transcription factor. Autophagy, 2008, 4, 378-380.	4.3	144
96	Autoubiquitination of the 26S Proteasome on Rpn13 Regulates Breakdown of Ubiquitin Conjugates. EMBO Journal, 2014, 33, 1159-1176.	3.5	143
97	The Cytosolic Endopeptidase, Thimet Oligopeptidase, Destroys Antigenic Peptides and Limits the Extent of MHC Class I Antigen Presentation. Immunity, 2003, 18, 429-440.	6.6	137
98	PROTEIN SYNTHESIS DURING WORK-INDUCED GROWTH OF SKELETAL MUSCLE. Journal of Cell Biology, 1968, 36, 653-658.	2.3	130
99	Major Histocompatibility Complex Class I-presented Antigenic Peptides Are Degraded in Cytosolic Extracts Primarily by Thimet Oligopeptidase. Journal of Biological Chemistry, 2001, 276, 36474-36481.	1.6	128
100	The N-end Rule Pathway Catalyzes a Major Fraction of the Protein Degradation in Skeletal Muscle. Journal of Biological Chemistry, 1998, 273, 25216-25222.	1.6	126
101	Protein Synthesis in Tonic and Phasic Skeletal Muscles. Nature, 1967, 216, 1219-1220.	13.7	124
102	The ATP Costs and Time Required to Degrade Ubiquitinated Proteins by the 26 S Proteasome. Journal of Biological Chemistry, 2013, 288, 29215-29222.	1.6	122
103	The active ClpP protease from<i>M. tuberculosis</i>is a complex composed of a heptameric ClpP1 and a ClpP2 ring. EMBO Journal, 2012, 31, 1529-1541.	3.5	118
104	Heat shock in Escherichia coli alters the protein-binding properties of the chaperonin groEL by inducing its phosphorylation. Nature, 1992, 357, 167-169.	13.7	112
105	Why Does Threonine, and Not Serine, Function as the Active Site Nucleophile in Proteasomes?. Journal of Biological Chemistry, 2000, 275, 14831-14837.	1.6	112
106	Mechanisms of muscle growth and atrophy in mammals and <i>Drosophila</i>. Developmental Dynamics, 2014, 243, 201-215.	0.8	112
107	Misfolded PrP impairs the UPS by interaction with the 20S proteasome and inhibition of substrate entry. EMBO Journal, 2011, 30, 3065-3077.	3.5	104
108	Ca2+-free Calmodulin and Calmodulin Damaged byin Vitro Aging Are Selectively Degraded by 26 S Proteasomes without Ubiquitination. Journal of Biological Chemistry, 2000, 275, 20295-20301.	1.6	100

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109	Interactions of PAN's C-termini with archaeal 20S proteasome and implications for the eukaryotic proteasomeâ€"ATPase interactions. EMBO Journal, 2010, 29, 692-702.	3.5	100
110	EFFECTS OF USE AND DISUSE ON AMINO ACID TRANSPORT AND PROTEIN TURNOVER IN MUSCLE. Annals of the New York Academy of Sciences, 1974, 228, 190-201.	1.8	99
111	Characterization of the brain 26S proteasome and its interacting proteins. Frontiers in Molecular Neuroscience, 2010, 3, .	1.4	99
112	Immuno- and Constitutive Proteasomes Do Not Differ in Their Abilities to Degrade Ubiquitinated Proteins. Cell, 2013, 152, 1184-1194.	13.5	99
113	Re-examining class-I presentation and the DRiP hypothesis. Trends in Immunology, 2014, 35, 144-152.	2.9	99
114	Proteasomes and their associated ATPases: A destructive combination. Journal of Structural Biology, 2006, 156, 72-83.	1.3	98
115	Bacterial proteolytic complexes as therapeutic targets. Nature Reviews Drug Discovery, 2012, 11, 777-789.	21.5	98
116	Structural characterization of the interaction of Ubp6 with the 26S proteasome. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8626-8631.	3.3	98
117	Newly synthesized proteins are degraded by an ATP-stimulated proteolytic process in isolated pea chloroplasts. FEBS Letters, 1984, 166, 253-257.	1.3	97
118	A Conserved F Box Regulatory Complex Controls Proteasome Activity in Drosophila. Cell, 2011, 145, 371-382.	13.5	96
119	Regulating protein breakdown through proteasome phosphorylation. Biochemical Journal, 2017, 474, 3355-3371.	1.7	95
120	Ubiquitinated Proteins Activate the Proteasomal ATPases by Binding to Usp14 or Uch37 Homologs. Journal of Biological Chemistry, 2013, 288, 7781-7790.	1.6	93
121	The unfolding of substrates and ubiquitin-independentprotein degradation by proteasomes. Biochimie, 2001, 83, 311-318.	1.3	91
122	26S Proteasomes are rapidly activated by diverse hormones and physiological states that raise cAMP and cause Rpn6 phosphorylation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4228-4237.	3.3	89
123	The Membrane-associated Inhibitor of Apoptosis Protein, BRUCE/Apollon, Antagonizes Both the Precursor and Mature Forms of Smac and Caspase-9. Journal of Biological Chemistry, 2005, 280, 174-182.	1.6	86
124	Tripeptidyl Peptidase II Is the Major Peptidase Needed to Trim Long Antigenic Precursors, but Is Not Required for Most MHC Class I Antigen Presentation. Journal of Immunology, 2006, 177, 1434-1443.	0.4	84
125	Inhibition of the Proteasome Î²2 Site Sensitizes Triple-Negative Breast Cancer Cells to Î²5 Inhibitors and Suppresses Nrf1 Activation. Cell Chemical Biology, 2017, 24, 218-230.	2.5	83
126	The Internal Sequence of the Peptide-Substrate Determines Its N-Terminus Trimming by ERAP1. PLoS ONE, 2008, 3, e3658.	1.1	82

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127	Trim32 reduces PI3Kâ€"Aktâ€"FoxO signaling in muscle atrophy by promoting plakoglobinâ€"PI3K dissociation. Journal of Cell Biology, 2014, 204, 747-758.	2.3	82
128	The p97/VCP ATPase is critical in muscle atrophy and the accelerated degradation of muscle proteins. EMBO Journal, 2012, 31, 3334-3350.	3.5	78
129	c-IAP1 Cooperates with Myc by Acting as a Ubiquitin Ligase for Mad1. Molecular Cell, 2007, 28, 914-922.	4.5	75
130	Gamma-interferon causes a selective induction of the lysosomal proteases, cathepsins B and L, in macrophages. FEBS Letters, 1995, 363, 85-89.	1.3	74
131	Blm10 Protein Promotes Proteasomal Substrate Turnover by an Active Gating Mechanism. Journal of Biological Chemistry, 2011, 286, 42830-42839.	1.6	74
132	Control of proteasomal proteolysis by mTOR. Nature, 2016, 529, E1-E2.	13.7	74
133	Rapid induction of p62 and GABARAPL1 upon proteasome inhibition promotes survival before autophagy activation. Journal of Cell Biology, 2018, 217, 1757-1776.	2.3	74
134	Acyldepsipeptide antibiotics kill mycobacteria by preventing the physiological functions of the ClpP1P2 protease. Molecular Microbiology, 2016, 101, 194-209.	1.2	73
135	Getting to First Base in Proteasome Assembly. Cell, 2009, 138, 25-28.	13.5	72
136	Enhanced ubiquitin-dependent degradation by Nedd4 protects against Î±-synuclein accumulation and toxicity in animal models of Parkinson's disease. Neurobiology of Disease, 2014, 64, 79-87.	2.1	71
137	S5a promotes protein degradation by blocking synthesis of nondegradable forked ubiquitin chains. EMBO Journal, 2009, 28, 1867-1877.	3.5	70
138	Compromising the 19S proteasome complex protects cells from reduced flux through the proteasome. ELife, 2015, 4, .	2.8	67
139	The deubiquitinating enzyme Usp14 allosterically inhibits multiple proteasomal activities and ubiquitin-independent proteolysis. Journal of Biological Chemistry, 2017, 292, 9830-9839.	1.6	65
140	Puromycin-sensitive aminopeptidase protects against aggregation-prone proteins via autophagy. Human Molecular Genetics, 2010, 19, 4573-4586.	1.4	62
141	The Direction of Protein Entry into the Proteasome Determines the Variety of Products and Depends on the Force Needed to Unfold Its Two Termini. Molecular Cell, 2012, 48, 601-611.	4.5	61
142	cGMP via PKG activates 26S proteasomes and enhances degradation of proteins, including ones that cause neurodegenerative diseases. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 14220-14230.	3.3	57
143	The Heat-Shock Protein HslVU from Escherichia Coli is a Protein-Activated ATPase as well as an ATP-Dependent Proteinase. FEBS Journal, 1997, 247, 1143-1150.	0.2	56
144	Proteins containing ubiquitin-like (Ubl) domains not only bind to 26S proteasomes but also induce their activation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4664-4674.	3.3	55

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145	Coordinate regulation of autophagy and the ubiquitin proteasome system by MTOR. Autophagy, 2016, 12, 1967-1970.	4.3	53
146	The Molecular Chaperone DnaJ Is Required for the Degradation of a Soluble Abnormal Protein in Escherichia coli. Journal of Biological Chemistry, 2001, 276, 3920-3928.	1.6	52
147	Cleavage Specificity of Mycobacterium tuberculosis ClpP1P2 Protease and Identification of Novel Peptide Substrates and Boronate Inhibitors with Anti-bacterial Activity. Journal of Biological Chemistry, 2015, 290, 11008-11020.	1.6	51
148	Structure and Functional Properties of the Active Form of the Proteolytic Complex, ClpP1P2, from Mycobacterium tuberculosis. Journal of Biological Chemistry, 2016, 291, 7465-7476.	1.6	50
149	UBL domain of Usp14 and other proteins stimulates proteasome activities and protein degradation in cells. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11642-E11650.	3.3	49
150	PDE1 inhibition facilitates proteasomal degradation of misfolded proteins and protects against cardiac proteinopathy. Science Advances, 2019, 5, eaaw5870.	4.7	49
151	Studies on the relationship between the degradative rates of proteins <i>in vivo</i> and their isoelectric points. Biochemical Journal, 1979, 178, 305-312.	3.2	47
152	The Proteasome Subunit, C2, Contains an Important Site for Binding of the PA28 (11S) Activator. FEBS Journal, 1996, 236, 510-516.	0.2	47
153	An allosteric switch regulates <i>Mycobacterium tuberculosis</i> ClpP1P2 protease function as established by cryo-EM and methyl-TROSY NMR. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 5895-5906.	3.3	47
154	ATP-stimulated endoprotease is associated with the cell membrane of E. coli. Nature, 1981, 290, 419-421.	13.7	45
155	Effects of chymostatin and other proteinase inhibitors on protein breakdown and proteolytic activities in muscle. Biochemical Journal, 1980, 188, 213-220.	1.7	43
156	Proteolytic Activity of the ATP-dependent Protease HslVU Can Be Uncoupled from ATP Hydrolysis. Journal of Biological Chemistry, 1997, 272, 21364-21372.	1.6	43
157	Muscle Wasting in Fasting Requires Activation of NF-Î°B and Inhibition of AKT/Mechanistic Target of Rapamycin (mTOR) by the Protein Acetylase, GCN5. Journal of Biological Chemistry, 2015, 290, 30269-30279.	1.6	43
158	ATP-induced Structural Transitions in PAN, the Proteasome-regulatory ATPase Complex in Archaea. Journal of Biological Chemistry, 2007, 282, 22921-22929.	1.6	42
159	The Ubiquitin-interacting Motif Protein, S5a, Is Ubiquitinated by All Types of Ubiquitin Ligases by a Mechanism Different from Typical Substrate Recognition. Journal of Biological Chemistry, 2009, 284, 12622-12632.	1.6	41
160	ZFAND5/ZNF216 is an activator of the 26S proteasome that stimulates overall protein degradation. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E9550-E9559.	3.3	40
161	SIP/CacyBP promotes autophagy by regulating levels of BRUCE/Apollon, which stimulates LC3-I degradation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13404-13413.	3.3	40
162	Rapid Degradation of an Abnormal Protein in Escherichia coli Proceeds through Repeated Cycles of Association with GroEL. Journal of Biological Chemistry, 1999, 274, 37743-37749.	1.6	39

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163	Nobel Committee Tags Ubiquitin for Distinction. Neuron, 2005, 45, 339-344.	3.8	39
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