Christopher J Frederickson

List of Publications by Year
in descending order

51 papers	8,519 citations	117453 34 h-index	243296 44 g-index
51 all docs	51 docs citations	51 times ranked	5936 citing authors

#	Article	IF	Citations
1	Determination of the Zinc Concentration in Human Fingernails Using Laser-Induced Breakdown Spectroscopy. Applied Spectroscopy, 2017, 71, 567-582.	1.2	14
2	Peptide-Based, Two-Fluorophore, Ratiometric Probe for Quantifying Mobile Zinc in Biological Solutions. ACS Chemical Biology, 2015, 10, 385-389.	1.6	24
3	Fluorophilia: Fluorophore-containing compounds adhere non-specifically to injured neurons. Brain Research, 2012, 1432, 28-35.	1.1	10
4	Sensitive and selective detection of zinc ions in neuronal vesicles using PYDPY1, a simple turn-on dipyrrin. Chemical Communications, 2011, 47, 7107.	2.2	60
5	Free zinc ions outside a narrow concentration range are toxic to a variety of cells in vitro. Experimental Biology and Medicine, 2010, 235, 741-750.	1.1	178
6	Evidence That the ZNT3 Protein Controls the Total Amount of Elemental Zinc in Synaptic Vesicles. Journal of Histochemistry and Cytochemistry, 2008, 56, 3-6.	1.3	108
7	High concentration of zinc in sub-retinal pigment epithelial deposits. Experimental Eye Research, 2007, 84, 772-780.	1.2	117
8	Neurotoxic Zinc Translocation into Hippocampal Neurons is Inhibited by Hypothermia and is Aggravated by Hyperthermia after Traumatic Brain Injury in Rats. Journal of Cerebral Blood Flow and Metabolism, 2006, 26, 161-169.	2.4	49
9	Synaptic release of zinc from brain slices: Factors governing release, imaging, and accurate calculation of concentration. Journal of Neuroscience Methods, 2006, 154, 19-29.	1.3	109
10	Zinc-secreting Paneth Cells Studied by ZP Fluorescence. Journal of Histochemistry and Cytochemistry, 2006, 54, 311-316.	1.3	48
11	The Gluzinergic Synapse: Whoâ€™s Talking and Whoâ€™s Listening?. , 2005, , 123-137.		5
12	In situ measurement of free zinc in an ischemia model and cell culture using a ratiometric fluorescence-based biosensor. , 2005, , .		4
13	Amyloid-Î² Metal Interaction and Metal Chelation. , 2005, 38, 235-254.		62
14	The neurobiology of zinc in health and disease. Nature Reviews Neuroscience, 2005, 6, 449-462.	4.9	1,633
15	Is zinc the link between compromises of brain perfusion (excitotoxicity) and Alzheimer's disease?. Journal of Alzheimer's Disease, 2005, 8, 155-160.	1.2	24
16	Method for identifying neuronal cells suffering zinc toxicity by use of a novel fluorescent sensor. Journal of Neuroscience Methods, 2004, 139, 79-89.	1.3	52
17	Membrane-Permeable and -Impermeable Sensors of the Zinpyr Family and Their Application to Imaging of Hippocampal Zinc In Vivo. Chemistry and Biology, 2004, 11, 1659-1666.	6.2	110
18	Zinc and Excitotoxic Brain Injury: A New Model. Neuroscientist, 2004, 10, 18-25.	2.6	114

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19	Protective effects of zinc chelation in traumatic brain injury correlate with upregulation of neuroprotective genes in rat brain. Neuroscience Letters, 2004, 355, 221-225.	1.0	55
20	Clioquinol effects on tissue chelatable zinc in mice. Journal of Molecular Medicine, 2003, 81, 637-644.	1.7	48
21	ZP4, an Improved Neuronal Zn2+Sensor of the Zinpyr Family. Journal of the American Chemical Society, 2003, 125, 1778-1787.	6.6	359
22	Depletion of Intracellular Zinc from Neurons by Use of an Extracellular Chelator In Vivo and In Vitro. Journal of Histochemistry and Cytochemistry, 2002, 50, 1659-1662.	1.3	68
23	Rapid Translocation of Zn²⁺From Presynaptic Terminals Into Postsynaptic Hippocampal Neurons After Physiological Stimulation. Journal of Neurophysiology, 2001, 86, 2597-2604.	0.9	246
24	Induction of Mossy Fiberâ†'CA3 Long-Term Potentiation Requires Translocation of Synaptically Released Zn²⁺. Journal of Neuroscience, 2001, 21, 8015-8025.	1.7	253
25	Loss of vesicular zinc and appearance of perikaryal zinc after seizures induced by pilocarpine. NeuroReport, 2001, 12, 1523-1525.	0.6	52
26	Synaptically released zinc: physiological functions and pathological effects. BioMetals, 2001, 14, 353-366.	1.8	332
27	Synaptically released zinc: Physiological functions and pathological effects. , 2001, , 167-180.		2
28	History of Zinc as Related to Brain Function. Journal of Nutrition, 2000, 130, 496S-502S.	1.3	180
29	Fluorescence microscopy of stimulated Zn(II) release from organotypic cultures of mammalian hippocampus using a carbonic anhydrase-based biosensor system. Journal of Neuroscience Methods, 2000, 96, 35-45.	1.3	85
30	Release of synaptic zinc is substantially depressed by conventional brain slice preparations. Brain Research, 2000, 879, 7-12.	1.1	35
31	Evidence that synaptically-released zinc contributes to neuronal injury after traumatic brain injury. Brain Research, 2000, 852, 268-273.	1.1	284
32	Histochemically-reactive zinc in amyloid plaques, angiopathy, and degenerating neurons of Alzheimer's diseased brains. Brain Research, 2000, 852, 274-278.	1.1	345
33	Importance of Zinc in the Central Nervous System: The Zinc-Containing Neuron. Journal of Nutrition, 2000, 130, 1471S-1483S.	1.3	720
34	Zinc-containing afferent projections to the rat corticomedial amygdaloid complex: A retrograde tracing study. , 1998, 400, 375-390.		49
35	Increased amount of zinc in the hippocampus and amygdala of Alzheimer's diseased brains. Journal of Neuroscience Methods, 1997, 76, 53-59.	1.3	160
36	Zinc-containing innervation of the subicular region in the rat. Neurochemistry International, 1995, 27, 95-103.	1.9	21

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37	A zinc-containing fiber system of thalamic origin. NeuroReport, 1994, 5, 2026-2028.	0.6	15
38	Zinc-containing neuronal innervation of the septal nuclei. Brain Research, 1993, 608, 115-122.	1.1	36
39	Zinc containing projections to the bed nucleus of the stria terminalis. Brain Research, 1991, 562, 181-189.	1.1	34
40	Applications of piezoelectric fluid jetting devices to neuroscience research. Journal of Neuroscience Methods, 1991, 38, 81-88.	1.3	10
41	Effects of Subcutaneous Injections of Zinc Chloride on Seizures Induced by Noise and by Kainic Acid. Epilepsia, 1990, 31, 139-144.	2.6	28
42	A retrograde transport method for mapping zinc-containing fiber systems in the brain. Brain Research, 1990, 515, 277-286.	1.1	54
43	In situ binding of bouton zinc reversibly disrupts performance on a spatial memory task. Behavioural Brain Research, 1990, 38, 25-33.	1.2	82
44	Darkfield illumination improves microscopic detection of metals in Timm's stained tissue. The Histochemical Journal, 1989, 21, 477-480.	0.6	8
45	Amygdaloid efferents through the stria terminalis in the rat give origin to zinc-containing boutons. Journal of Comparative Neurology, 1989, 290, 201-212.	0.9	49
46	Neurobiology of Zinc and Zinc-Containing Neurons. International Review of Neurobiology, 1989, 31, 145-238.	0.9	971
47	Seizure-Induced Alterations of Opioid Peptide and Zinc Metabolism in the Hippocampus of Rats. , 1988, , 271-287.		2
48	Hippocampal Zinc, The Storage Granule Pool: Localization, Physiochemistry, and Possible Functions. , 1988, , 289-306.		32
49	Stimulation-induced uptake and release of zinc in hippocampal slices. Nature, 1984, 308, 736-738.	13.7	785
50	Cytoarchitectonic distribution of zinc in the hippocampus of man and the rat. Brain Research, 1983, 273, 335-339.	1.1	337
51	Zinc dithizonate staining in the cat hippocampus: Relationship to the mossy-fiber neuropil and postnatal development. Experimental Neurology, 1981, 73, 812-823.	2.0	61