Robert Vassar

List of Publications by Year
in descending order

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87 papers	17,882 citations	29994 54 h-index	53109 85 g-index
95 all docs	95 docs citations	95 times ranked	16129 citing authors

#	Article	IF	Citations
1	Intraneuronal beta-Amyloid Aggregates, Neurodegeneration, and Neuron Loss in Transgenic Mice with Five Familial Alzheimer's Disease Mutations: Potential Factors in Amyloid Plaque Formation. Journal of Neuroscience, 2006, 26, 10129-10140.	1.7	2,607
2	Topographic organization of sensory projections to the olfactory bulb. Cell, 1994, 79, 981-991.	13.5	1,172
3	Mice deficient in BACE1, the Alzheimer's Î²-secretase, have normal phenotype and abolished Î²-amyloid generation. Nature Neuroscience, 2001, 4, 231-232.	7.1	978
4	Spatial segregation of odorant receptor expression in the mammalian olfactory epithelium. Cell, 1993, 74, 309-318.	13.5	811
5	The secretases: enzymes with therapeutic potential in Alzheimer disease. Nature Reviews Neurology, 2010, 6, 99-107.	4.9	702
6	<scp>APP</scp> mouse models for Alzheimer's disease preclinical studies. EMBO Journal, 2017, 36, 2473-2487.	3.5	530
7	Targeting the Î² secretase BACE1 for Alzheimer's disease therapy. Lancet Neurology, The, 2014, 13, 319-329.	4.9	527
8	BACE1 Deficiency Rescues Memory Deficits and Cholinergic Dysfunction in a Mouse Model of Alzheimer's Disease. Neuron, 2004, 41, 27-33.	3.8	506
9	The Î²-Secretase Enzyme BACE in Health and Alzheimer's Disease: Regulation, Cell Biology, Function, and Therapeutic Potential. Journal of Neuroscience, 2009, 29, 12787-12794.	1.7	498
10	Anti-Inflammatory Drug Therapy Alters Î²-Amyloid Processing and Deposition in an Animal Model of Alzheimer's Disease. Journal of Neuroscience, 2003, 23, 7504-7509.	1.7	473
11	Mutant keratin expression in transgenic mice causes marked abnormalities resembling a human genetic skin disease. Cell, 1991, 64, 365-380.	13.5	425
12	The Alzheimer's disease Beta-secretase enzyme, BACE1. Molecular Neurodegeneration, 2007, 2, 22.	4.4	386
13	Phosphorylation of the Translation Initiation Factor eIF2Î± Increases BACE1 Levels and Promotes Amyloidogenesis. Neuron, 2008, 60, 988-1009.	3.8	383
14	The Î²-Secretase BACE1 in Alzheimerâ€™s Disease. Biological Psychiatry, 2021, 89, 745-756.	0.7	336
15	Â-Site Amyloid Precursor Protein Cleaving Enzyme 1 Levels Become Elevated in Neurons around Amyloid Plaques: Implications for Alzheimer's Disease Pathogenesis. Journal of Neuroscience, 2007, 27, 3639-3649.	1.7	333
16	BACE1 inhibitor drugs in clinical trials for Alzheimerâ€™s disease. Alzheimer's Research and Therapy, 2014, 6, 89.	3.0	322
17	BACE1: The Î²-Secretase Enzyme in Alzheimer's Disease. Journal of Molecular Neuroscience, 2004, 23, 105-114.	1.1	314
18	AÎ²-Generating Enzymes. Neuron, 2000, 27, 419-422.	3.8	311

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19	Neuron loss in the 5XFAD mouse model of Alzheimerâ€™s disease correlates with intraneuronal AÎ²42 accumulation and Caspase-3 activation. Molecular Neurodegeneration, 2013, 8, 2.	4.4	278
20	BACE1 gene deletion prevents neuron loss and memory deficits in 5XFAD APP/PS1 transgenic mice. Neurobiology of Disease, 2007, 26, 134-145.	2.1	272
21	Function, therapeutic potential and cell biology of <scp>BACE</scp> proteases: current status and future prospects. Journal of Neurochemistry, 2014, 130, 4-28.	2.1	269
22	Expression Analysis of BACE2 in Brain and Peripheral Tissues. Journal of Biological Chemistry, 2000, 275, 20647-20651.	1.6	264
23	Temporal memory deficits in Alzheimer's mouse models: rescue by genetic deletion of BACE1. European Journal of Neuroscience, 2006, 23, 251-260.	1.2	256
24	Energy Inhibition Elevates Â-Secretase Levels and Activity and Is Potentially Amyloidogenic in APP Transgenic Mice: Possible Early Events in Alzheimer's Disease Pathogenesis. Journal of Neuroscience, 2005, 25, 10874-10883.	1.7	235
25	A Furin-like Convertase Mediates Propeptide Cleavage of BACE, the Alzheimer's Î²-Secretase. Journal of Biological Chemistry, 2000, 275, 37712-37717.	1.6	234
26	The innate immunity protein IFITM3 modulates Î³-secretase in Alzheimerâ€™s disease. Nature, 2020, 586, 735-740.	13.7	219
27	The Role of Amyloid Precursor Protein Processing by BACE1, the Î²-Secretase, in Alzheimer Disease Pathophysiology. Journal of Biological Chemistry, 2008, 283, 29621-29625.	1.6	218
28	Characterization of Alzheimer's Î²-Secretase Protein BACE. Journal of Biological Chemistry, 2000, 275, 21099-21106.	1.6	208
29	Î²-Secretase (BACE) as a drug target for alzheimerâ€™s disease. Advanced Drug Delivery Reviews, 2002, 54, 1589-1602.	6.6	197
30	Presynaptic dystrophic neurites surrounding amyloid plaques are sites of microtubule disruption, BACE1 elevation, and increased AÎ² generation in Alzheimerâ€™s disease. Acta Neuropathologica, 2016, 132, 235-256.	3.9	193
31	The Alzheimerâ€™s Î²-secretase BACE1 localizes to normal presynaptic terminals and to dystrophic presynaptic terminals surrounding amyloid plaques. Acta Neuropathologica, 2013, 126, 329-352.	3.9	190
32	BACE1 (Î²-secretase) knockout mice do not acquire compensatory gene expression changes or develop neural lesions over time. Neurobiology of Disease, 2003, 14, 81-88.	2.1	160
33	The Î²-Secretase, BACE: A Prime Drug Target for Alzheimer's Disease. Journal of Molecular Neuroscience, 2001, 17, 157-170.	1.1	158
34	AÎ² reduction in BACE1 heterozygous null 5XFAD mice is associated with transgenic APP level. Molecular Neurodegeneration, 2015, 10, 1.	4.4	146
35	Novel Alzheimer Disease Risk Loci and Pathways in African American Individuals Using the African Genome Resources Panel. JAMA Neurology, 2021, 78, 102.	4.5	144
36	Alzheimer Disease AÎ² Production in the Absence of S-Palmitoylation-dependent Targeting of BACE1 to Lipid Rafts. Journal of Biological Chemistry, 2009, 284, 3793-3803.	1.6	137

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37	Î²-Site Amyloid Precursor Protein (APP)-cleaving Enzyme 1 (BACE1)-deficient Mice Exhibit a Close Homolog of L1 (CHL1) Loss-of-function Phenotype Involving Axon Guidance Defects. Journal of Biological Chemistry, 2012, 287, 38408-38425.	1.6	134
38	Statins Cause Intracellular Accumulation of Amyloid Precursor Protein, Î²-Secretase-cleaved Fragments, and Amyloid Î²-Peptide via an Isoprenoid-dependent Mechanism. Journal of Biological Chemistry, 2005, 280, 18755-18770.	1.6	133
39	Axonal BACE1 dynamics and targeting in hippocampal neurons: a role for Rab11 GTPase. Molecular Neurodegeneration, 2014, 9, 1.	4.4	130
40	A Becn1 mutation mediates hyperactive autophagic sequestration of amyloid oligomers and improved cognition in Alzheimer's disease. PLoS Genetics, 2017, 13, e1006962.	1.5	120
41	Î²-Amyloid-induced Dynamin 1 Depletion in Hippocampal Neurons. Journal of Biological Chemistry, 2005, 280, 31746-31753.	1.6	114
42	The Î²-secretase enzyme BACE1 as a therapeutic target for Alzheimer's disease. Alzheimer's Research and Therapy, 2011, 3, 20.	3.0	109
43	Involvement of -site APP cleaving enzyme 1 (BACE1) in amyloid precursor protein-mediated enhancement of memory and activity-dependent synaptic plasticity. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8167-8172.	3.3	107
44	The Alzheimer's Î²-secretase enzyme BACE1 is required for accurate axon guidance of olfactory sensory neurons and normal glomerulus formation in the olfactory bulb. Molecular Neurodegeneration, 2011, 6, 88.	4.4	95
45	BACE1 Structure and Function in Health and Alzheimers Disease. Current Alzheimer Research, 2008, 5, 100-120.	0.7	87
46	BACE1-/- mice exhibit seizure activity that does not correlate with sodium channel level or axonal localization. Molecular Neurodegeneration, 2010, 5, 31.	4.4	85
47	Astrocytes from old Alzheimer's disease mice are impaired in AÎ² uptake and in neuroprotection. Neurobiology of Disease, 2016, 96, 84-94.	2.1	85
48	Identification and biology of Î²â€secretase. Journal of Neurochemistry, 2012, 120, 55-61.	2.1	73
49	Axonal organization defects in the hippocampus of adult conditional BACE1 knockout mice. Science Translational Medicine, 2018, 10, .	5.8	66
50	A Function for EHD Family Proteins in Unidirectional Retrograde Dendritic Transport of BACE1 and Alzheimerâ€™s Disease AÎ² Production. Cell Reports, 2013, 5, 1552-1563.	2.9	65
51	The case for low-level BACE1 inhibition for the prevention of Alzheimer disease. Nature Reviews Neurology, 2021, 17, 703-714.	4.9	65
52	Identification of natural products with neuronal and metabolic benefits through autophagy induction. Autophagy, 2017, 13, 41-56.	4.3	61
53	X11 Proteins Regulate the Translocation of Amyloid Î²-Protein Precursor (APP) into Detergent-resistant Membrane and Suppress the Amyloidogenic Cleavage of APP by Î²-Site-cleaving Enzyme in Brain. Journal of Biological Chemistry, 2008, 283, 35763-35771.	1.6	60
54	Amyloid-Î²42 alters apolipoprotein E solubility in brains of mice with five familial AD mutations. Journal of Neuroscience Methods, 2011, 196, 51-59.	1.3	58

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55	Inhibiting BACE1 to reverse synaptic dysfunctions in Alzheimerâ€™s disease. Neuroscience and Biobehavioral Reviews, 2016, 65, 326-340.	2.9	58
56	Cdk5 Protein Inhibition and AÎ²42 Increase BACE1 Protein Level in Primary Neurons by a Post-transcriptional Mechanism. Journal of Biological Chemistry, 2012, 287, 7224-7235.	1.6	56
57	3K3A-activated protein C blocks amyloidogenic BACE1 pathway and improves functional outcome in mice. Journal of Experimental Medicine, 2019, 216, 279-293.	4.2	55
58	Increased mtDNA mutations with aging promotes amyloid accumulation and brain atrophy in the APP/Ld transgenic mouse model of Alzheimerâ€™s disease. Molecular Neurodegeneration, 2014, 9, 16.	4.4	54
59	Î²-Secretase, APP and AÎ² in Alzheimerâ€™s Disease. , 2005, , 79-103.		49
60	Molecular Differences and Similarities between Alzheimer's Disease and the 5XFAD Transgenic Mouse Model of Amyloidosis. Biochemistry Insights, 2013, 6, BCI.S13025.	3.3	48
61	Murine versus human apolipoprotein E4: differential facilitation of and co-localization in cerebral amyloid angiopathy and amyloid plaques in APP transgenic mouse models. Acta Neuropathologica Communications, 2015, 3, 70.	2.4	45
62	The Normal and Pathologic Roles of the Alzheimer's β-secretase, BACE1. Current Alzheimer Research, 2014, 11, 441-449.	0.7	40
63	Quantitative Comparison of Dense-Core Amyloid Plaque Accumulation in Amyloid-Î² Protein Precursor Transgenic Mice. Journal of Alzheimer's Disease, 2017, 56, 743-761.	1.2	39
64	ER stress is not elevated in the 5XFAD mouse model of Alzheimer's disease. Journal of Biological Chemistry, 2018, 293, 18434-18443.	1.6	37
65	Linking vascular disorders and Alzheimer's disease: Potential involvement of BACE1. Neurobiology of Aging, 2009, 30, 1535-1544.	1.5	35
66	Genetic Inhibition of Phosphorylation of the Translation Initiation Factor eIF2Î± Does Not Block AÎ²-Dependent Elevation of BACE1 and APP Levels or Reduce Amyloid Pathology in a Mouse Model of Alzheimerâ€™s Disease. PLoS ONE, 2014, 9, e101643.	1.1	31
67	BACE1 Mediates HIV-Associated and Excitotoxic Neuronal Damage Through an APP-Dependent Mechanism. Journal of Neuroscience, 2018, 38, 4288-4300.	1.7	31
68	HIV Protease Inhibitors Alter Amyloid Precursor Protein Processing via Î²-Site Amyloid Precursor Protein Cleaving Enzyme-1 Translational Up-Regulation. American Journal of Pathology, 2017, 187, 91-109.	1.9	29
69	A promising, novel, and unique <scp>BACE</scp> 1 inhibitor emerges in the quest to prevent Alzheimer's disease. EMBO Molecular Medicine, 2018, 10, .	3.3	28
70	Caspase-3 Cleavage of GGA3 Stabilizes BACE: Implications for Alzheimer's Disease. Neuron, 2007, 54, 671-673.	3.8	26
71	ADAM10 Prodomain Mutations Cause Late-Onset Alzheimerâ€™s Disease: Not Just the Latest FAD. Neuron, 2013, 80, 250-253.	3.8	26
72	Contribution of GABAergic interneurons to amyloid-Î² plaque pathology in an APP knock-in mouse model. Molecular Neurodegeneration, 2020, 15, 3.	4.4	26

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73	BACE1 inhibition as a therapeutic strategy for Alzheimer's disease. Journal of Sport and Health Science, 2016, 5, 388-390.	3.3	24
74	AÎ²-accelerated neurodegeneration caused by Alzheimerâ€™s-associated ACE variant R1279Q is rescued by angiotensin system inhibition in mice. Science Translational Medicine, 2020, 12, .	5.8	22
75	beta-Secretase, APP and Abeta in Alzheimer's disease. Sub-Cellular Biochemistry, 2005, 38, 79-103.	1.0	19
76	The role of mTORC1 activation in seizure-induced exacerbation of Alzheimer's disease. Brain, 2022, 145, 324-339.	3.7	15
77	Elevated Aβ42 in Aged, Non-demented Individuals with Cerebral Atherosclerosis. Current Alzheimer Research, 2013, 10, 785-789.	0.7	14
78	Early detection and personalized medicine: Future strategies against Alzheimer's disease. Progress in Molecular Biology and Translational Science, 2021, 177, 157-173.	0.9	9
79	Oral nimodipine treatment has no effect on amyloid pathology or neuritic dystrophy in the 5XFAD mouse model of amyloidosis. PLoS ONE, 2022, 17, e0263332.	1.1	7
80	Molecular neurodegeneration: basic biology and disease pathways. Molecular Neurodegeneration, 2014, 9, 34.	4.4	4
81	Seeds of Destruction: New Mechanistic Insights into the Role of Apolipoprotein E4 in Alzheimerâ€™s Disease. Neuron, 2017, 96, 953-955.	3.8	4
82	Pregabalin Treatment does not Affect Amyloid Pathology in 5XFAD Mice. Current Alzheimer Research, 2021, 18, 283-297.	0.7	3
83	Death by microglia. Journal of Experimental Medicine, 2019, 216, 2451-2452.	4.2	2
84	Modeling genetic diversity in Alzheimerâ€™s disease. Lab Animal, 2019, 48, 87-88.	0.2	1
85	Poloxamer-188 Exacerbates Brain Amyloidosis, Presynaptic Dystrophies, and Pathogenic Microglial Activation in 5XFAD Mice. Current Alzheimer Research, 2022, 19, 317-329.	0.7	1
86	PL-04-01: Targeting beta-secretase. , 2013, 9, P677-P677.		0
87	RPS23RG1 May Prevent Ubiquitin-Proteosomal Degradation of Postsynaptic Densities-93 and -95 to Protect Synaptic Function: Implications for Alzheimerâ€™s Disease. Biological Psychiatry, 2019, 86, 164-166.	0.7	0