Gabriele Meloni

List of Publications by Year
in descending order

48 papers	1,785 citations	279701 23 h-index	276775 41 g-index
53 all docs	53 docs citations	53 times ranked	2227 citing authors

#	Article	IF	Citations
1	Chemistry and biology of mammalian metallothioneins. Journal of Biological Inorganic Chemistry, 2011, 16, 1067-1078.	1.1	235
2	Metal swap between Zn7-metallothionein-3 and amyloid-Î²â€“Cu protects against amyloid-Î² toxicity. Nature Chemical Biology, 2008, 4, 366-372.	3.9	181
3	Redox Silencing of Copper in Metal-linked Neurodegenerative Disorders. Journal of Biological Chemistry, 2007, 282, 16068-16078.	1.6	113
4	Structure and mechanism of Zn2+-transporting P-type ATPases. Nature, 2014, 514, 518-522.	13.7	107
5	Copper metallothioneins. IUBMB Life, 2017, 69, 236-245.	1.5	93
6	Mammalian Metallothionein-3: New Functional and Structural Insights. International Journal of Molecular Sciences, 2017, 18, 1117.	1.8	70
7	Redox activity of Î±-synucleinâ€“Cu is silenced by Zn7-metallothionein-3. Free Radical Biology and Medicine, 2011, 50, 1471-1479.	1.3	66
8	The ABC exporter IrtAB imports and reduces mycobacterial siderophores. Nature, 2020, 580, 413-417.	13.7	63
9	Ratiometric two-photon microscopy reveals attomolar copper buffering in normal and Menkes mutant cells. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12167-12172.	3.3	61
10	Chemistry of mammalian metallothioneins and their interaction with amyloidogenic peptides and proteins. Chemical Society Reviews, 2017, 46, 7683-7693.	18.7	57
11	Organization and Assembly of Metal-Thiolate Clusters in Epithelium-specific Metallothionein-4. Journal of Biological Chemistry, 2006, 281, 14588-14595.	1.6	55
12	Zn7Metallothionein-3 and the Synaptic Vesicle Cycle:Â Interaction of Metallothionein-3 with the Small GTPase Rab3Aâ€. Biochemistry, 2005, 44, 3159-3165.	1.2	54
13	Characterization of the role of metallothionein-3 in an animal model of Alzheimerâ€™s disease. Cellular and Molecular Life Sciences, 2012, 69, 3683-3700.	2.4	45
14	Structure and Function of Cu(I)- and Zn(II)-ATPases. Biochemistry, 2015, 54, 5673-5683.	1.2	43
15	A sulfurâ€based transport pathway in Cu ⁺ â€•<scp>ATP</scp> ases. EMBO Reports, 2015, 16, 728-740.	2.0	41
16	Stabilization of supramolecular membrane proteinâ€“lipid bilayer assemblies through immobilization in a crystalline exoskeleton. Nature Communications, 2021, 12, 2202.	5.8	35
17	Zinc release of Zn7-metallothionein-3 induces fibrillar type amyloid-Î² aggregates. Metallomics, 2010, 2, 741.	1.0	34
18	Detection of neuronal growth inhibitory factor (metallothionein-3) in polyacrylamide gels and by Western blot analysis. Journal of Proteomics, 2005, 64, 76-81.	2.4	33

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19	Effects of Zn²⁺, Ca²⁺, and Mg²⁺ on the Structure of Zn₇Metallothionein-3: Evidence for an Additional Zinc Binding Site. Biochemistry, 2009, 48, 5700-5707.	1.2	33
20	A Responsive Magnetic Resonance Imaging Contrast Agent for Detection of Excess Copper(II) in the Liver In Vivo. Journal of the American Chemical Society, 2019, 141, 11009-11018.	6.6	33
21	On Allosteric Modulation of P-Type Cu+-ATPases. Journal of Molecular Biology, 2013, 425, 2299-2308.	2.0	30
22	The Glutathione/Metallothionein System Challenges the Design of Efficient O₂â€Activating Copper Complexes. Angewandte Chemie - International Edition, 2020, 59, 7830-7835.	7.2	30
23	The Sixteenth Iron in the Nitrogenase MoFe Protein. Angewandte Chemie - International Edition, 2013, 52, 10529-10532.	7.2	28
24	Non-coordinative metal selectivity bias in human metallothioneins metalâ€“thiolate clusters. Metallomics, 2018, 10, 1777-1791.	1.0	25
25	The yeast copper chaperone for copper-zinc superoxide dismutase (CCS1) is a multifunctional chaperone promoting all levels of SOD1 maturation. Journal of Biological Chemistry, 2019, 294, 1956-1966.	1.6	22
26	Mutations in Superoxide Dismutase 1 (Sod1) Linked to Familial Amyotrophic Lateral Sclerosis Can Disrupt High-Affinity Zinc-Binding Promoted by the Copper Chaperone for Sod1 (Ccs). Molecules, 2020, 25, 1086.	1.7	19
27	A single point mutation converts a proton-pumping rhodopsin into a red-shifted, turn-on fluorescent sensor for chloride. Chemical Science, 2021, 12, 5655-5663.	3.7	19
28	The Catalytic Redox Activity of Prion Proteinâ€“Cu^{II} is Controlled by Metal Exchange with the Zn^{II}â€“Thiolate Clusters of Zn₇Metallothioneinâ€3. ChemBioChem, 2012, 13, 1261-1265.	1.3	18
29	Metal binding and interdomain thermodynamics of mammalian metallothionein-3: enthalpically favoured Cu⁺supplants entropically favoured Zn²⁺to form Cu₄⁺clusters under physiological conditions. Chemical Science, 2022, 13, 5289-5304.	3.7	18
30	Fluorescent Functionalization across Quaternary Structure in a Virus-like Particle. Bioconjugate Chemistry, 2017, 28, 2277-2283.	1.8	17
31	IroT/MavN Is a Legionella Transmembrane Fe(II) Transporter: Metal Selectivity and Translocation Kinetics Revealed by in Vitro Real-Time Transport. Biochemistry, 2019, 58, 4337-4342.	1.2	14
32	Transmembrane Type-2-like Cu²⁺ Site in the P_{1B-3}-type ATPase CopB: Implications for Metal Selectivity. ACS Chemical Biology, 2014, 9, 116-121.	1.6	12
33	Crystal structure of the DNA-binding domain of Myelin-gene Regulatory Factor. Scientific Reports, 2017, 7, 3696.	1.6	12
34	Membrane insertion exacerbates the Î±-Synuclein-Cu(II) dopamine oxidase activity: Metallothionein-3 targets and silences all Î±-synuclein-Cu(II) complexes. Free Radical Biology and Medicine, 2020, 158, 149-161.	1.3	11
35	Evidence for a Long-Lived, Cu-Coupled and Oxygen-Inert Disulfide Radical Anion in the Assembly of Metallothionein-3 Cu(I)₄-Thiolate Cluster. Journal of the American Chemical Society, 2022, 144, 709-722.	6.6	10
36	Transmembrane Cu(i) P-type ATPase pumps are electrogenic uniporters. Dalton Transactions, 2020, 49, 16082-16094.	1.6	9

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37	Structure and ion-release mechanism of PIB-4-type ATPases. ELife, 2021, 10, .	2.8	8
38	Metallothionein-3, Zinc, and Copper in the Central Nervous System. Metal Ions in Life Sciences, 2009, , 319-351.	1.0	7
39	<scp>PcoB</scp> is a defense outer membrane protein that facilitates cellular uptake of copper. Protein Science, 2022, 31, .	3.1	5
40	Coordination promiscuity guarantees metal substrate selection in transmembrane primary-active Zn²⁺ pumps. Chemical Communications, 2019, 55, 10844-10847.	2.2	4
41	The Glutathione/Metallothionein System Challenges the Design of Efficient O₂â€Activating Copper Complexes. Angewandte Chemie, 2020, 132, 7904-7909.	1.6	4
42	METALLOTHIONEIN STRUCTURE AND REACTIVITY. , 2008, , 3-26.		3
43	A recombinant platform to characterize the role of transmembrane protein hTMEM205 in Pt(ii)-drug resistance and extrusion. Metallomics, 2020, 12, 1542-1554.	1.0	2
44	Control of Abnormal Metal-Protein Interactions in Neurodegenerative Disorders by Metallothionein-3. Chimia, 2009, 63, 211-213.	0.3	1
45	11 Metallothionein-3, Zinc, and Copper in the Central Nervous System. , 2015, , 319-352.		0
46	Mechanistic Dissection of Cu(I)â€translocating Pâ€type ATPase Pumps by I nâ€vitro Realâ€Time Transport in Artificial Lipid Bilayer Vesicles. FASEB Journal, 2021, 35, .	0.2	0
47	Metal Substrate Selectivity and Mechanism of Transport in a Transmembrane Znâ€pump Revealed by inâ€vitro Realâ€time Transport. FASEB Journal, 2021, 35, .	0.2	0
48	Metal Substrate Translocation and Transport Mechanism of the Sinorhizobium meliloti P _{1B} â€•₅ â€type ATPase Nia Revealed by Inâ€vitro Transport Assays in Proteoliposomes. FASEB Journal, 2022, 36, .	0.2	0