Adam Lesner

List of Publications by Year
in descending order

122 papers	2,281 citations	236612 25 h-index	329751 37 g-index
123 all docs	123 docs citations	123 times ranked	3038 citing authors

#	Article	IF	Citations
1	Theoretical Investigation of the Coronavirus SARS-CoV-2 (COVID-19) Infection Mechanism and Selectivity. Molecules, 2022, 27, 2080.	1.7	2
2	Bile Acids: Key Players in Inflammatory Bowel Diseases?. Cells, 2022, 11, 901.	1.8	19
3	Chemical tools to monitor bladder cancer progression. Biomarkers, 2022, 27, 568-578.	0.9	0
4	Detection of ADAM15 in urine from patients with bladder cancer. Analytical Biochemistry, 2022, 654, 114805.	1.1	1
5	Structural Determinants of Substrate Specificity of SplF Protease from Staphylococcus aureus. International Journal of Molecular Sciences, 2021, 22, 2220.	1.8	6
6	Nonâ€Proteasomal Urine Activity in Bladder Cancer. Chemistry and Biodiversity, 2021, 18, e2000981.	1.0	4
7	Digestive Inflammation: Role of Proteolytic Dysregulation. International Journal of Molecular Sciences, 2021, 22, 2817.	1.8	10
8	Novel Cell Permeable Polymers of N-Substituted L-2,3-Diaminopropionic Acid (DAPEGs) and Cellular Consequences of Their Interactions with Nucleic Acids. International Journal of Molecular Sciences, 2021, 22, 2571.	1.8	1
9	Gut Serpinome: Emerging Evidence in IBD. International Journal of Molecular Sciences, 2021, 22, 6088.	1.8	10
10	Elastolytic activity is associated with inflammation in bladder cancer. Journal of Biochemistry, 2021, 170, 547-558.	0.9	4
11	Lipidation of Temporin-1CEb Derivatives as a Tool for Activity Improvement, Pros and Cons of the Approach. International Journal of Molecular Sciences, 2021, 22, 6679.	1.8	2
12	Proteinase release from activated neutrophils in mechanically ventilated patients with non-COVID-19 and COVID-19 pneumonia. European Respiratory Journal, 2021, 57, 2003755.	3.1	27
13	SP-1, a Serine Protease from the Gut Microbiota, Influences Colitis and Drives Intestinal Dysbiosis in Mice. Cells, 2021, 10, 2658.	1.8	4
14	Analysis of urinary kallikrein-related peptidase 13 for monitoring bladder cancer. Biomarkers, 2021, 26, 1-30.	0.9	1
15	Simplified Theta-defensin [Ser3,7,12,16] RTD-2 Analog Is Involved in Proteasomal Degradation Pathway in Breast Cancer. Anticancer Research, 2021, 41, 5415-5423.	0.5	0
16	The molecular function of kallikreinâ€related peptidase 14 demonstrates a key modulatory role in advanced prostate cancer. Molecular Oncology, 2020, 14, 105-128.	2.1	13
17	Lung Protection by Cathepsin C Inhibition: A New Hope for COVID-19 and ARDS?. Journal of Medicinal Chemistry, 2020, 63, 13258-13265.	2.9	49
18	Kallikrein 13 serves as a priming protease during infection by the human coronavirus HKU1. Science Signaling, 2020, 13, .	1.6	10

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19	Myeloperoxidase Modulates Inflammation in Generalized Pustular Psoriasis and Additional Rare Pustular Skin Diseases. American Journal of Human Genetics, 2020, 107, 527-538.	2.6	53
20	A Peptidomimetic Fluorescent Probe to Detect the Trypsin Î²2 Subunit of the Human 20S Proteasome. International Journal of Molecular Sciences, 2020, 21, 2396.	1.8	4
21	Fecal Serine Protease Profiling in Inflammatory Bowel Diseases. Frontiers in Cellular and Infection Microbiology, 2020, 10, 21.	1.8	62
22	Kallikrein-Related Peptidase 14 Activates Zymogens of Membrane Type Matrix Metalloproteinases (MT-MMPs)â€"A CleavEx Based Analysis. International Journal of Molecular Sciences, 2020, 21, 4383.	1.8	5
23	Activity-based protein profiling guided identification of urine proteinase 3 activity in subclinical rejection after renal transplantation. Clinical Proteomics, 2020, 17, 23.	1.1	3
24	Human proteinase 3 resistance to inhibition extends to alphaâ€2 macroglobulin. FEBS Journal, 2020, 287, 4068-4081.	2.2	3
25	Cathepsin C is a novel mediator of podocyte and renal injury induced by hyperglycemia. Biochimica Et Biophysica Acta - Molecular Cell Research, 2020, 1867, 118723.	1.9	12
26	Aggregated neutrophil extracellular traps resolve inflammation by proteolysis of cytokines and chemokines and protection from antiproteases. FASEB Journal, 2019, 33, 1401-1414.	0.2	90
27	The Bactericidal Activity of Temporin Analogues Against Methicillin Resistant Staphylococcus aureus. International Journal of Molecular Sciences, 2019, 20, 4761.	1.8	9
28	Processing and Maturation of Cathepsin C Zymogen: A Biochemical and Molecular Modeling Analysis. International Journal of Molecular Sciences, 2019, 20, 4747.	1.8	12
29	Properties of the HtrA Protease From Bacterium Helicobacter pylori Whose Activity Is Indispensable for Growth Under Stress Conditions. Frontiers in Microbiology, 2019, 10, 961.	1.5	36
30	Development of Chemical Tools to Monitor Human Kallikrein 13 (KLK13) Activity. International Journal of Molecular Sciences, 2019, 20, 1557.	1.8	15
31	Proteinase 3 phosphonic inhibitors. Biochimie, 2019, 166, 142-149.	1.3	7
32	Structure-based design and in vivo anti-arthritic activity evaluation of a potent dipeptidyl cyclopropyl nitrile inhibitor of cathepsin C. Biochemical Pharmacology, 2019, 164, 349-367.	2.0	21
33	A Novel Biological Role for Peptidyl-Arginine Deiminases: Citrullination of Cathelicidin LL-37 Controls the Immunostimulatory Potential of Cell-Free DNA. Journal of Immunology, 2018, 200, 2327-2340.	0.4	27
34	Design, Synthesis, and Enzymatic Evaluation of Novel ZnO Quantum Dot-Based Assay for Detection of Proteinase 3 Activity. Bioconjugate Chemistry, 2018, 29, 1576-1583.	1.8	10
35	Exploiting the S4â€"S5 Specificity of Human Neutrophil Proteinase 3 to Improve the Potency of Peptidyl Di(chlorophenyl)-phosphonate Ester Inhibitors: A Kinetic and Molecular Modeling Analysis. Journal of Medicinal Chemistry, 2018, 61, 1858-1870.	2.9	14
36	Biochemical properties of the HtrA homolog from bacterium Stenotrophomonas maltophilia. International Journal of Biological Macromolecules, 2018, 109, 992-1005.	3.6	12

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37	Conjugate of Enkephalin and Temporin Peptides as a Novel Therapeutic Agent for Sepsis. Bioconjugate Chemistry, 2018, 29, 4127-4139.	1.8	9
38	One Step Beyond: Design of Substrates Spanning Primed Positions of Zika Virus NS2B-NS3 Protease. ACS Medicinal Chemistry Letters, 2018, 9, 1025-1029.	1.3	8
39	Therapeutic targeting of cathepsin C: from pathophysiology to treatment. , 2018, 190, 202-236.		85
40	Consequences of cathepsin C inactivation for membrane exposure of proteinase 3, the target antigen in autoimmune vasculitis. Journal of Biological Chemistry, 2018, 293, 12415-12428.	1.6	26
41	Prolonged pharmacological inhibition of cathepsin C results in elimination of neutrophil serine proteases. Biochemical Pharmacology, 2017, 131, 52-67.	2.0	34
42	Simplified, serineâ€rich thetaâ€defensin analogues as antitumour peptides. Chemical Biology and Drug Design, 2017, 90, 52-63.	1.5	13
43	Selection of Effective HTRA3 Activators Using Combinatorial Chemistry. ACS Combinatorial Science, 2017, 19, 565-573.	3.8	1
44	The role of the LB structural loop and its interactions with the PDZ domain of the human HtrA3 protease. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 1141-1151.	1.1	9
45	Lactoferrin Is an Allosteric Enhancer of the Proteolytic Activity of Cathepsin G. PLoS ONE, 2016, 11, e0151509.	1.1	22
46	Bladder cancer detection using a peptide substrate of the 20S proteasome. FEBS Journal, 2016, 283, 2929-2948.	2.2	12
47	Analysis of urinary cathepsin C for diagnosing Papillonâ€“LefÃ¨vre syndrome. FEBS Journal, 2016, 283, 498-509.	2.2	14
48	Antimicrobial peptides (AMPs) as drug candidates: a patent review (2003â€“2015). Expert Opinion on Therapeutic Patents, 2016, 26, 689-702.	2.4	134
49	Neutrophilic Cathepsin C Is Maturated by a Multistep Proteolytic Process and Secreted by Activated Cells during Inflammatory Lung Diseases. Journal of Biological Chemistry, 2016, 291, 8486-8499.	1.6	45
50	Substrate profiling of Zika virus <scp>NS</scp>2Bâ€<scp>NS</scp>3 protease. FEBS Letters, 2016, 590, 3459-3468.	1.3	45
51	The <scp>LD</scp> loop as an important structural element required for transmission of the allosteric signal in the HtrA (DegP) protease from Escherichia coli. FEBS Journal, 2016, 283, 3471-3487.	2.2	8
52	PEGylated substrates of NSP4 protease: A tool to study protease specificity. Scientific Reports, 2016, 6, 22856.	1.6	10
53	Development of the first internally-quenched fluorescent substrates of human cathepsin C: The application in the enzyme detection in biological samples. Archives of Biochemistry and Biophysics, 2016, 612, 91-102.	1.4	14
54	Inhibitors and Antibody Fragments as Potential Anti-Inflammatory Therapeutics Targeting Neutrophil Proteinase 3 in Human Disease. Pharmacological Reviews, 2016, 68, 603-630.	7.1	30

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55	Intra- and intersubunit changes accompanying thermal activation of the HtrA2(Omi) protease homotrimer. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 283-296.	1.1	18
56	Novel internally quenched substrate of the trypsin-like subunit of 20S eukaryotic proteasome. Analytical Biochemistry, 2016, 508, 38-45.	1.1	7
57	Analysis of the Link between the Redox State and Enzymatic Activity of the HtrA (DegP) Protein from Escherichia coli. PLoS ONE, 2015, 10, e0117413.	1.1	10
58	Structural and Functional Analysis of Human HtrA3 Protease and Its Subdomains. PLoS ONE, 2015, 10, e0131142.	1.1	35
59	Design and synthesis of new substrates of HtrA2 protease. Analytical Biochemistry, 2015, 475, 44-52.	1.1	4
60	Cathepsin G deficiency reduces periaortic calcium chloride injury-induced abdominal aortic aneurysms in mice. Journal of Vascular Surgery, 2015, 62, 1615-1624.	0.6	20
61	Conformational studies of [Nphe5]SFTI-1 by means of 2D NMR spectroscopy in conjunction with molecular dynamics calculations. Journal of Molecular Structure, 2015, 1100, 203-207.	1.8	1
62	Synthesis and Evaluation of Biological Activity of Antimicrobial â€“ Pro-Proliferative Peptide Conjugates. PLoS ONE, 2015, 10, e0140377.	1.1	19
63	NEW SELECTIVE PEPTIDYL DI(CHLOROPHENYL)â€PHOSPHONATE ESTERS TO VISUALIZE AND BLOCK NEUTROPHIL PROTEINASE 3 IN HUMAN DISEASES. FASEB Journal, 2015, 29, 1022.2.	0.2	0
64	Inhibition of Human and Yeast 20S Proteasome by Analogues of Trypsin Inhibitor SFTI-1. PLoS ONE, 2014, 9, e89465.	1.1	14
65	Synthesis of Novel Phosphonicâ€Type Activityâ€Based Probes for Neutrophil Serine Proteases and Their Application in Spleen Lysates of Different Organisms. ChemBioChem, 2014, 15, 2605-2612.	1.3	17
66	Fluorescent analogs of trypsin inhibitor SFTIâ€1 isolated from sunflower seedsâ€"synthesis and applications. Biopolymers, 2014, 102, 124-135.	1.2	9
67	New Selective Peptidyl Di(chlorophenyl) Phosphonate Esters for Visualizing and Blocking Neutrophil Proteinase 3 in Human Diseases. Journal of Biological Chemistry, 2014, 289, 31777-31791.	1.6	38
68	Determination of cathepsin G in endometrial tissue using a surface plasmon resonance imaging biosensor with tailored phosphonic inhibitor. European Journal of Obstetrics, Gynecology and Reproductive Biology, 2014, 182, 38-42.	0.5	13
69	Ultrasensitive internally quenched substrates of human cathepsin L. Analytical Biochemistry, 2014, 466, 30-37.	1.1	12
70	Cathepsin G activity lowers plasma LDL and reduces atherosclerosis. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2014, 1842, 2174-2183.	1.8	33
71	Substrate specificity of human matriptase-2. Biochimie, 2014, 97, 121-127.	1.3	23
72	The LA Loop as an Important Regulatory Element of the HtrA (DegP) Protease from Escherichia coli. Journal of Biological Chemistry, 2014, 289, 15880-15893.	1.6	22

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73	Substrate profiling of Finegoldia magna SufA protease, inhibitor screening and application to prevent human fibrinogen degradation and bacteria growth inÂvitro. Biochimie, 2014, 103, 137-143.	1.3	6
74	Peptidic Inhibitors of Serine Proteinases of Plant Origin. , 2013, , 187-204.		0
75	Neutrophil proteinase 3 and dipeptidyl peptidase I (cathepsin C) as pharmacological targets in granulomatosis with polyangiitis (Wegener granulomatosis). Seminars in Immunopathology, 2013, 35, 411-421.	2.8	57
76	A new proteinase 3 substrate with improved selectivity over human neutrophil elastase. Analytical Biochemistry, 2013, 442, 75-82.	1.1	18
77	Temperature-induced changes of HtrA2(Omi) protease activity and structure. Cell Stress and Chaperones, 2013, 18, 35-51.	1.2	33
78	Inhibitors of cathepsin G: a patent review (2005 to present). Expert Opinion on Therapeutic Patents, 2013, 23, 1611-1624.	2.4	21
79	Hybrid analogues of SFTIâ€1 modified in P₁ position by Î²â€•and Î³â€amino acids and Nâ€substituted Î²â€alanines. Biopolymers, 2013, 100, 154-159.	1.2	7
80	Biochemical and Structural Characterization of SplD Protease from Staphylococcus aureus. PLoS ONE, 2013, 8, e76812.	1.1	29
81	Microarrays and Dynamics of Fluorescent Dyes. , 2013, , 165-178.		0
82	Adrenal Secretory Protease. , 2013, , 2983-2985.		0
83	Pegylated Fluorescent Peptides as Substrates of Proteolytic Enzymes. Protein and Peptide Letters, 2012, 19, 1237-1244.	0.4	3
84	Three Wavelength Substrate System of Neutrophil Serine Proteinases. Analytical Chemistry, 2012, 84, 7241-7248.	3.2	24
85	Inhibitory and antimicrobial activities of OGTI and HV-BBI peptides, fragments and analogs derived from amphibian skin. Peptides, 2012, 35, 276-284.	1.2	18
86	Substrate specificity of Staphylococcus aureus cysteine proteases â€“ Staphopains A, B and C. Biochimie, 2012, 94, 318-327.	1.3	20
87	Editorial(Hot Topic: Proteolysis in Health and Disease). Current Pharmaceutical Design, 2012, 19, 965-965.	0.9	0
88	Surface plasmon resonance imaging biosensor for cathepsin G based on a potent inhibitor: Development and applications. Analytical Biochemistry, 2012, 423, 218-223.	1.1	38
89	Future of Protease Activity Assays. Current Pharmaceutical Design, 2012, 19, 1062-1067.	0.9	15
90	Sunflower Trypsin Inhibitor 1 as a Molecular Scaffold for Drug Discovery. Current Pharmaceutical Design, 2011, 17, 4308-4317.	0.9	51

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91	Introduction of Pro and Its Analogues in the Conserved P1 Position of Trypsin Inhibitor SFTI-1 Retains Its Inhibitory Activity. Protein and Peptide Letters, 2011, 18, 1158-1167.	0.4	4
92	Analogues of Trypsin Inhibitor SFTI-1 with Disulfide Bridge Substituted by Various Length of Carbonyl Bridges. Protein and Peptide Letters, 2010, 17, 1223-1227.	0.4	8
93	Implication of the disulfide bridge in trypsin inhibitor SFTI-1 in its interaction with serine proteinases. Bioorganic and Medicinal Chemistry, 2010, 18, 8188-8193.	1.4	22
94	Selection of peptomeric inhibitors of bovine Î±-chymotrypsin and cathepsin G based on trypsin inhibitor SFTI-1 using a combinatorial chemistry approach. Molecular Diversity, 2010, 14, 51-58.	2.1	16
95	The new fluorogenic substrates of neutrophil proteinase 3 optimized in prime site region. Analytical Biochemistry, 2010, 399, 196-201.	1.1	15
96	Substrate specificity and inhibitory study of human airway trypsin-like protease. Bioorganic and Medicinal Chemistry, 2010, 18, 5504-5509.	1.4	27
97	Inhibitory activity of doubleâ€sequence analogues of trypsin inhibitor SFTIâ€1 from sunflower seeds: an example of peptide splicing. FEBS Journal, 2010, 277, 2351-2359.	2.2	10
98	Highly Specific Substrates of Proteinase 3 Containing 3-(2-Benzoxazol-5-yl)-<scp>l</scp>-alanine and Their Application for Detection of This Enzyme in Human Serum. Analytical Chemistry, 2010, 82, 3883-3889.	3.2	7
99	Introduction of non-natural amino acid residues into the substrate-specific P1 position of trypsin inhibitor SFTI-1 yields potent chymotrypsin and cathepsin G inhibitors. Bioorganic and Medicinal Chemistry, 2009, 17, 3302-3307.	1.4	40
100	Identification of X-DING-CD4, a new member of human DING protein family that is secreted by HIV-1 resistant CD4+ T cells and has anti-viral activity. Biochemical and Biophysical Research Communications, 2009, 389, 284-289.	1.0	30
101	Application of specific cell permeable cathepsin G inhibitors resulted in reduced antigen processing in primary dendritic cells. Molecular Immunology, 2009, 46, 2994-2999.	1.0	24
102	Low-Molecular-Weight Aldehyde Inhibitors of Cathepsin G. Protein and Peptide Letters, 2009, 16, 408-410.	0.4	2
103	The influence of substrate peptide length on human Î²â€tryptase specificity. Journal of Peptide Science, 2008, 14, 917-923.	0.8	9
104	Peptomeric analogues of trypsin inhibitor SFTI-1 isolated from sunflower seeds. Bioorganic and Medicinal Chemistry, 2008, 16, 5644-5652.	1.4	16
105	New potent cathepsin G phosphonate inhibitors. Bioorganic and Medicinal Chemistry, 2008, 16, 8863-8867.	1.4	21
106	Development of sensitive cathepsin G fluorogenic substrate using combinatorial chemistry methods. Analytical Biochemistry, 2008, 375, 306-312.	1.1	15
107	Design of selective substrates of proteinase 3 using combinatorial chemistry methods. Analytical Biochemistry, 2008, 378, 208-215.	1.1	35
108	Designing of Substrates and Inhibitors of Bovine α-Chymotrypsin with Synthetic Phenylalanine Analogues in Position P1. Protein and Peptide Letters, 2008, 15, 260-264.	0.4	5

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109	Selection of New Chromogenic Substrates of Serine Proteinases Using Combinatorial Chemistry Methods. Combinatorial Chemistry and High Throughput Screening, 2007, 10, 171-180.	0.6	24
110	Trypsin inhibitors from the garden four oâ€™clock (Mirabilis jalapa) and spinach (Spinacia oleracea) seeds: Isolation, characterization and chemical synthesis. Phytochemistry, 2007, 68, 1487-1496.	1.4	22
111	Design of serine proteinase inhibitors by combinatorial chemistry using trypsin inhibitor SFTIâ€1 as a starting structure. Journal of Peptide Science, 2007, 13, 749-755.	0.8	27
112	Inhibition of HIVâ€1 or bacterial activation of macrophages by products of HIVâ€1â€resistant human cells. Immunology and Cell Biology, 2007, 85, 603-609.	1.0	16
113	New chromogenic substrates of human neutrophil cathepsin G containing non-natural aromatic amino acid residues in position P1 selected by combinatorial chemistry methods. Molecular Diversity, 2007, 11, 93-99.	2.1	28
114	A Soluble Factor Secreted by an HIV-1-Resistant Cell Line Blocks Transcription through Inactivating the DNA-Binding Capacity of the NF-ÎºB p65/p50 Dimer. Journal of Immunology, 2005, 175, 2548-2554.	0.4	24
115	Microarray analysis of differentially expressed genes in cells resistant to HIV-1. Immunology Letters, 2004, 93, 79-86.	1.1	15
116	Monoubiquitinated Histone H1B Is Required for Antiviral Protection in CD4+T Cells Resistant to HIV-1â€. Biochemistry, 2004, 43, 16203-16211.	1.2	20
117	A simple method for selection of trypsin chromogenic substrates using combinatorial chemistry approach. Biochemical and Biophysical Research Communications, 2004, 319, 185-188.	1.0	14
118	Induction of Secreted Human Immunodeficiency Virus Type 1 (HIV-1) Resistance Factors in CD4-Positive T Lymphocytes by Attenuated HIV-1 Infection. Virology, 2002, 294, 1-12.	1.1	19
119	Chromogenic Substrates of Bovine Î²-Trypsin: The Influence of an Amino Acid Residue in P1 Position on Their Interaction with the Enzyme. Biochemical and Biophysical Research Communications, 2001, 285, 1350-1353.	1.0	15
120	Synthesis, activity on NK-3 tachykinin receptor and conformational solution studies of scyliorhinin II analogs modified at position 16. Chemical Biology and Drug Design, 2001, 58, 159-172.	1.2	1
121	Design, Chemical Synthesis and Kinetic Studies of Trypsin Chromogenic Substrates Based on the Proteinase Binding Loop of Cucurbita maxima Trypsin Inhibitor (CMTI-III). Biochemical and Biophysical Research Communications, 2000, 269, 81-84.	1.0	18
122	Distance between the Basic Group of the Amino Acid Residue's Side Chain in Position P1of Trypsin Inhibitor CMTI-III and Asp189in the Substrate Pocket of Trypsin Has an Essential Influence on the Inhibitory Activity. Biochemical and Biophysical Research Communications, 1997, 240, 869-871.	1.0	11