Irene Volitakis

List of Publications by Year
in descending order

74 papers	9,632 citations	66343 42 h-index	76900 74 g-index
85 all docs	85 docs citations	85 times ranked	8682 citing authors

#	Article	IF	Citations
1	Treatment with a Copper-Zinc Chelator Markedly and Rapidly Inhibits Î²-Amyloid Accumulation in Alzheimer's Disease Transgenic Mice. Neuron, 2001, 30, 665-676.	8.1	1,419
2	Metal-Protein Attenuation With Iodochlorhydroxyquin (Clioquinol) Targeting AÎ² Amyloid Deposition and Toxicity in Alzheimer Disease. Archives of Neurology, 2003, 60, 1685.	4.5	951
3	Rapid Restoration of Cognition in Alzheimer's Transgenic Mice with 8-Hydroxy Quinoline Analogs Is Associated with Decreased Interstitial AÎ². Neuron, 2008, 59, 43-55.	8.1	629
4	Alzheimer's Disease Amyloid-Î² Binds Copper and Zinc to Generate an Allosterically Ordered Membrane-penetrating Structure Containing Superoxide Dismutase-like Subunits. Journal of Biological Chemistry, 2001, 276, 20466-20473.	3.4	595
5	Tau deficiency induces parkinsonism with dementia by impairing APP-mediated iron export. Nature Medicine, 2012, 18, 291-295.	30.7	491
6	Overexpression of Alzheimer's Disease Amyloid-Î² Opposes the Age-dependent Elevations of Brain Copper and Iron. Journal of Biological Chemistry, 2002, 277, 44670-44676.	3.4	324
7	Mitochondrial Oxidative Stress Causes Hyperphosphorylation of Tau. PLoS ONE, 2007, 2, e536.	2.5	291
8	Degradation of the Alzheimer Disease Amyloid Î²-Peptide by Metal-dependent Up-regulation of Metalloprotease Activity. Journal of Biological Chemistry, 2006, 281, 17670-17680.	3.4	267
9	Hypoxia-inducible Factor Prolyl 4-Hydroxylase Inhibition. Journal of Biological Chemistry, 2005, 280, 41732-41743.	3.4	265
10	Copper and Zinc Binding Modulates the Aggregation and Neurotoxic Properties of the Prion Peptide PrP106â^’126. Biochemistry, 2001, 40, 8073-8084.	2.5	264
11	Increasing Cu bioavailability inhibits AÎ² oligomers and tau phosphorylation. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 381-386.	7.1	259
12	Insights into Zn²⁺homeostasis in neurons from experimental and modeling studies. American Journal of Physiology - Cell Physiology, 2008, 294, C726-C742.	4.6	184
13	Platinum-based inhibitors of amyloid-Î² as therapeutic agents for Alzheimer's disease. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6813-6818.	7.1	182
14	Selective Intracellular Release of Copper and Zinc Ions from Bis(thiosemicarbazonato) Complexes Reduces Levels of Alzheimer Disease Amyloid-Î² Peptide. Journal of Biological Chemistry, 2008, 283, 4568-4577.	3.4	177
15	Neurotoxic, Redox-competent Alzheimer's Î²-Amyloid Is Released from Lipid Membrane by Methionine Oxidation. Journal of Biological Chemistry, 2003, 278, 42959-42965.	3.4	176
16	The Alzheimerâ€™s therapeutic PBT2 promotes amyloidâ€•Î² degradation and GSK3 phosphorylation via a metal chaperone activity. Journal of Neurochemistry, 2011, 119, 220-230.	3.9	167
17	Mechanisms of Copper Ion Mediated Huntington's Disease Progression. PLoS ONE, 2007, 2, e334.	2.5	159
18	Elevated labile Cu is associated with oxidative pathology in Alzheimer disease. Free Radical Biology and Medicine, 2012, 52, 298-302.	2.9	144

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19	Neuronal Zinc Exchange with the Blood Vessel Wall Promotes Cerebral Amyloid Angiopathy in an Animal Model of Alzheimer's Disease. Journal of Neuroscience, 2004, 24, 3453-3459.	3.6	135
20	Zinc and copper modulate Alzheimer Aî² levels in human cerebrospinal fluid. Neurobiology of Aging, 2009, 30, 1069-1077.	3.1	126
21	Iron Accumulates in Huntingtonâ€™s Disease Neurons: Protection by Deferoxamine. PLoS ONE, 2013, 8, e77023.	2.5	119
22	Quantitative elemental bio-imaging of Mn, Fe, Cu and Zn in 6-hydroxydopamine induced Parkinsonism mouse models. Metallomics, 2009, 1, 53-58.	2.4	118
23	Motor and cognitive deficits in aged tau knockout mice in two background strains. Molecular Neurodegeneration, 2014, 9, 29.	10.8	117
24	An ironâ€“dopamine index predicts risk of parkinsonian neurodegeneration in the substantia nigra pars compacta. Chemical Science, 2014, 5, 2160-2169.	7.4	98
25	Gender and genetic background effects on brain metal levels in APP transgenic and normal mice: Implications for Alzheimer î²-amyloid pathology. Journal of Inorganic Biochemistry, 2006, 100, 952-962.	3.5	93
26	Cu^{II}(atsm) inhibits ferroptosis: Implications for treatment of neurodegenerative disease. British Journal of Pharmacology, 2020, 177, 656-667.	5.4	92
27	Mechanisms Controlling the Cellular Accumulation of Copper Bis(thiosemicarbazonato) Complexes. Inorganic Chemistry, 2011, 50, 9594-9605.	4.0	76
28	Intracellular copper deficiency increases amyloid-î² secretion by diverse mechanisms. Biochemical Journal, 2008, 412, 141-152.	3.7	75
29	Decreased Plasma Iron in Alzheimerâ€™s Disease Is Due to Transferrin Desaturation. ACS Chemical Neuroscience, 2015, 6, 398-402.	3.5	75
30	Radioiodinated clioquinol as a biomarker for beta-amyloid: Zn2+ complexes in Alzheimer's disease. Aging Cell, 2006, 5, 69-79.	6.7	74
31	Clioquinol rescues Parkinsonism and dementia phenotypes of the tau knockout mouse. Neurobiology of Disease, 2015, 81, 168-175.	4.4	73
32	Presenilins Promote the Cellular Uptake of Copper and Zinc and Maintain Copper Chaperone of SOD1-dependent Copper/Zinc Superoxide Dismutase Activity. Journal of Biological Chemistry, 2011, 286, 9776-9786.	3.4	69
33	Copper as a target for prostate cancer therapeutics: copper-ionophore pharmacology and altering systemic copper distribution. Oncotarget, 2016, 7, 37064-37080.	1.8	69
34	Iron accumulation confers neurotoxicity to a vulnerable population of nigral neurons: implications for Parkinsonâ€™s disease. Molecular Neurodegeneration, 2014, 9, 27.	10.8	60
35	Differential modulation of Alzheimer's disease amyloid î²-peptide accumulation by diverse classes of metal ligands. Biochemical Journal, 2007, 407, 435-450.	3.7	58
36	Paradoxical Condensation of Copper with Elevated î²-Amyloid in Lipid Rafts under Cellular Copper Deficiency Conditions. Journal of Biological Chemistry, 2009, 284, 21899-21907.	3.4	55

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37	Cysteine Oxidation within N-terminal Mutant Huntingtin Promotes Oligomerization and Delays Clearance of Soluble Protein. Journal of Biological Chemistry, 2011, 286, 18320-18330.	3.4	54
38	Genetically Decreased Spinal Cord Copper Concentration Prolongs Life in a Transgenic Mouse Model of Amyotrophic Lateral Sclerosis. Journal of Neuroscience, 2004, 24, 7945-7950.	3.6	50
39	Enduring Elevations of Hippocampal Amyloid Precursor Protein and Iron Are Features of Î²-Amyloid Toxicity and Are Mediated by Tau. Neurotherapeutics, 2015, 12, 862-873.	4.4	50
40	The <i>APOE</i> Îµ4 Allele Is Associated with Lower Selenium Levels in the Brain: Implications for Alzheimerâ€™s Disease. ACS Chemical Neuroscience, 2017, 8, 1459-1464.	3.5	48
41	Longitudinal Analysis of Serum Copper and Ceruloplasmin in Alzheimer's Disease. Journal of Alzheimer's Disease, 2013, 34, 171-182.	2.6	46
42	The effect of paraformaldehyde fixation and sucrose cryoprotection on metal concentration in murine neurological tissue. Journal of Analytical Atomic Spectrometry, 2014, 29, 565-570.	3.0	45
43	Novel Fluorinated 8-Hydroxyquinoline Based Metal Ionophores for Exploring the Metal Hypothesis of Alzheimerâ€™s Disease. ACS Medicinal Chemistry Letters, 2015, 6, 1025-1029.	2.8	41
44	Intracellular amyloid formation in muscle cells of AÎ²-transgenic Caenorhabditis elegans: determinants and physiological role in copper detoxification. Molecular Neurodegeneration, 2009, 4, 2.	10.8	39
45	Altered selenium status in Huntington's disease: Neuroprotection by selenite in the N171-82Q mouse model. Neurobiology of Disease, 2014, 71, 34-42.	4.4	39
46	Rubidium and potassium levels are altered in Alzheimerâ€™s disease brain and blood but not in cerebrospinal fluid. Acta Neuropathologica Communications, 2016, 4, 119.	5.2	39
47	Neuroprotective Copper Bis(thiosemicarbazonato) Complexes Promote Neurite Elongation. PLoS ONE, 2014, 9, e90070.	2.5	39
48	Overexpression of AÎ² is associated with acceleration of onset of motor impairment and superoxide dismutase 1 aggregation in an amyotrophic lateral sclerosis mouse model. Aging Cell, 2006, 5, 153-165.	6.7	37
49	Sustained Activation of Glial Cell Epidermal Growth Factor Receptor by Bis(thiosemicarbazonato) Metal Complexes Is Associated with Inhibition of Protein Tyrosine Phosphatase Activity. Journal of Medicinal Chemistry, 2009, 52, 6606-6620.	6.4	37
50	Manganese chelation therapy extends survival in a mouse model of M1000 prion disease. Journal of Neurochemistry, 2010, 114, 440-451.	3.9	37
51	Increased metal content in the TDP-43A315T transgenic mouse model of frontotemporal lobar degeneration and amyotrophic lateral sclerosis. Frontiers in Aging Neuroscience, 2014, 6, 15.	3.4	37
52	Deregulation of subcellular biometal homeostasis through loss of the metal transporter, Zip7, in a childhood neurodegenerative disorder. Acta Neuropathologica Communications, 2014, 2, 25.	5.2	37
53	Plasma Amyloid Î²42 and Amyloid Î²40 Levels Are Associated With Early Cognitive Dysfunction After Cardiac Surgery. Annals of Thoracic Surgery, 2009, 88, 1426-1432.	1.3	35
54	Effects of Neonatal Iron Feeding and Chronic Clioquinol Administration on the Parkinsonian Human A53T Transgenic Mouse. ACS Chemical Neuroscience, 2016, 7, 360-366.	3.5	32

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55	Neonatal iron supplementation potentiates oxidative stress, energetic dysfunction and neurodegeneration in the R6/2 mouse model of Huntington's disease. Redox Biology, 2015, 4, 363-374.	9.0	31
56	Regulation of Insulin-Regulated Membrane Aminopeptidase Activity by Its C-Terminal Domain. Biochemistry, 2011, 50, 2611-2622.	2.5	30
57	Lead and manganese levels in serum and erythrocytes in Alzheimer's disease and mild cognitive impairment: results from the Australian Imaging, Biomarkers and Lifestyle Flagship Study of Ageing. Metallomics, 2016, 8, 628-632.	2.4	30
58	Increased Zinc and Manganese in Parallel with Neurodegeneration, Synaptic Protein Changes and Activation of Akt/GSK3 Signaling in Ovine CLN6 Neuronal Ceroid Lipofuscinosis. PLoS ONE, 2013, 8, e58644.	2.5	28
59	Altered biometal homeostasis is associated with CLN6 mRNA loss in mouse neuronal ceroid lipofuscinosis. Biology Open, 2013, 2, 635-646.	1.2	27
60	Deregulation of biometal homeostasis: the missing link for neuronal ceroid lipofuscinoses?. Metallomics, 2014, 6, 932-943.	2.4	27
61	Lipophilic adamantyl- or deferasirox-based conjugates of desferrioxamine B have enhanced neuroprotective capacity: implications for Parkinson disease. Free Radical Biology and Medicine, 2013, 60, 147-156.	2.9	26
62	Altered transition metal homeostasis in Niemannâ€"Pick disease, type C1. Metallomics, 2014, 6, 542-553.	2.4	26
63	Apolipoprotein E ablation decreases synaptic vesicular zinc in the brain. BioMetals, 2010, 23, 1085-1095.	4.1	21
64	Effect of Structural Modifications to Glyoxal-bis(thiosemicarbazonato)copper(II) Complexes on Cellular Copper Uptake, Copper-Mediated ATP7A Trafficking, and P-Glycoprotein Mediated Efflux. Journal of Medicinal Chemistry, 2018, 61, 711-723.	6.4	21
65	Deferiprone Treatment in Aged Transgenic Tau Mice Improves Y-Maze Performance and Alters Tau Pathology. Neurotherapeutics, 2021, 18, 1081-1094.	4.4	17
66	Chronic Exposure to High Levels of Zinc or Copper has Little Effect on Brain Metal Homeostasis or AÎ² Accumulation in Transgenic APP-C100 Mice. Cellular and Molecular Neurobiology, 2009, 29, 757-767.	3.3	16
67	Ionophore and Biometal Modulation of P-glycoprotein Expression and Function in Human Brain Microvascular Endothelial Cells. Pharmaceutical Research, 2018, 35, 83.	3.5	16
68	Direct determination of zinc in plasma by graphite furnace atomic absorption spectrometry using palladium/magnesium and EDTA matrix modification with high temperature pyrolysis. Journal of Analytical Atomic Spectrometry, 2017, 32, 843-847.	3.0	12
69	Copper modulates the large dense core vesicle secretory pathway in PC12 cells. Metallomics, 2013, 5, 700.	2.4	10
70	Investigating copperâ€regulated protein expression in Menkes fibroblasts using antibody microarrays. Proteomics, 2008, 8, 1819-1831.	2.2	8
71	Copper Ionophores as Novel Antiobesity Therapeutics. Molecules, 2020, 25, 4957.	3.8	8
72	The Effects of Clioquinol on P-glycoprotein Expression and Biometal Distribution in the Mouse Brain Microvasculature. Journal of Pharmaceutical Sciences, 2019, 108, 2247-2255.	3.3	5

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73	Zn-DTSM, A Zinc Ionophore with Therapeutic Potential for Acrodermatitis Enteropathica?. Nutrients, 2019, 11, 206.	4.1	1
74	Characterising the brain metalloproteome in Down syndrome patients with concomitant Alzheimer's pathology. Metallomics, 2020, 12, 114-132.	2.4	0