Peep Palumaa

List of Publications by Year
in descending order

62 papers	3,081 citations	159585 30 h-index	155660 55 g-index
64 all docs	64 docs citations	64 times ranked	3919 citing authors

#	Article	IF	Citations
1	Î±-Lipoic Acid Has the Potential to Normalize Copper Metabolism, Which Is Dysregulated in Alzheimerâ€™s Disease. Journal of Alzheimer's Disease, 2022, 85, 715-728.	2.6	7
2	Evaluation of Zn2+- and Cu2+-Binding Affinities of Native Cu,Zn-SOD1 and Its G93A Mutant by LC-ICP MS. Molecules, 2022, 27, 3160.	3.8	2
3	Mercury and Alzheimerâ€™s Disease: Hg(II) Ions Display Specific Binding to the Amyloid-Î² Peptide and Hinder Its Fibrillization. Biomolecules, 2020, 10, 44.	4.0	26
4	Copper(II)-binding equilibria in human blood. Scientific Reports, 2020, 10, 5686.	3.3	64
5	Copper(II) partially protects three histidine residues and the Nâ€terminus of amyloidâ€Î² peptide from diethyl pyrocarbonate (DEPC) modification. FEBS Open Bio, 2020, 10, 1072-1081.	2.3	4
6	Toxicity of Amyloid-Î² Peptides Varies Depending on Differentiation Route of SH-SY5Y Cells. Journal of Alzheimer's Disease, 2019, 71, 879-887.	2.6	17
7	Redox properties of Cys 2 His 2 and Cys 4 zinc fingers determined by electrospray ionization mass spectrometry. FEBS Open Bio, 2018, 8, 923-931.	2.3	1
8	Copper(I)-binding properties of de-coppering drugs for the treatment of Wilson disease. Î±-Lipoic acid as a potential anti-copper agent. Scientific Reports, 2018, 8, 1463.	3.3	47
9	In situ fibrillizing amyloid-beta 1-42 induces neurite degeneration and apoptosis of differentiated SH-SY5Y cells. PLoS ONE, 2017, 12, e0186636.	2.5	55
10	Assessment of Blood Contamination in Biological Fluids Using MALDI-TOF MS. Protein Journal, 2016, 35, 171-176.	1.6	2
11	Oxidation of Methionine-35 in Alzheimerâ€™s amyloid-beta peptide and the aggregation of the oxidized peptide. SpringerPlus, 2015, 4, .	1.2	1
12	Comprehensive elucidation of amino acid profile in human follicular fluid and plasma of<i>in vitro</i>fertilization patients. Gynecological Endocrinology, 2015, 31, 9-17.	1.7	3
13	Effect of methionine-35 oxidation on the aggregation of amyloid-Î² peptide. Biochemistry and Biophysics Reports, 2015, 3, 94-99.	1.3	45
14	Toxicity of amyloid beta 1-40 and 1-42 on SH-SY5Y cell line. SpringerPlus, 2015, 4, .	1.2	5
15	Metallothionein 2A affects the cell respiration by suppressing the expression of mitochondrial protein cytochrome c oxidase subunit II. Journal of Bioenergetics and Biomembranes, 2015, 47, 209-216.	2.3	13
16	Insulin Fibrillization at Acidic and Physiological pH Values is Controlled by Different Molecular Mechanisms. Protein Journal, 2015, 34, 398-403.	1.6	21
17	<i>In vitro</i> fibrillization of Alzheimerâ€™s amyloid-Î² peptide (1-42). AIP Advances, 2015, 5, .	1.3	48
18	Copper(II) ions and the Alzheimer's amyloid-Î² peptide: Affinity and stoichiometry of binding. , 2014, , .		0

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19	Formation of [4Fe-4S] Clusters in the Mitochondrial Ironâ€“Sulfur Cluster Assembly Machinery. Journal of the American Chemical Society, 2014, 136, 16240-16250.	13.7	114
20	Affinity of zinc and copper ions for insulin monomers. Metallomics, 2014, 6, 1296-1300.	2.4	19
21	Copper chaperones. The concept of conformational control in the metabolism of copper. FEBS Letters, 2013, 587, 1902-1910.	2.8	81
22	The missing link in the amyloid cascade of Alzheimerâ€™s disease â€“ Metal ions. Neurochemistry International, 2013, 62, 367-378.	3.8	72
23	Effect of agitation on the peptide fibrillization: Alzheimer's amyloidâ€<i>Î²</i> peptide 1â€42 but not amylin and insulin fibrils can grow under quiescent conditions. Journal of Peptide Science, 2013, 19, 386-391.	1.4	34
24	The Role of Initial Oligomers in Amyloid Fibril Formation by Human Stefin B. International Journal of Molecular Sciences, 2013, 14, 18362-18384.	4.1	12
25	Human superoxide dismutase 1 (hSOD1) maturation through interaction with human copper chaperone for SOD1 (hCCS). Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13555-13560.	7.1	120
26	Redox-active Cu(II)â€“AÎ² causes substantial changes in axonal integrity in cultured cortical neurons in an oxidative-stress dependent manner. Experimental Neurology, 2012, 237, 499-506.	4.1	6
27	Redox and Metal Ion Binding Properties of Human Insulin-like Growth Factor 1 Determined by Electrospray Ionization Mass Spectrometry. Biochemistry, 2012, 51, 5851-5859.	2.5	3
28	Coordination of zinc ions to the key proteins of neurodegenerative diseases: AÎ², APP, Î±-synuclein and PrP. Coordination Chemistry Reviews, 2012, 256, 2219-2224.	18.8	50
29	Interference of lowâ€molecular substances with the thioflavinâ€T fluorescence assay of amyloid fibrils. Journal of Peptide Science, 2012, 18, 59-64.	1.4	31
30	Interactions of Zn(ii) and Cu(ii) ions with Alzheimer's amyloid-beta peptide. Metal ion binding, contribution to fibrillization and toxicity. Metallomics, 2011, 3, 250.	2.4	196
31	Affinity gradients drive copper to cellular destinations. Nature, 2010, 465, 645-648.	27.8	395
32	The Native Copper- and Zinc- Binding Protein Metallothionein Blocks Copper-Mediated AÎ² Aggregation and Toxicity in Rat Cortical Neurons. PLoS ONE, 2010, 5, e12030.	2.5	58
33	Interaction between Oligomers of Stefin B and Amyloid-Î² in Vitro and in Cells. Journal of Biological Chemistry, 2010, 285, 3201-3210.	3.4	40
34	Zn(II) ions co-secreted with insulin suppress inherent amyloidogenic properties of monomeric insulin. Biochemical Journal, 2010, 430, 511-518.	3.7	39
35	Label-Free High-Throughput Screening Assay for Inhibitors of Alzheimerâ€™s Amyloid-Î² Peptide Aggregation Based on MALDI MS. Analytical Chemistry, 2010, 82, 8558-8565.	6.5	31
36	Modulation of Redox Switches of Copper Chaperone Cox17 by Zn(II) Ions Determined by New ESI MS-Based Approach. Antioxidants and Redox Signaling, 2009, 11, 985-995.	5.4	8

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37	Zn(II)â€•and Cu(II)â€induced nonâ€fibrillar aggregates of amyloidâ€Î² (1â€"42) peptide are transformed to amyloid fibrils, both spontaneously and under the influence of metal chelators. Journal of Neurochemistry, 2009, 110, 1784-1795.	3.9	180
38	Stability and Conformation of Polycopperâˆ'Thiolate Clusters Studied by Density Functional Approach. Journal of Physical Chemistry A, 2009, 113, 9157-9164.	2.5	10
39	Biological Redox Switches. Antioxidants and Redox Signaling, 2009, 11, 981-983.	5.4	22
40	Reaction of the XPA Zinc Finger withS-Nitrosoglutathione. Chemical Research in Toxicology, 2008, 21, 386-392.	3.3	16
41	Binding of zinc(II) and copper(II) to the fullâ€length Alzheimerâ€™s amyloidâ€Î² peptide. Journal of Neurochemistry, 2008, 104, 1249-1259.	3.9	201
42	A Structural-Dynamical Characterization of Human Cox17. Journal of Biological Chemistry, 2008, 283, 7912-7920.	3.4	91
43	Mitochondrial copper(I) transfer from Cox17 to Sco1 is coupled to electron transfer. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6803-6808.	7.1	162
44	Human Sco1 functional studies and pathological implications of the P174L mutant. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15-20.	7.1	120
45	Oxidative switches in functioning of mammalian copper chaperone Cox17. Biochemical Journal, 2007, 408, 139-148.	3.7	50
46	Cox17, a copper chaperone for cytochrome c oxidase: Expression, purification, and formation of mixed disulphide adducts with thiol reagents. Protein Expression and Purification, 2007, 53, 138-144.	1.3	19
47	Quantitative electrospray ionization mass spectrometry of zinc finger oxidation: The reaction of XPA zinc finger with H2O2. Analytical Biochemistry, 2007, 369, 226-231.	2.4	20
48	Maximum entropy reconstruction of joint Ï†, Ïˆ-distribution with a coil-library prior: the backbone conformation of the peptide hormone motilin in aqueous solution from Ï† and Ïˆ-dependent J-couplings. Journal of Biomolecular NMR, 2007, 38, 107-123.	2.8	7
49	A hint for the function of human Sco1 from different structures. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8595-8600.	7.1	99
50	Organization and Assembly of Metal-Thiolate Clusters in Epithelium-specific Metallothionein-4. Journal of Biological Chemistry, 2006, 281, 14588-14595.	3.4	55
51	Metal binding of metallothionein-3 versus metallothionein-2: lower affinity and higher plasticity. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2005, 1747, 205-211.	2.3	54
52	Metal-binding mechanism of Cox17, a copper chaperone for cytochrome c oxidase. Biochemical Journal, 2004, 382, 307-314.	3.7	87
53	Purification of recombinant human apometallothionein-3 and reconstitution with zinc. Protein Expression and Purification, 2003, 31, 161-165.	1.3	7
54	Brain-Specific Metallothionein-3 Has Higher Metal-Binding Capacity than Ubiquitous Metallothioneins and Binds Metals Noncooperativelyâ€. Biochemistry, 2002, 41, 6158-6163.	2.5	80

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55	Evidence for non-isostructural replacement of Zn2+with Cd2+in the Î²-domain of brain-specific metallothionein-3. FEBS Letters, 2002, 527, 76-80.	2.8	24
56	The effects of physiologically important nonmetallic ligands in the reactivity of metallothionein towards 5,5â€²-dithiobis(2-nitrobenzoic acid). FEBS Journal, 2001, 268, 4979-4984.	0.2	5
57	Reactivity of Cd7-metallothionein with Cu(II) ions: evidence for a cooperative formation of Cd3,Cu(I)5-metallothionein. Journal of Inorganic Biochemistry, 2001, 83, 1-6.	3.5	29
58	Large-Scale HPLC Purification of Calbindin D9k from Porcine Intestine. Protein Expression and Purification, 1999, 17, 387-391.	1.3	0
59	Spectroscopic studies of metal-induced dimers of metallothionein. Journal of Inorganic Biochemistry, 1995, 59, 102.	3.5	0
60	Formation and spectroscopic characterization of a novel monomeric cadmium- and phosphate-containing form of metallothionein. Biochemistry, 1993, 32, 2874-2879.	2.5	16
61	Nonoxidative cadmium-dependent dimerization of cadmium-metallothionein from rabbit liver. Biochemistry, 1992, 31, 2181-2186.	2.5	38
62	Binding of inorganic phosphate to the cadmium-induced dimeric form of metallothionein from rabbit liver. FEBS Journal, 1992, 205, 1131-1135.	0.2	18