Vivian Hook

List of Publications by Year
in descending order

85 papers	3,034 citations	126708 33 h-index	182168 51 g-index
88 all docs	88 docs citations	88 times ranked	3732 citing authors

#	Article	IF	Citations
1	Proteases for Processing Proneuropeptides into Peptide Neurotransmitters and Hormones. Annual Review of Pharmacology and Toxicology, 2008, 48, 393-423.	4.2	215
2	Cathepsin L in secretory vesicles functions as a prohormone-processing enzyme for production of the enkephalin peptide neurotransmitter. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9590-9595.	3.3	199
3	Inhibition of cathepsin B reduces Î²-amyloid production in regulated secretory vesicles of neuronal chromaffin cells: evidence for cathepsin B as a candidate Î²-secretase of Alzheimer's disease. Biological Chemistry, 2005, 386, 931-40.	1.2	138
4	Human iPSC Neurons Display Activity-Dependent Neurotransmitter Secretion: Aberrant Catecholamine Levels in Schizophrenia Neurons. Stem Cell Reports, 2014, 3, 531-538.	2.3	97
5	The Cysteine Protease Inhibitor, E64d, Reduces Brain Amyloid-Î² and Improves Memory Deficits in Alzheimer's Disease Animal Models by Inhibiting Cathepsin B, but not BACE1, Î²-Secretase Activity. Journal of Alzheimer's Disease, 2011, 26, 387-408.	1.2	92
6	Cathepsin B in neurodegeneration of Alzheimer's disease, traumatic brain injury, and related brain disorders. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2020, 1868, 140428.	1.1	91
7	Cathepsin B is a New Drug Target for Traumatic Brain Injury Therapeutics: Evidence for E64d as a Promising Lead Drug Candidate. Frontiers in Neurology, 2015, 6, 178.	1.1	76
8	A Clinical-Stage Cysteine Protease Inhibitor blocks SARS-CoV-2 Infection of Human and Monkey Cells. ACS Chemical Biology, 2021, 16, 642-650.	1.6	74
9	Brain Pyroglutamate Amyloid-Î² is Produced by Cathepsin B and is Reduced by the Cysteine Protease Inhibitor E64d, Representing a Potential Alzheimer's Disease Therapeutic. Journal of Alzheimer's Disease, 2014, 41, 129-149.	1.2	73
10	Major Role of Cathepsin L for Producing the Peptide Hormones ACTH, Î²-Endorphin, and Î±-MSH, Illustrated by Protease Gene Knockout and Expression. Journal of Biological Chemistry, 2008, 283, 35652-35659.	1.6	69
11	Alternative pathways for production of Î²-amyloid peptides of Alzheimer's disease. Biological Chemistry, 2008, 389, 993-1006.	1.2	68
12	Cysteine Cathepsins in the secretory vesicle produce active peptides: Cathepsin L generates peptide neurotransmitters and cathepsin B produces beta-amyloid of Alzheimer's disease. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2012, 1824, 89-104.	1.1	67
13	Deletion of the Cathepsin B Gene Improves Memory Deficits in a Transgenic Alzheimer's Disease Mouse Model Expressing AÎ²PP Containing the Wild-Type Î²-Secretase Site Sequence. Journal of Alzheimer's Disease, 2012, 29, 827-840.	1.2	66
14	Cathepsin L and Arg/Lys aminopeptidase: a distinct prohormone processing pathway for the biosynthesis of peptide neurotransmitters and hormones. Biological Chemistry, 2004, 385, 473-80.	1.2	64
15	NeuroPedia: neuropeptide database and spectral library. Bioinformatics, 2011, 27, 2772-2773.	1.8	63
16	The Marine Cyanobacterial Metabolite Gallinamide A Is a Potent and Selective Inhibitor of Human Cathepsin L. Journal of Natural Products, 2014, 77, 92-99.	1.5	57
17	The Cysteine Protease Cathepsin B Is a Key Drug Target and Cysteine Protease Inhibitors Are Potential Therapeutics for Traumatic Brain Injury. Journal of Neurotrauma, 2014, 31, 515-529.	1.7	56
18	Secretory vesicle aminopeptidase B related to neuropeptide processing: molecular identification and subcellular localization to enkephalin- and NPY-containing chromaffin granules. Journal of Neurochemistry, 2007, 100, 1340-1350.	2.1	51

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19	Cathepsin L participates in the production of neuropeptide Y in secretory vesicles, demonstrated by protease gene knockout and expression. Journal of Neurochemistry, 2008, 106, 384-391.	2.1	50
20	Proteomics of Dense Core Secretory Vesicles Reveal Distinct Protein Categories for Secretion of Neuroeffectors for Cellâ˜'Cell Communication. Journal of Proteome Research, 2010, 9, 5002-5024.	1.8	48
21	Unique biological function of cathepsin L in secretory vesicles for biosynthesis of neuropeptides. Neuropeptides, 2010, 44, 457-466.	0.9	46
22	Potent Anti-SARS-CoV-2 Activity by the Natural Product Gallinamide A and Analogues via Inhibition of Cathepsin L. Journal of Medicinal Chemistry, 2022, 65, 2956-2970.	2.9	46
23	The Emerging Role of Spinal Dynorphin in Chronic Pain: A Therapeutic Perspective. Annual Review of Pharmacology and Toxicology, 2016, 56, 511-533.	4.2	45
24	Proteomics of Neuroendocrine Secretory Vesicles Reveal Distinct Functional Systems for Biosynthesis and Exocytosis of Peptide Hormones and Neurotransmitters. Journal of Proteome Research, 2007, 6, 1652-1665.	1.8	44
25	Mass Spectrometry-Based Visualization of Molecules Associated with Human Habitats. Analytical Chemistry, 2016, 88, 10775-10784.	3.2	44
26	Cathepsin L Expression Is Directed to Secretory Vesicles for Enkephalin Neuropeptide Biosynthesis and Secretion. Journal of Biological Chemistry, 2007, 282, 9556-9563.	1.6	43
27	Cysteine protease inhibitors effectively reduce in vivo levels of brain Î²-amyloid related to Alzheimer's disease. Biological Chemistry, 2007, 388, 247-52.	1.2	43
28	Design of Gallinamide A Analogs as Potent Inhibitors of the Cysteine Proteases Human Cathepsin L and <i>Trypanosoma cruzi</i> Cruzain. Journal of Medicinal Chemistry, 2019, 62, 9026-9044.	2.9	43
29	Pharmacogenetic features of cathepsin B inhibitors that improve memory deficit and reduce Î²-amyloid related to Alzheimer's disease. Biological Chemistry, 2010, 391, 861-72.	1.2	42
30	Inhibition of cathepsin B reduces Î²-amyloid production in regulated secretory vesicles of neuronal chromaffin cells: evidence for cathepsin B as a candidate Î²-secretase of Alzheimer's disease. Biological Chemistry, 2005, 386, 1325-1325.	1.2	38
31	Multiple clinical features of Huntingtonâ€™s disease correlate with mutant HTT gene CAG repeat lengths and neurodegeneration. Journal of Neurology, 2019, 266, 551-564.	1.8	38
32	Cathepsin L plays a major role in cholecystokinin production in mouse brain cortex and in pituitary AtT-20 cells: Protease gene knockout and inhibitor studies. Peptides, 2009, 30, 1882-1891.	1.2	35
33	Dysregulation of Exosome Cargo by Mutant Tau Expressed in Human-induced Pluripotent Stem Cell (iPSC) Neurons Revealed by Proteomics Analyses. Molecular and Cellular Proteomics, 2020, 19, 1017-1034.	2.5	34
34	Human pituitary contains dual cathepsin L and prohormone convertase processing pathway components involved in converting POMC into the peptide hormones ACTH, Î±-MSH, and Î²-endorphin. Endocrine, 2009, 35, 429-437.	1.1	33
35	Cathepsin L participates in dynorphin production in brain cortex, illustrated by protease gene knockout and expression. Molecular and Cellular Neurosciences, 2010, 43, 98-107.	1.0	33
36	Human Tau Isoforms and Proteolysis for Production of Toxic Tau Fragments in Neurodegeneration. Frontiers in Neuroscience, 2021, 15, 702788.	1.4	33

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37	Multi-omics of human plasma reveals molecular features of dysregulated inflammation and accelerated aging in schizophrenia. Molecular Psychiatry, 2022, 27, 1217-1225.	4.1	30
38	Mass Spectrometry-Based Neuropeptidomics of Secretory Vesicles from Human Adrenal Medullary Pheochromocytoma Reveals Novel Peptide Products of Prohormone Processing. Journal of Proteome Research, 2010, 9, 5065-5075.	1.8	29
39	Diversity of Neuropeptide Cell-Cell Signaling Molecules Generated by Proteolytic Processing Revealed by Neuropeptidomics Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2018, 29, 807-816.	1.2	29
40	Cathepsin B Gene Knockout Improves Behavioral Deficits and Reduces Pathology in Models of Neurologic Disorders. Pharmacological Reviews, 2022, 74, 600-629.	7.1	29
41	Detecting low-abundance vasoactive peptides in plasma: Progress toward absolute quantitation using nano liquid chromatographyâ€“mass spectrometry. Analytical Biochemistry, 2009, 394, 164-170.	1.1	27
42	Human Cathepsin V Protease Participates in Production of Enkephalin and NPY Neuropeptide Neurotransmitters. Journal of Biological Chemistry, 2012, 287, 15232-15241.	1.6	27
43	Selective Neutral pH Inhibitor of Cathepsin B Designed Based on Cleavage Preferences at Cytosolic and Lysosomal pH Conditions. ACS Chemical Biology, 2021, 16, 1628-1643.	1.6	27
44	Spinal astrocytes produce and secrete dynorphin neuropeptides. Neuropeptides, 2013, 47, 109-115.	0.9	26
45	Beta-amyloid peptides undergo regulated co-secretion with neuropeptide and catecholamine neurotransmitters. Peptides, 2013, 46, 126-135.	1.2	26
46	The Proteasome as a Drug Target in the Metazoan Pathogen, <i>Schistosoma mansoni</i>. ACS Infectious Diseases, 2019, 5, 1802-1812.	1.8	25
47	Cathepsin H functions as an aminopeptidase in secretory vesicles for production of enkephalin and galanin peptide neurotransmitters. Journal of Neurochemistry, 2012, 122, 512-522.	2.1	24
48	Neuropeptidomic Components Generated by Proteomic Functions in Secretory Vesicles for Cellâ€“Cell Communication. AAPS Journal, 2010, 12, 635-645.	2.2	23
49	Neuropeptidomics Mass Spectrometry Reveals Signaling Networks Generated by Distinct Protease Pathways in Human Systems. Journal of the American Society for Mass Spectrometry, 2015, 26, 1970-1980.	1.2	23
50	Proteolytic Fragments of Chromogranins A and B Represent Major Soluble Components of Chromaffin Granules, Illustrated by Two-Dimensional Proteomics with NH₂-Terminal Edman Peptide Sequencing and MALDI-TOF MS. Biochemistry, 2009, 48, 5254-5262.	1.2	21
51	Profiles of secreted neuropeptides and catecholamines illustrate similarities and differences in response to stimulation by distinct secretagogues. Molecular and Cellular Neurosciences, 2015, 68, 177-185.	1.0	20
52	Penetrating Traumatic Brain Injury Triggers Dysregulation of Cathepsin B Protein Levels Independent of Cysteine Protease Activity in Brain and Cerebral Spinal Fluid. Journal of Neurotrauma, 2020, 37, 1574-1586.	1.7	19
53	Cathepsin B inhibition blocks neurite outgrowth in cultured neurons by regulating lysosomal trafficking and remodeling. Journal of Neurochemistry, 2020, 155, 300-312.	2.1	19
54	Differential activation of enkephalin, galanin, somatostatin, NPY, and VIP neuropeptide production by stimulators of protein kinases A and C in neuroendocrine chromaffin cells. Neuropeptides, 2008, 42, 503-511.	0.9	16

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55	Lysosomal Cathepsin Protease Gene Expression Profiles in the Human Brain During Normal Development. Journal of Molecular Neuroscience, 2018, 65, 420-431.	1.1	16
56	Differential Neuropeptidomes of Dense Core Secretory Vesicles (DCSV) Produced at Intravesicular and Extracellular pH Conditions by Proteolytic Processing. ACS Chemical Neuroscience, 2021, 12, 2385-2398.	1.7	16
57	Metabolomics Analyses of 14 Classical Neurotransmitters by GC-TOF with LC-MS Illustrates Secretion of 9 Cellâ€"Cell Signaling Molecules from Sympathoadrenal Chromaffin Cells in the Presence of Lithium. ACS Chemical Neuroscience, 2019, 10, 1369-1379.	1.7	13
58	Synapsin-caveolin-1 gene therapy preserves neuronal and synaptic morphology and prevents neurodegeneration in a mouse model of AD. Molecular Therapy - Methods and Clinical Development, 2021, 21, 434-450.	1.8	13
59	Dysregulation of Neuropeptide and Tau Peptide Signatures in Human Alzheimerâ€™s Disease Brain. ACS Chemical Neuroscience, 2022, 13, 1992-2005.	1.7	13
60	Linear and accurate quantitation of proenkephalin-derived peptides by isotopic labeling with internal standards and mass spectrometry. Analytical Biochemistry, 2009, 389, 18-26.	1.1	12
61	Molecular Features of CA-074 pH-Dependent Inhibition of Cathepsin B. Biochemistry, 2022, 61, 228-238.	1.2	12
62	The Protein Architecture of Human Secretory Vesicles Reveals Differential Regulation of Signaling Molecule Secretion by Protein Kinases. PLoS ONE, 2012, 7, e41134.	1.1	11
63	Zinc regulation of aminopeptidase B involved in neuropeptide production. FEBS Letters, 2008, 582, 2527-2531.	1.3	10
64	Mutation in the substrate-binding site of aminopeptidase B confers new enzymatic properties. Biochimie, 2011, 93, 730-741.	1.3	10
65	The prohormone proenkephalin possesses differential conformational features of subdomains revealed by rapid Hâ€Đ exchange mass spectrometry. Protein Science, 2012, 21, 178-187.	3.1	10
66	Genetic variants affecting alternative splicing of human cholesteryl ester transfer protein. Biochemical and Biophysical Research Communications, 2014, 443, 1270-1274.	1.0	10
67	Phosphopeptidomics Reveals Differential Phosphorylation States and Novel SxE Phosphosite Motifs of Neuropeptides in Dense Core Secretory Vesicles. Journal of the American Society for Mass Spectrometry, 2018, 29, 935-947.	1.2	10
68	High-Resolution Mass Spectrometry-Based Approaches for the Detection and Quantification of Peptidase Activity in Plasma. Molecules, 2020, 25, 4071.	1.7	10
69	Pyroglutamate-Amyloid-Î² and Glutaminyl Cyclase Are Colocalized with Amyloid-Î² in Secretory Vesicles and Undergo Activity-Dependent, Regulated Secretion. Neurodegenerative Diseases, 2014, 14, 85-97.	0.8	9
70	Human brain gene expression profiles of the cathepsin V and cathepsin L cysteine proteases, with the PC1/3 and PC2 serine proteases, involved in neuropeptide production. Heliyon, 2018, 4, e00673.	1.4	9
71	The Novel Role of Cathepsin L for Neuropeptide Production Illustrated by Research Strategies in Chemical Biology with Protease Gene Knockout and Expression. Methods in Molecular Biology, 2011, 768, 107-125.	0.4	9
72	Endopin Serpin Protease Inhibitors Localize with Neuropeptides in Secretory Vesicles and Neuroendocrine Tissues. Neuroendocrinology, 2009, 89, 210-216.	1.2	7

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73	Mutant Presenilin 1 Dysregulates Exosomal Proteome Cargo Produced by Human-Induced Pluripotent Stem Cell Neurons. ACS Omega, 2021, 6, 13033-13056.	1.6	7
74	Resistance of cathepsin L compared to elastase to proteolysis when complexed with the serpin endopin 2C, and recovery of cathepsin L activity. Biochemical and Biophysical Research Communications, 2006, 340, 1238-1243.	1.0	5
75	Distinct Dibasic Cleavage Specificities of Neuropeptide-Producing Cathepsin L and Cathepsin V Cysteine Proteases Compared to PC1/3 and PC2 Serine Proteases. ACS Chemical Neuroscience, 2022, 13, 245-256.	1.7	5
76	Differential Accessibilities of Dibasic Prohormone Processing Sites of Proenkephalin to the Aqueous Environment Revealed by Hâˆ'D Exchange Mass Spectrometry. Biochemistry, 2009, 48, 1604-1612.	1.2	4
77	The future of proteomic analysis in biological systems and molecular medicine. Molecular BioSystems, 2007, 3, 14-17.	2.9	3
78	INHIBITORS OF CATHEPSIN B REDUCE PRODUCTION OF BETAâ€AMYLOID IN REGULATED SECRETORY VESICLES: A NOVEL CYSTEINE PROTEASE PATHWAY AS BETAâ€SECRETASE FOR GENERATING BETAâ€AMYLOID OF ALZHEIMER'S DISEASE. FASEB Journal, 2006, 20, A1135.	0.2	2
79	Discovery of pH-Selective Marine and Plant Natural Product Inhibitors of Cathepsin B Revealed by Screening at Acidic and Neutral pH Conditions. ACS Omega, 0, , .	1.6	2
80	Alternative pathways for production of Î²-amyloid peptides of Alzheimer's disease. Biological Chemistry, 2008, .	1.2	1
81	O1-10-05: CATHEPSIN B KNOCKOUT REDUCES PGLU-ABETA AND ABETA, AND IMPROVES MEMORY DEFICITS, IN THE APPLON MOUSE MODEL OF AD. , 2014, 10, P150-P150.		0
82	Cysteine Proteases as beta-Secretases for Abeta Production in the Major Regulated Secretory Pathway of Neurons. Oxidative Stress and Disease, 2005, , 327-342.	0.3	0
83	CATHEPSIN L PARTICIPATES IN THE PRODUCTION OF PEPTIDE NEUROTRANSMITTERS AND HORMONES IN THE REGULATED SECRETORY PATHWAY: STUDIES IN CATHEPSIN L KNOCKOUT MICE AND NEUROENDOCRINE CELLS.. FASEB Journal, 2006, 20, A243.	0.2	0
84	Cathepsin L Participates in the Production of the Dynorphin Opioid Peptide Neurotransmitter. FASEB Journal, 2009, 23, 671.3.	0.2	0
85	Deletion of the Cathepsin B gene improves memory deficits in a Alzheimer's disease mouse model expressing APP containing the wildâ€type Î²â€secretase site sequence. FASEB Journal, 2012, 26, 956.9.	0.2	0