

Alex Y Strongin

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179
papers

10,965
citations

51
h-index

100
g-index

185
ext. papers

11,791
ext. citations

5.5
avg. IF

5.8
L-index

#	Paper	IF	Citations
179	Mechanism of cell surface activation of 72-kDa type IV collagenase. Isolation of the activated form of the membrane metalloprotease. <i>Journal of Biological Chemistry</i> , 1995 , 270, 5331-8	5.4	1248
178	Compensation mechanism in tumor cell migration: mesenchymal-amoeboid transition after blocking of pericellular proteolysis. <i>Journal of Cell Biology</i> , 2003 , 160, 267-77	7.3	1152
177	S-nitrosylation of matrix metalloproteinases: signaling pathway to neuronal cell death. <i>Science</i> , 2002 , 297, 1186-90	33.3	834
176	A highly specific inhibitor of matrix metalloproteinase-9 rescues laminin from proteolysis and neurons from apoptosis in transient focal cerebral ischemia. <i>Journal of Neuroscience</i> , 2005 , 25, 6401-8	6.6	345
175	MT1-MMP initiates activation of pro-MMP-2 and integrin alphavbeta3 promotes maturation of MMP-2 in breast carcinoma cells. <i>Experimental Cell Research</i> , 2001 , 263, 209-23	4.2	335
174	Matrix-dependent proteolysis of surface transglutaminase by membrane-type metalloproteinase regulates cancer cell adhesion and locomotion. <i>Journal of Biological Chemistry</i> , 2001 , 276, 18415-22	5.4	193
173	Insights into RNA unwinding and ATP hydrolysis by the flavivirus NS3 protein. <i>EMBO Journal</i> , 2008 , 27, 3209-19	13	180
172	Processing of integrin alpha(v) subunit by membrane type 1 matrix metalloproteinase stimulates migration of breast carcinoma cells on vitronectin and enhances tyrosine phosphorylation of focal adhesion kinase. <i>Journal of Biological Chemistry</i> , 2002 , 277, 9749-56	5.4	172
171	Structural evidence for regulation and specificity of flaviviral proteases and evolution of the Flaviviridae fold. <i>Protein Science</i> , 2007 , 16, 795-806	6.3	163
170	Mutation analysis of membrane type-1 matrix metalloproteinase (MT1-MMP). The role of the cytoplasmic tail Cys(574), the active site Glu(240), and furin cleavage motifs in oligomerization, processing, and self-proteolysis of MT1-MMP expressed in breast carcinoma cells. <i>Journal of Biological Chemistry</i> , 2001 , 276, 25705-14	5.4	135
169	Functional activation of integrin alpha V beta 3 in tumor cells expressing membrane-type 1 matrix metalloproteinase. <i>International Journal of Cancer</i> , 2000 , 86, 15-23	7.5	135
168	An alternative processing of integrin alpha(v) subunit in tumor cells by membrane type-1 matrix metalloproteinase. <i>Journal of Biological Chemistry</i> , 2002 , 277, 7377-85	5.4	121
167	Efficient synthetic inhibitors of anthrax lethal factor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 9499-504	11.5	116
166	Up-regulation of vascular endothelial growth factor by membrane-type 1 matrix metalloproteinase stimulates human glioma xenograft growth and angiogenesis. <i>Cancer Research</i> , 2002 , 62, 580-8	10.1	115
165	Characterization of matrix metalloproteinase-26, a novel metalloproteinase widely expressed in cancer cells of epithelial origin. <i>Biochemical Journal</i> , 2001 , 356, 705-718	3.8	111
164	Substrate cleavage analysis of furin and related proprotein convertases. A comparative study. <i>Journal of Biological Chemistry</i> , 2008 , 283, 20897-906	5.4	109
163	MMP-28, a new human matrix metalloproteinase with an unusual cysteine-switch sequence is widely expressed in tumors. <i>Gene</i> , 2001 , 265, 87-93	3.8	107

162	The low density lipoprotein receptor-related protein LRP is regulated by membrane type-1 matrix metalloproteinase (MT1-MMP) proteolysis in malignant cells. <i>Journal of Biological Chemistry</i> , 2004 , 279, 4260-8	5.4	104
161	Simultaneous visualization of protumorigenic Src and MT1-MMP activities with fluorescence resonance energy transfer. <i>Cancer Research</i> , 2010 , 70, 2204-12	10.1	95
160	Novel MT1-MMP small-molecule inhibitors based on insights into hemopexin domain function in tumor growth. <i>Cancer Research</i> , 2012 , 72, 2339-49	10.1	93
159	Repurposing of the anti-malaria drug chloroquine for Zika Virus treatment and prophylaxis. <i>Scientific Reports</i> , 2017 , 7, 15771	4.9	91
158	Cleavage targets and the D-arginine-based inhibitors of the West Nile virus NS3 processing proteinase. <i>Biochemical Journal</i> , 2006 , 393, 503-11	3.8	91
157	Tumor cell invasion through matrigel is regulated by activated matrix metalloproteinase-2. <i>Anticancer Research</i> , 1997 , 17, 3201-10	2.3	89
156	Human beta-cell precursors mature into functional insulin-producing cells in an immunoisolation device: implications for diabetes cell therapies. <i>Transplantation</i> , 2009 , 87, 983-91	1.8	86
155	Tissue inhibitor of metalloproteinases-2 binding to membrane-type 1 matrix metalloproteinase induces MAPK activation and cell growth by a non-proteolytic mechanism. <i>Journal of Biological Chemistry</i> , 2008 , 283, 87-99	5.4	86
154	Epigenetic control of the invasion-promoting MT1-MMP/MMP-2/TIMP-2 axis in cancer cells. <i>Journal of Biological Chemistry</i> , 2009 , 284, 12727-34	5.4	85
153	HTS identifies novel and specific uncompetitive inhibitors of the two-component NS2B-NS3 proteinase of West Nile virus. <i>Assay and Drug Development Technologies</i> , 2007 , 5, 737-50	2.1	84
152	Targeting host cell furin proprotein convertases as a therapeutic strategy against bacterial toxins and viral pathogens. <i>Journal of Biological Chemistry</i> , 2007 , 282, 20847-53	5.4	84
151	Proteolytic and non-proteolytic roles of membrane type-1 matrix metalloproteinase in malignancy. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2010 , 1803, 133-41	4.9	83
150	Membrane type-1 matrix metalloproteinase stimulates tumour cell-induced platelet aggregation: role of receptor glycoproteins. <i>British Journal of Pharmacology</i> , 2004 , 141, 241-52	8.6	80
149	Beta-catenin regulates the gene of MMP-26, a novel metalloproteinase expressed both in carcinomas and normal epithelial cells. <i>International Journal of Biochemistry and Cell Biology</i> , 2004 , 36, 942-56	5.6	80
148	Membrane type-1 matrix metalloproteinase (MT1-MMP) exhibits an important intracellular cleavage function and causes chromosome instability. <i>Journal of Biological Chemistry</i> , 2005 , 280, 25079-86	5.4	80
147	Promoter characterization of the novel human matrix metalloproteinase-26 gene: regulation by the T-cell factor-4 implies specific expression of the gene in cancer cells of epithelial origin. <i>Biochemical Journal</i> , 2002 , 363, 253-262	3.8	79
146	Characterization of the Zika virus two-component NS2B-NS3 protease and structure-assisted identification of allosteric small-molecule antagonists. <i>Antiviral Research</i> , 2017 , 143, 218-229	10.8	76
145	A unique substrate binding mode discriminates membrane type-1 matrix metalloproteinase from other matrix metalloproteinases. <i>Journal of Biological Chemistry</i> , 2002 , 277, 23788-93	5.4	76

144	Membrane type-1 matrix metalloproteinase (MT1-MMP) processing of pro-alpha _v integrin regulates cross-talk between alpha _v beta ₃ and alpha ₂ beta ₁ integrins in breast carcinoma cells. <i>Experimental Cell Research</i> , 2003 , 291, 167-75	4.2	72
143	Mislocalization and unconventional functions of cellular MMPs in cancer. <i>Cancer and Metastasis Reviews</i> , 2006 , 25, 87-98	9.6	70
142	The MMP-9/TIMP-1 axis controls the status of differentiation and function of myelin-forming Schwann cells in nerve regeneration. <i>PLoS ONE</i> , 2012 , 7, e33664	3.7	68
141	Matrix metalloproteinase proteolysis of the myelin basic protein isoforms is a source of immunogenic peptides in autoimmune multiple sclerosis. <i>PLoS ONE</i> , 2009 , 4, e4952	3.7	67
140	Characterization of matrix metalloproteinase-26, a novel metalloproteinase widely expressed in cancer cells of epithelial origin. <i>Biochemical Journal</i> , 2001 , 356, 705-18	3.8	66
139	Determination of matrix metalloproteinase activity using biotinylated gelatin. <i>Analytical Biochemistry</i> , 2000 , 286, 149-55	3.1	66
138	The Wnt/planar cell polarity protein-tyrosine kinase-7 (PTK7) is a highly efficient proteolytic target of membrane type-1 matrix metalloproteinase: implications in cancer and embryogenesis. <i>Journal of Biological Chemistry</i> , 2010 , 285, 35740-9	5.4	65
137	Aberrant, persistent inclusion into lipid rafts limits the tumorigenic function of membrane type-1 matrix metalloproteinase in malignant cells. <i>Experimental Cell Research</i> , 2004 , 293, 81-95	4.2	62
136	The transmembrane domain is essential for the microtubular trafficking of membrane type-1 matrix metalloproteinase (MT1-MMP). <i>Journal of Cell Science</i> , 2005 , 118, 4975-84	5.3	61
135	Interaction of hepatitis B viral oncoprotein with cellular target HBXIP dysregulates centrosome dynamics and mitotic spindle formation. <i>Journal of Biological Chemistry</i> , 2008 , 283, 2793-803	5.4	60
134	NS4A regulates the ATPase activity of the NS3 helicase: a novel cofactor role of the non-structural protein NS4A from West Nile virus. <i>Journal of General Virology</i> , 2009 , 90, 2081-5	4.9	59
133	Prostaglandin FP agonists alter metalloproteinase gene expression in sclera. <i>Investigative Ophthalmology and Visual Science</i> , 2004 , 45, 4368-77		58
132	Structure-activity relationship and improved hydrolytic stability of pyrazole derivatives that are allosteric inhibitors of West Nile Virus NS2B-NS3 proteinase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2009 , 19, 5773-7	2.9	57
131	Molecular signature of MT1-MMP: transactivation of the downstream universal gene network in cancer. <i>Cancer Research</i> , 2008 , 68, 4086-96	10.1	57
130	Anthrax lethal factor protease inhibitors: synthesis, SAR, and structure-based 3D QSAR studies. <i>Journal of Medicinal Chemistry</i> , 2006 , 49, 27-30	8.3	53
129	Delayed administration of a matrix metalloproteinase inhibitor limits progressive brain injury after hypoxia-ischemia in the neonatal rat. <i>Journal of Neuroinflammation</i> , 2008 , 5, 34	10.1	52
128	Cleavage preference distinguishes the two-component NS2B-NS3 serine proteinases of Dengue and West Nile viruses. <i>Biochemical Journal</i> , 2007 , 401, 743-52	3.8	51
127	Furin regulates the intracellular activation and the uptake rate of cell surface-associated MT1-MMP. <i>Oncogene</i> , 2006 , 25, 5648-55	9.2	51

126	Basis for substrate recognition and distinction by matrix metalloproteinases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, E4148-55	11.5	49
125	Epigenetic regulation of matrix metalloproteinases and their collagen substrates in cancer. <i>Biomolecular Concepts</i> , 2011 , 2, 135-147	3.7	49
124	Cell-surface-associated tissue transglutaminase is a target of MMP-2 proteolysis. <i>Biochemistry</i> , 2004 , 43, 11760-9	3.2	49
123	Matrix metalloproteinase 26 proteolysis of the NH2-terminal domain of the estrogen receptor beta correlates with the survival of breast cancer patients. <i>Cancer Research</i> , 2006 , 66, 2716-24	10.1	48
122	Promoter characterization of the novel human matrix metalloproteinase-26 gene: regulation by the T-cell factor-4 implies specific expression of the gene in cancer cells of epithelial origin. <i>Biochemical Journal</i> , 2002 , 363, 253-62	3.8	48
121	Timp-2 binding with cellular MT1-MMP stimulates invasion-promoting MEK/ERK signaling in cancer cells. <i>International Journal of Cancer</i> , 2010 , 126, 1067-78	7.5	47
120	The cytoplasmic tail peptide sequence of membrane type-1 matrix metalloproteinase (MT1-MMP) directly binds to gC1qR, a compartment-specific chaperone-like regulatory protein. <i>FEBS Letters</i> , 2002 , 527, 51-7	3.8	47
119	Matrix metalloproteinase-26 is associated with estrogen-dependent malignancies and targets alpha1-antitrypsin serpin. <i>Cancer Research</i> , 2004 , 64, 8657-65	10.1	46
118	Active-site MMP-selective antibody inhibitors discovered from convex paratope synthetic libraries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016 , 113, 14970-14975	11.5	46
117	Rhodanine derivatives as selective protease inhibitors against bacterial toxins. <i>Chemical Biology and Drug Design</i> , 2008 , 71, 131-9	2.9	45
116	Intracellular serine protease from <i>Bacillus subtilis</i> . Structural comparison with extracellular serine proteases-subtilisins. <i>Biochemical and Biophysical Research Communications</i> , 1977 , 77, 298-305	3.4	44
115	Immunodominant fragments of myelin basic protein initiate T cell-dependent pain. <i>Journal of Neuroinflammation</i> , 2012 , 9, 119	10.1	43
114	High-resolution analysis and functional mapping of cleavage sites and substrate proteins of furin in the human proteome. <i>PLoS ONE</i> , 2013 , 8, e54290	3.7	43
113	O-glycosylation regulates autolysis of cellular membrane type-1 matrix metalloproteinase (MT1-MMP). <i>Journal of Biological Chemistry</i> , 2006 , 281, 16897-16905	5.4	43
112	Switching the substrate specificity of the two-component NS2B-NS3 flavivirus proteinase by structure-based mutagenesis. <i>Journal of Virology</i> , 2007 , 81, 4501-9	6.6	43
111	Activatable and Cell-Penetrable Multiplex FRET Nanosensor for Profiling MT1-MMP Activity in Single Cancer Cells. <i>Nano Letters</i> , 2015 , 15, 5025-32	11.5	42
110	The calcium-binding proteins S100A8 and S100A9 initiate the early inflammatory program in injured peripheral nerves. <i>Journal of Biological Chemistry</i> , 2015 , 290, 11771-84	5.4	42
109	The isolation and properties of collagenolytic proteases from crab hepatopancreas. <i>Biochemical and Biophysical Research Communications</i> , 1990 , 166, 1411-20	3.4	42

108	The structure and regulation of the human and mouse matrix metalloproteinase-21 gene and protein. <i>Biochemical Journal</i> , 2003 , 372, 503-15	3.8	41
107	Membrane type-1 matrix metalloproteinase functions as a proprotein self-convertase. Expression of the latent zymogen in <i>Pichia pastoris</i> , autolytic activation, and the peptide sequence of the cleavage forms. <i>Journal of Biological Chemistry</i> , 2003 , 278, 8257-60	5.4	41
106	Membrane-type-1 matrix metalloproteinase confers tumorigenicity on nonmalignant epithelial cells. <i>Oncogene</i> , 2005 , 24, 1689-97	9.2	40
105	Protein-tyrosine pseudokinase 7 (PTK7) directs cancer cell motility and metastasis. <i>Journal of Biological Chemistry</i> , 2014 , 289, 24238-49	5.4	39
104	Prointegrin maturation follows rapid trafficking and processing of MT1-MMP in Furin-Negative Colon Carcinoma LoVo Cells. <i>Traffic</i> , 2004 , 5, 627-41	5.7	39
103	The hemopexin-like C-terminal domain of membrane type 1 matrix metalloproteinase regulates proteolysis of a multifunctional protein, gC1qR. <i>Journal of Biological Chemistry</i> , 2002 , 277, 9318-25	5.4	39
102	Gelatin zymography and substrate cleavage assays of matrix metalloproteinase-2 in breast carcinoma cells overexpressing membrane type-1 matrix metalloproteinase. <i>Laboratory Investigation</i> , 2002 , 82, 1583-90	5.9	38
101	A new chromogenic substrate for subtilisin. <i>Analytical Biochemistry</i> , 1974 , 62, 371-6	3.1	38
100	Human 92 kDa type IV collagenase: functional analysis of fibronectin and carboxyl-end domains. <i>Kidney International</i> , 1993 , 43, 158-62	9.9	37
99	Virtual ligand screening of the National Cancer Institute (NCI) compound library leads to the allosteric inhibitory scaffolds of the West Nile Virus NS3 proteinase. <i>Assay and Drug Development Technologies</i> , 2011 , 9, 69-78	2.1	35
98	Microarray-based transcriptional and epigenetic profiling of matrix metalloproteinases, collagens, and related genes in cancer. <i>Journal of Biological Chemistry</i> , 2010 , 285, 19647-59	5.4	35
97	Inflammatory proprotein convertase-matrix metalloproteinase proteolytic pathway in antigen-presenting cells as a step to autoimmune multiple sclerosis. <i>Journal of Biological Chemistry</i> , 2009 , 284, 30615-26	5.4	35
96	Unconventional activation mechanisms of MMP-26, a human matrix metalloproteinase with a unique PHCGXXD cysteine-switch motif. <i>Journal of Biological Chemistry</i> , 2002 , 277, 18967-72	5.4	35
95	Matrix metalloproteinase-14 both sheds cell surface neuronal glial antigen 2 (NG2) proteoglycan on macrophages and governs the response to peripheral nerve injury. <i>Journal of Biological Chemistry</i> , 2015 , 290, 3693-707	5.4	34
94	A monoclonal antibody interferes with TIMP-2 binding and incapacitates the MMP-2-activating function of multifunctional, pro-tumorigenic MMP-14/MT1-MMP. <i>Oncogenesis</i> , 2013 , 2, e80	6.6	34
93	Selective and potent furin inhibitors protect cells from anthrax without significant toxicity. <i>International Journal of Biochemistry and Cell Biology</i> , 2010 , 42, 987-95	5.6	33
92	The two-component NS2B-NS3 proteinase represses DNA unwinding activity of the West Nile virus NS3 helicase. <i>Journal of Biological Chemistry</i> , 2008 , 283, 17270-8	5.4	33
91	Identification of Annexin A4 as a hepatopancreas factor involved in liver cell survival. <i>Developmental Biology</i> , 2014 , 395, 96-110	3.1	32

90	Engineering a leucine zipper-TRAIL homotrimer with improved cytotoxicity in tumor cells. <i>Molecular Cancer Therapeutics</i> , 2009 , 8, 1515-25	6.1	32
89	Membrane type-1 matrix metalloproteinase confers aneuploidy and tumorigenicity on mammary epithelial cells. <i>Cancer Research</i> , 2006 , 66, 10460-5	10.1	32
88	Cellular membrane type-1 matrix metalloproteinase (MT1-MMP) cleaves C3b, an essential component of the complement system. <i>Journal of Biological Chemistry</i> , 2004 , 279, 46551-7	5.4	30
87	Cloning and expression of <i>Clostridium thermocellum</i> genes coding for thermostable exoglucanases (cellobiohydrolases) in <i>Escherichia coli</i> cells. <i>Biochemical and Biophysical Research Communications</i> , 1990 , 169, 1055-60	3.4	30
86	Selective function-blocking monoclonal human antibody highlights the important role of membrane type-1 matrix metalloproteinase (MT1-MMP) in metastasis. <i>Oncotarget</i> , 2017 , 8, 2781-2799	3.3	29
85	<i>Mycoplasma</i> CG- and GATC-specific DNA methyltransferases selectively and efficiently methylate the host genome and alter the epigenetic landscape in human cells. <i>Epigenetics</i> , 2015 , 10, 303-18	5.7	28
84	New details of HCV NS3/4A proteinase functionality revealed by a high-throughput cleavage assay. <i>PLoS ONE</i> , 2012 , 7, e35759	3.7	27
83	Centrosomal pericentrin is a direct cleavage target of membrane type-1 matrix metalloproteinase in humans but not in mice: potential implications for tumorigenesis. <i>Journal of Biological Chemistry</i> , 2005 , 280, 42237-41	5.4	27
82	Structure-based mutagenesis identifies important novel determinants of the NS2B cofactor of the West Nile virus two-component NS2B-NS3 proteinase. <i>Journal of General Virology</i> , 2008 , 89, 636-641	4.9	26
81	Proteolysis of the membrane type-1 matrix metalloproteinase prodomain: implications for a two-step proteolytic processing and activation. <i>Journal of Biological Chemistry</i> , 2007 , 282, 36283-91	5.4	25
80	Expression and purification of a two-component flaviviral proteinase resistant to autocleavage at the NS2B-NS3 junction region. <i>Protein Expression and Purification</i> , 2007 , 52, 334-9	2	25
79	Coordinated histone modifications and chromatin reorganization in a single cell revealed by FRET biosensors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, E11681-E11690	11.5	25
78	Matrix metalloproteinases - From the cleavage data to the prediction tools and beyond. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2017 , 1864, 1952-1963	4.9	24
77	Biochemical characterization of the cellular glycosylphosphatidylinositol-linked membrane type-6 matrix metalloproteinase. <i>Journal of Biological Chemistry</i> , 2010 , 285, 16076-86	5.4	24
76	Crystal and solution structures of a prokaryotic M16B peptidase: an open and shut case. <i>Structure</i> , 2009 , 17, 1465-75	5.2	24
75	Convergent evolution as a mechanism for pathogenic adaptation. <i>Trends in Microbiology</i> , 2005 , 13, 522-7	12.4	24
74	Prinomastat, a hydroxamate inhibitor of matrix metalloproteinases, has a complex effect on migration of breast carcinoma cells. <i>International Journal of Cancer</i> , 2003 , 104, 533-41	7.5	24
73	Inhibition of membrane type-1 matrix metalloproteinase by cancer drugs interferes with the homing of diabetogenic T cells into the pancreas. <i>Journal of Biological Chemistry</i> , 2005 , 280, 27755-8	5.4	24

72	Zika Virus: Origins, Pathological Action, and Treatment Strategies. <i>Frontiers in Microbiology</i> , 2018 , 9, 3253-7	2.7	24
71	Epigenetic inactivation of the extracellular matrix metalloproteinase ADAMTS19 gene and the metastatic spread in colorectal cancer. <i>Clinical Epigenetics</i> , 2015 , 7, 124	7.7	23
70	Insights into ectodomain shedding and processing of protein-tyrosine pseudokinase 7 (PTK7). <i>Journal of Biological Chemistry</i> , 2012 , 287, 42009-18	5.4	23
69	Proteolysis-driven oncogenesis. <i>Cell Cycle</i> , 2007 , 6, 147-50	4.7	23
68	A reliable technique for large-scale DNA separation. <i>Analytical Biochemistry</i> , 1977 , 79, 1-10	3.1	23
67	Spinal activity of interleukin 6 mediates myelin basic protein-induced allodynia. <i>Brain, Behavior, and Immunity</i> , 2016 , 56, 378-89	16.6	22
66	Distinct interactions with cellular E-cadherin of the two virulent metalloproteinases encoded by a <i>Bacteroides fragilis</i> pathogenicity island. <i>PLoS ONE</i> , 2014 , 9, e113896	3.7	22
65	High-Throughput Multiplexed Peptide-Centric Profiling Illustrates Both Substrate Cleavage Redundancy and Specificity in the MMP Family. <i>Chemistry and Biology</i> , 2015 , 22, 1122-33		21
64	Substrate cleavage profiling suggests a distinct function of <i>Bacteroides fragilis</i> metalloproteinases (fragilysin and metalloproteinase II) at the microbiome-inflammation-cancer interface. <i>Journal of Biological Chemistry</i> , 2013 , 288, 34956-67	5.4	21
63	Quantitative FRET imaging to visualize the invasiveness of live breast cancer cells. <i>PLoS ONE</i> , 2013 , 8, e58569	3.7	21
62	Methylation of MGMT and ADAMTS14 in normal colon mucosa: biomarkers of a field defect for cancerization preferentially targeting elder African-Americans. <i>Oncotarget</i> , 2015 , 6, 3420-31	3.3	21
61	Potential relation of aberrant proteolysis of human protein tyrosine kinase 7 (PTK7) chuzhoi by membrane type 1 matrix metalloproteinase (MT1-MMP) to congenital defects. <i>Journal of Biological Chemistry</i> , 2011 , 286, 20970-6	5.4	20
60	Autocatalytic activation of the furin zymogen requires removal of the emerging enzyme's N-terminus from the active site. <i>PLoS ONE</i> , 2009 , 4, e5031	3.7	19
59	Interference with the complement system by tumor cell membrane type-1 matrix metalloproteinase plays a significant role in promoting metastasis in mice. <i>Cancer Research</i> , 2006 , 66, 6258-63	10.1	19
58	Internal cleavages of the autoinhibitory prodomain are required for membrane type 1 matrix metalloproteinase activation, although furin cleavage alone generates inactive proteinase. <i>Journal of Biological Chemistry</i> , 2010 , 285, 27726-36	5.4	18
57	Cloning of <i>Clostridium thermocellum</i> endoglucanase genes in <i>Escherichia coli</i> . <i>Biochemical and Biophysical Research Communications</i> , 1990 , 167, 1057-64	3.4	18
56	Directed Evolution to Engineer Monobody for FRET Biosensor Assembly and Imaging at Live-Cell Surface. <i>Cell Chemical Biology</i> , 2018 , 25, 370-379.e4	8.2	16
55	Acute- and late-phase matrix metalloproteinase (MMP)-9 activity is comparable in female and male rats after peripheral nerve injury. <i>Journal of Neuroinflammation</i> , 2018 , 15, 89	10.1	16

54	Downstream signaling and genome-wide regulatory effects of PTK7 pseudokinase and its proteolytic fragments in cancer cells. <i>Cell Communication and Signaling</i> , 2014 , 12, 15	7.5	16
53	Defining the roles of T cell membrane proteinase and CD44 in type 1 diabetes. <i>IUBMB Life</i> , 2007 , 59, 6-13	4.7	16
52	Reciprocal relationship between membrane type 1 matrix metalloproteinase and the algescic peptides of myelin basic protein contributes to chronic neuropathic pain. <i>Brain, Behavior, and Immunity</i> , 2017 , 60, 282-292	16.6	15
51	Structural and functional parameters of the flaviviral protease: a promising antiviral drug target. <i>Future Virology</i> , 2010 , 5, 593-606	2.4	15
50	Role of myelin auto-antigens in pain: a female connection. <i>Neural Regeneration Research</i> , 2016 , 11, 890-14.5		15
49	Non-proteolytic, receptor/ligand interactions associate cellular membrane type-1 matrix metalloproteinase with the complement component C1q. <i>Journal of Biological Chemistry</i> , 2004 , 279, 50321-8	5.4	14
48	Nicotinic acetylcholine receptor-mediated stimulation of endothelial cells results in the arrest of haematopoietic progenitor cells on endothelium. <i>British Journal of Haematology</i> , 2005 , 129, 257-65	4.5	14
47	Non-destructive and selective imaging of the functionally active, pro-invasive membrane type-1 matrix metalloproteinase (MT1-MMP) enzyme in cancer cells. <i>Journal of Biological Chemistry</i> , 2013 , 288, 20568-80	5.4	13
46	Targeting metalloproteins by fragment-based lead discovery. <i>Chemical Biology and Drug Design</i> , 2011 , 78, 211-23	2.9	13
45	Intradomain cleavage of inhibitory prodomain is essential to protumorigenic function of membrane type-1 matrix metalloproteinase (MT1-MMP) in vivo. <i>Journal of Biological Chemistry</i> , 2011 , 286, 34215-23 ^{5.4}		13
44	On the appearance of Bacillus subtilis intracellular serine protease in the cell membrane and culture medium. Comparison of the enzyme and other Bacillus subtilis serine proteases. <i>Archives of Microbiology</i> , 1978 , 119, 287-93	3	13
43	Potential Therapeutic Targeting of Coronavirus Spike Glycoprotein Priming. <i>Molecules</i> , 2020 , 25,	4.8	12
42	The alternatively spliced fibronectin CS1 isoform regulates IL-17A levels and mechanical allodynia after peripheral nerve injury. <i>Journal of Neuroinflammation</i> , 2015 , 12, 158	10.1	12
41	Matrix metalloproteinases, T cell homing and beta-cell mass in type 1 diabetes. <i>Vitamins and Hormones</i> , 2009 , 80, 541-62	2.5	12
40	Dynamic interdomain interactions contribute to the inhibition of matrix metalloproteinases by tissue inhibitors of metalloproteinases. <i>Journal of Biological Chemistry</i> , 2011 , 286, 21002-12	5.4	11
39	Activity, specificity, and probe design for the smallpox virus protease K7L. <i>Journal of Biological Chemistry</i> , 2012 , 287, 39470-9	5.4	11
38	Mechanistic insights into targeting T cell membrane proteinase to promote islet beta-cell rejuvenation in type 1 diabetes. <i>FASEB Journal</i> , 2006 , 20, 1793-801	0.9	11
37	A suitable method for construction and cloning hybrid plasmids containing EcoRI-fragments of E. coli genome. <i>Molecular Genetics and Genomics</i> , 1977 , 150, 211-9		11

36	Matrix metalloproteinase proteolysis of the mycobacterial HSP65 protein as a potential source of immunogenic peptides in human tuberculosis. <i>FEBS Journal</i> , 2011 , 278, 3277-86	5.7	10
35	Biochemical evidence of the interactions of membrane type-1 matrix metalloproteinase (MT1-MMP) with adenine nucleotide translocator (ANT): potential implications linking proteolysis with energy metabolism in cancer cells. <i>Biochemical Journal</i> , 2009 , 420, 37-47	3.8	10
34	Visualization of leucineaminopeptidase activity after acrylamide gel electrophoresis. <i>Analytical Biochemistry</i> , 1976 , 74, 597-9	3.1	10
33	A femtomol range FRET biosensor reports exceedingly low levels of cell surface furin: implications for the processing of anthrax protective antigen. <i>PLoS ONE</i> , 2010 , 5, e11305	3.7	9
32	Membrane type-1 matrix metalloproteinase (MT1-MMP) protects malignant cells from tumoricidal activity of re-engineered anthrax lethal toxin. <i>International Journal of Biochemistry and Cell Biology</i> , 2005 , 37, 142-54	5.6	9
31	Both PA63 and PA83 are endocytosed within an anthrax protective antigen mixed heptamer: a putative mechanism to overcome a furin deficiency. <i>Archives of Biochemistry and Biophysics</i> , 2006 , 446, 52-9	4.1	9
30	Depletion of CG-Specific Methylation in Mycoplasma hyorhinis Genomic DNA after Host Cell Invasion. <i>PLoS ONE</i> , 2015 , 10, e0142529	3.7	9
29	Matrix Metalloproteinase (MMP) Proteolysis of the Extracellular Loop of Voltage-gated Sodium Channels and Potential Alterations in Pain Signaling. <i>Journal of Biological Chemistry</i> , 2015 , 290, 22939-44	5.4	8
28	A myelin basic protein fragment induces sexually dimorphic transcriptome signatures of neuropathic pain in mice. <i>Journal of Biological Chemistry</i> , 2020 , 295, 10807-10821	5.4	8
27	Targeting the T-cell membrane type-1 matrix metalloproteinase-CD44 axis in a transferred type 1 diabetes model in NOD mice. <i>Experimental and Therapeutic Medicine</i> , 2013 , 5, 438-442	2.1	8
26	A novel monoclonal antibody, L1A3, is directed to the functional site of the alpha v integrin subunit. <i>Hybridoma</i> , 1996 , 15, 279-88		8
25	The acidic sequence of the NS4A cofactor regulates ATP hydrolysis by the HCV NS3 helicase. <i>Archives of Virology</i> , 2011 , 156, 313-8	2.6	7
24	Bacillus amyloliquefaciens alpha-amylase signal sequence fused in frame with human proinsulin is properly processed by Bacillus subtilis cells. <i>Biochemical and Biophysical Research Communications</i> , 1990 , 169, 297-301	3.4	7
23	Isolation and characterization of selective and potent human Fab inhibitors directed to the active-site region of the two-component NS2B-NS3 proteinase of West Nile virus. <i>Biochemical Journal</i> , 2010 , 427, 369-76	3.8	6
22	Specific inhibition of autoimmune T cell transmigration contributes to beta cell functionality and insulin synthesis in non-obese diabetic (NOD) mice. <i>Journal of Biological Chemistry</i> , 2007 , 282, 32106-11	5.4	6
21	Two related structural genes coding two homologous serine proteases in the Bacillus subtilis genome. <i>Molecular Genetics and Genomics</i> , 1978 , 159, 337-9		6
20	Structural homology of myelin basic protein and muscarinic acetylcholine receptor: Significance in the pathogenesis of complex regional pain syndrome. <i>Molecular Pain</i> , 2018 , 14, 1744806918815005	3.4	6
19	The matrix metalloproteinase-21 gene 572C/T polymorphism and the risk of breast cancer. <i>Anticancer Research</i> , 2004 , 24, 199-201	2.3	6

18	A sensitive and selective ELISA methodology quantifies a demyelination marker in experimental and clinical samples. <i>Journal of Immunological Methods</i> , 2018 , 455, 80-87	2.5	4
17	Amino acid sequence conservation of the algescic fragment of myelin basic protein is required for its interaction with CDK5 and function in pain. <i>FEBS Journal</i> , 2018 , 285, 3485-3502	5.7	4
16	The intrinsic fluorescence of the recombinant human leukocyte interferon-alpha A and fibroblast interferon-beta 1. <i>Biochemical and Biophysical Research Communications</i> , 1990 , 169, 282-8	3.4	4
15	Characterization and regulation of MT1-MMP cell surface-associated activity. <i>Chemical Biology and Drug Design</i> , 2019 , 93, 1251-1264	2.9	4
14	Probing of exosites leads to novel inhibitor scaffolds of HCV NS3/4A proteinase. <i>PLoS ONE</i> , 2012 , 7, e40629	3.7	3
13	The effects of synthetic protease inhibitors on human proinsulin production by recombinant <i>Bacillus subtilis</i> strain. <i>Biotechnology Letters</i> , 1990 , 12, 547-550	3	3
12	A humanized leucine zipper-TRAIL hybrid induces apoptosis of tumors both in vitro and in vivo. <i>PLoS ONE</i> , 2015 , 10, e0122980	3.7	3
11	Interaction of the cryptic fragment of myelin basic protein with mitochondrial voltage-dependent anion-selective channel-1 affects cell energy metabolism. <i>Biochemical Journal</i> , 2018 , 475, 2355-2376	3.8	3
10	Chemical modification of the recombinant human alpha A- and beta-interferons. <i>Biochemical and Biophysical Research Communications</i> , 1990 , 167, 74-80	3.4	2
9	Reconstruction of an epitope capable of binding murine monoclonal antibodies NK2 within the sequence of human leukocyte interferon alpha F by site-directed mutagenesis. <i>Biochemical and Biophysical Research Communications</i> , 1990 , 169, 1061-7	3.4	2
8	The specificity of the <i>Bacillus amyloliquefaciens</i> intracellular serine protease: a comparison with the specificity of secretory subtilisins. <i>International Journal of Biochemistry & Cell Biology</i> , 1981 , 13, 201-6		2
7	A simple method for phage or plasmid DNA $\bar{\text{e}}$ isolation suitable as a "screening test" after molecular cloning. <i>Analytical Biochemistry</i> , 1978 , 86, 316-9	3.1	2
6	Peptide Sequence Region That is Essential for the Interactions of the Enterotoxigenic <i>Bacteroides fragilis</i> Metalloproteinase II with E-cadherin 2014 , 1, 3-14		2
5	A Note on the Potential BCG Vaccination [COVID-19 Molecular Link. <i>Coronaviruses</i> , 2020 , 1, 4-6	1.5	2
4	Tissue inhibitors of metalloproteases strike a nerve. <i>Neural Regeneration Research</i> , 2018 , 13, 1890-1892	4.5	2
3	Secondary Analysis of the NCI-60 Whole Exome Sequencing Data Indicates Significant Presence of <i>Propionibacterium acnes</i> Genomic Material in Leukemia (RPMI-8226) and Central Nervous System (SF-295, SF-539, and SNB-19) Cell Lines. <i>PLoS ONE</i> , 2015 , 10, e0127799	3.7	0
2	Sex-Specific B Cell and Anti-Myelin Autoantibody Response After Peripheral Nerve Injury.. <i>Frontiers in Cellular Neuroscience</i> , 2022 , 16, 835800	6.1	0
1	Plasma membrane proteins of embryo cells of sea urchins <i>Strongylocentrotus intermedius</i> , <i>Strongylocentrotus droebachiensis</i> and their hybrid embryo. <i>Comparative Biochemistry and Physiology Part B: Comparative Biochemistry</i> , 1977 , 56, 381-384		

