MercÃ¨ Capdevila

List of Publications by Year
in descending order

121	3,940	109137	149479
papers	citations	35 h-index	56 g-index

125	125	125	3296
all docs	docs citations	times ranked	citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis and In Vitro Studies of Photoactivatable Semisquaraine-type Pt(II) Complexes. Inorganic Chemistry, 2022, 61, 7729-7745.	1.9	1
2	Modularity in Protein Evolution: Modular Organization and De Novo Domain Evolution in Mollusk Metallothioneins. Molecular Biology and Evolution, 2021, 38, 424-436.	3.5	12
3	Copper(II) N,N,O-Chelating Complexes as Potential Anticancer Agents. Inorganic Chemistry, 2021, 60, 2939-2952.	1.9	30
4	Functionalized azobenzene platinum(II) complexes as putative anticancer compounds. Journal of Biological Inorganic Chemistry, 2021, 26, 435-453.	1.1	1
5	Tunicates Illuminate the Enigmatic Evolution of Chordate Metallothioneins by Gene Gains and Losses, Independent Modular Expansions, and Functional Convergences. Molecular Biology and Evolution, 2021, 38, 4435-4448.	3.5	6
6	Modular Evolution and Population Variability of Oikopleura dioica Metallothioneins. Frontiers in Cell and Developmental Biology, 2021, 9, 702688.	1.8	5
7	Two Unconventional Metallothioneins in the Apple Snail Pomacea bridgesii Have Lost Their Metal Specificity during Adaptation to Freshwater Habitats. International Journal of Molecular Sciences, 2021, 22, 95.	1.8	7
8	Metal-Specificity Divergence between Metallothioneins of Nerita peloronta (Neritimorpha,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 467 Td Journal of Molecular Sciences, 2021, 22, 13114.	1.8	6
9	Metallomics reveals a persisting impact of cadmium on the evolution of metal-selective snail metallothioneins. Metallomics, 2020, 12, 702-720.	1.0	15
10	The Solution Structure and Dynamics of Cd-Metallothionein from Helix pomatia Reveal Optimization for Binding Cd over Zn. Biochemistry, 2019, 58, 4570-4581.	1.2	16
11	Mouse metallothionein-1 and metallothionein-2 are not biologically interchangeable in an animal model of multiple sclerosis, EAE. Metallomics, 2019, 11, 327-337.	1.0	14
12	Pb(<scp>II</scp>) binding to the brain specific mammalian metallothionein isoform MT3 and its isolated Î±MT3 and Î²MT3 domains. Metallomics, 2019, 11, 349-361.	1.0	14
13	Goodbye to Silvia Atrian. Metallomics, 2019, 11, 238-239.	1.0	0
14	Studying the reactivity of â€œoldâ€•Cu(II) complexes for â€œnovelâ€•anticancer purposes. Journal of Inorganic Biochemistry, 2019, 195, 51-60.	1.5	11
15	Structural Lesions of Proteins Connected to Lipid Membrane Damages Caused by Radical Stress: Assessment by Biomimetic Systems and Raman Spectroscopy. Biomolecules, 2019, 9, 794.	1.8	10
16	Copper redox chemistry of plant frataxins. Journal of Inorganic Biochemistry, 2018, 180, 135-140.	1.5	8
17	Metal binding functions of metallothioneins in the slug Arion vulgaris differ from metal-specific isoforms of terrestrial snails. Metallomics, 2018, 10, 1638-1654.	1.0	19
18	Squaramide-Based Pt(II) Complexes as Potential Oxygen-Regulated Light-Triggered Photocages. Inorganic Chemistry, 2018, 57, 15517-15525.	1.9	7

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19	Iron chemistry at the service of life. IUBMB Life, 2017, 69, 382-388.	1.5	121
20	Identification of two frataxin isoforms in Zea mays : Structural and functional studies. Biochimie, 2017, 140, 34-47.	1.3	11
21	Structural Adaptation of a Protein to Increased Metal Stress: NMR Structure of a Marine Snail Metallothionein with an Additional Domain. Angewandte Chemie - International Edition, 2017, 56, 4617-4622.	7.2	28
22	Strukturanpassung eines Proteins an Metallbelastung: NMRâ€Struktur eines marinen Schneckenâ€Metallothioneins mit einer zusÃtzlichen DomÃne. Angewandte Chemie, 2017, 129, 4688-4693.	1.6	0
23	Varying iron release from transferrin and lactoferrin proteins. A laboratory experiment. Biochemistry and Molecular Biology Education, 2017, 45, 521-527.	0.5	8
24	Metagenomics analysis reveals a new metallothionein family: Sequence and metal-binding features of new environmental cysteine-rich proteins. Journal of Inorganic Biochemistry, 2017, 167, 1-11.	1.5	35
25	Analysis of Metal-Binding Features of the Wild Type and Two Domain-Truncated Mutant Variants of Littorina littorea Metallothionein Reveals Its Cd-Specific Character. International Journal of Molecular Sciences, 2017, 18, 1452.	1.8	18
26	Biomphalaria glabrata Metallothionein: Lacking Metal Specificity of the Protein and Missing Gene Upregulation Suggest Metal Sequestration by Exchange Instead of through Selective Binding. International Journal of Molecular Sciences, 2017, 18, 1457.	1.8	14
27	The Fungus Tremella mesenterica Encodes the Longest Metallothionein Currently Known: Gene, Protein and Metal Binding Characterization. PLoS ONE, 2016, 11, e0148651.	1.1	21
28	Does Variation of the Inter-Domain Linker Sequence Modulate the Metal Binding Behaviour of Helix pomatia Cd-Metallothionein?. International Journal of Molecular Sciences, 2016, 17, 6.	1.8	30
29	Comparative Raman study of four plant metallothionein isoforms: Insights into their Zn(II) clusters and protein conformations. Journal of Inorganic Biochemistry, 2016, 156, 55-63.	1.5	17
30	Chemically and Biologically Harmless versus Harmful Ferritin/Copperâ€“Metallothionein Couples. Chemistry - A European Journal, 2015, 21, 808-813.	1.7	4
31	Understanding the 7â€<scp>C</scp>ys module amplification of <scp>C</scp>. neoformans metallothioneins: how high capacity <scp>C</scp>uâ€binding polypeptides are built to neutralize host nutritional immunity. Molecular Microbiology, 2015, 98, 977-992.	1.2	4
32	Hints for Metal-Preference Protein Sequence Determinants: Different Metal Binding Features of the Five Tetrahymena thermophila Metallothioneins. International Journal of Biological Sciences, 2015, 11, 456-471.	2.6	37
33	Sunflower metallothionein family characterisation. Study of the Zn(II)- and Cd(II)-binding abilities of the HaMT1 and HaMT2 isoforms. Journal of Inorganic Biochemistry, 2015, 148, 35-48.	1.5	25
34	Rhenium and technetium tricarbonyl, {M(CO)3}+ (MÂ=ÂTc, Re), binding to mammalian metallothioneins: new insights into chemical and radiopharmaceutical implications. Journal of Biological Inorganic Chemistry, 2015, 20, 465-474.	1.1	17
35	Cantareus aspersus metallothionein metal binding abilities: The unspecific CaCd/CuMT isoform provides hints about the metal preference determinants in metallothioneins. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2014, 1844, 1694-1707.	1.1	30
36	Monitoring lactoferrin iron levels by fluorescence resonance energy transfer: a combined chemical and computational study. Journal of Biological Inorganic Chemistry, 2014, 19, 439-447.	1.1	15

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37	In vivoâ€folded metalâ€“metallothioneinÂ3 complexes reveal the Cuâ€“thionein rather than Znâ€“thionein character of this brainâ€specific mammalian metallothionein. FEBS Journal, 2014, 281, 1659-1678.	2.2	47
38	Full characterization of the Cu-, Zn-, and Cd-binding properties of CnMT1 and CnMT2, two metallothioneins of the pathogenic fungus Cryptococcus neoformans acting as virulence factors. Metallomics, 2014, 6, 279-291.	1.0	28
39	Understanding the interaction of an antitumoral platinum(II) 7-azaindolate complex with proteins and DNA. BioMetals, 2014, 27, 1159-1177.	1.8	8
40	Cognate and noncognate metal ion coordination in metal-specific metallothioneins: the Helix pomatia system as a model. Journal of Biological Inorganic Chemistry, 2014, 19, 923-935.	1.1	25
41	His-containing plant metallothioneins: comparative study of divalent metal-ion binding by plant MT3 and MT4 isoforms. Journal of Biological Inorganic Chemistry, 2014, 19, 1149-1164.	1.1	12
42	Metallothionein-protein interactions. Biomolecular Concepts, 2013, 4, 143-160.	1.0	54
43	Histone H3 Glutathionylation in Proliferating Mammalian Cells Destabilizes Nucleosomal Structure. Antioxidants and Redox Signaling, 2013, 19, 1305-1320.	2.5	83
44	Mammalian MT1 and MT2 metallothioneins differ in their metal binding abilities. Metallomics, 2013, 5, 1397.	1.0	46
45	Toxicology (Pb, Hg, Cd, As, Al, Cr, and Others). , 2013, , 51-63.		0
46	Ferritin iron uptake and release in the presence of metals and metalloproteins: Chemical implications in the brain. Coordination Chemistry Reviews, 2013, 257, 2752-2764.	9.5	44
47	New steroidal 7-azaindole platinum(II) antitumor complexes. Journal of Inorganic Biochemistry, 2013, 128, 48-56.	1.5	24
48	The sea urchin metallothionein system: Comparative evaluation of the SpMTA and SpMTB metalâ€binding preferences. FEBS Open Bio, 2013, 3, 89-100.	1.0	17
49	Cryptococcus neoformans Copper Detoxification Machinery Is Critical for Fungal Virulence. Cell Host and Microbe, 2013, 13, 265-276.	5.1	167
50	Non-enzymatic modifications in metallothioneins connected to lipid membrane damages: Structural and biomimetic studies under reductive radical stress. Journal of Proteomics, 2013, 92, 204-215.	1.2	14
51	The Role of Histidine in a Copperâ€Specific Metallothionein. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 1356-1360.	0.6	4
52	Metallothioneins and Mercury. , 2013, , 1386-1390.		4
53	Metallothioneins and Lead. , 2013, , 1383-1386.		0
54	Metallothioneins and Copper. , 2013, , 1379-1383.		1

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55	Novel C,N-chelate rhodium(iii) and iridium(iii) antitumor complexes incorporating a lipophilic steroidal conjugate and their interaction with DNA. Dalton Transactions, 2012, 41, 12847.	1.6	82
56	Is MtnE, the fifth Drosophila metallothionein, functionally distinct from the other members of this polymorphic protein family?. Metallomics, 2012, 4, 342.	1.0	27
57	Studying the interactions of a platinum(ii) 9-aminoacridine complex with proteins and oligonucleotides by ESI-TOF MS. Dalton Transactions, 2012, 41, 300-306.	1.6	10
58	The response of the different soybean metallothionein isoforms to cadmium intoxication. Journal of Inorganic Biochemistry, 2012, 117, 306-315.	1.5	44
59	Preface. Special Issue featuring articles from the Eleventh International Symposium on Applied Bioinorganic Chemistry. Journal of Inorganic Biochemistry, 2012, 117, 204.	1.5	1
60	State-of-the-art of metallothioneins at the beginning of the 21st century. Coordination Chemistry Reviews, 2012, 256, 46-62.	9.5	143
61	The metal binding abilities of Megathura crenulata metallothionein (McMT) in the frame of Gastropoda MTs. Journal of Inorganic Biochemistry, 2012, 108, 84-90.	1.5	24
62	Metal Dealing at the Origin of the Chordata Phylum: The Metallothionein System and Metal Overload Response in Amphioxus. PLoS ONE, 2012, 7, e43299.	1.1	15
63	Differential ESI-MS behaviour of highly similar metallothioneins. Talanta, 2011, 83, 1057-1061.	2.9	16
64	Ferritin and metallothionein: dangerous liaisons. Chemical Communications, 2011, 47, 12155.	2.2	28
65	Physiological relevance and contribution to metal balance of specific and non-specific Metallothionein isoforms in the garden snail, Cantareus aspersus. BioMetals, 2011, 24, 1079-1092.	1.8	50
66	Metallothionein protein evolution: a miniassay. Journal of Biological Inorganic Chemistry, 2011, 16, 977-989.	1.1	140
67	Zn- and Cu-thioneins: a functional classification for metallothioneins?. Journal of Biological Inorganic Chemistry, 2011, 16, 991-1009.	1.1	132
68	Shaping mechanisms of metal specificity in a family of metazoan metallothioneins: evolutionary differentiation of mollusc metallothioneins. BMC Biology, 2011, 9, 4.	1.7	96
69	Comparative genomics analysis of metallothioneins in twelve Drosophila species. Journal of Inorganic Biochemistry, 2011, 105, 1050-1059.	1.5	15
70	Evidence of Native Metalâ€“S^{2â^’}â€“Metallothionein Complexes Confirmed by the Analysis of Cup1 Divalentâ€Metalâ€Ion Binding Properties. Chemistry - A European Journal, 2010, 16, 12363-12372.	1.7	17
71	The Zn- or Cu-Thionein Character of a Metallothionein Determines Its Metal Load When Synthesized in Physiological (Metal-Unsupplemented) Conditions. Bioinorganic Chemistry and Applications, 2010, 2010, 1-6.	1.8	7
72	The first isoform-selective protein biosensor: a metallothionein potentiometric electrode. Chemical Communications, 2010, 46, 2040.	2.2	9

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73	Zinc and Cadmium Complexes of a Plant Metallothionein under Radical Stress: Desulfurisation Reactions Associated with the Formation of transâ€Lipids in Model Membranes. Chemistry - A European Journal, 2009, 15, 6015-6024.	1.7	32
74	Caenorhabditisâ€ƒelegans metallothionein isoform specificity â€“ metal binding abilities and the role of histidine in CeMT1 and CeMT2. FEBS Journal, 2009, 276, 7040-7056.	2.2	37
75	Novel potentiometric sensors based on polysulfone immobilized metallothioneins as metal-ionophores. Talanta, 2009, 77, 1528-1533.	2.9	27
76	Independent metal-binding features of recombinant metallothioneins convergently draw a step gradation between Zn- and Cu-thioneins. Metallomics, 2009, 1, 229.	1.0	69
77	The metal-binding features of the recombinant mussel Mytilus edulis MT-10-IV metallothionein. Journal of Biological Inorganic Chemistry, 2008, 13, 801-812.	1.1	22
78	Raman study of in vivo synthesized Zn(II)â€•metallothionein complexes: Structural insight into metal clusters and protein folding. Biopolymers, 2008, 89, 1114-1124.	1.2	18
79	Comparative insight into the Zn(II)-, Cd(II)- and Cu(I)-binding features of the protozoan Tetrahymena pyriformis MT1 metallothionein. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2008, 1784, 693-704.	1.1	30
80	Biomimetic Chemistry on Tandem Protein/Lipid Damages under Reductive Radical Stress. Chimia, 2008, 62, 721-727.	0.3	9
81	Structural study of the zinc and cadmium complexes of a type 2 plant (Quercus suber) metallothionein: Insights by vibrational spectroscopy. Biopolymers, 2007, 86, 240-248.	1.2	40
82	The Saccharomyces cerevisiae Crs5 Metallothionein metal-binding abilities and its role in the response to zinc overload. Molecular Microbiology, 2007, 63, 256-269.	1.2	89
83	The CdII-binding abilities of recombinant Quercus suber metallothionein: bridging the gap between phytochelatins and metallothioneins. Journal of Biological Inorganic Chemistry, 2007, 12, 867-882.	1.1	44
84	Plant metallothionein domains: functional insight into physiological metal binding andÂprotein folding. Biochimie, 2006, 88, 583-593.	1.3	78
85	The Zn- and Cd-Clusters of Recombinant Mammalian MT1 and MT4 Metallothionein Domains Include Sulfide Ligands. Experimental Biology and Medicine, 2006, 231, 1522-1527.	1.1	9
86	Comparative metal binding and genomic analysis of the avian (chicken) and mammalian metallothionein. FEBS Journal, 2006, 273, 523-535.	2.2	30
87	The four members of theDrosophilametallothionein family exhibit distinct yet overlapping roles in heavy metal homeostasis and detoxification. Genes To Cells, 2006, 11, 647-658.	0.5	103
88	Zn- and Cd-Metallothionein Recombinant Species from the Most Diverse Phyla May Contain Sulfide (S2â^') Ligands. Angewandte Chemie - International Edition, 2005, 44, 4618-4622.	7.2	75
89	Influence of chloride ligands on the structure of Znâ€“ and Cdâ€“metallothionein species. Archives of Biochemistry and Biophysics, 2005, 435, 331-335.	1.4	18
90	Functional Differentiation in the Mammalian Metallothionein Gene Family. Journal of Biological Chemistry, 2004, 279, 24403-24413.	1.6	62

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91	Chemical foundation of the attenuation of methylmercury(II) cytotoxicity by metallothioneins. FEBS Journal, 2004, 271, 1323-1328.	0.2	14
92	Mercury(II) binding to metallothioneins. Variables governing the formation and structural features of the mammalian Hg-MT species. FEBS Journal, 2004, 271, 4872-4880.	0.2	29
93	Electrochemical and theoretical study of the redox properties of transition metal complexes with {Pt2S2} cores. Dalton Transactions, 2004, , 706-712.	1.6	10
94	Is Ag(I) an adequate probe for Cu(I) in structural copperâ€“metallothionein studies?. Journal of Biological Inorganic Chemistry, 2003, 8, 831-842.	1.1	34
95	MTO: the second member of aDrosophiladual copper-thionein system. FEBS Letters, 2003, 533, 72-78.	1.3	35
96	Diverse Evolution of [{Ph2P(CH2)nPPh2}Pt(Î¼-S)2Pt{Ph2P(CH2)nPPh2}] (n = 2, 3) Metalloligands in CH2Cl2. Inorganic Chemistry, 2002, 41, 3218-3229.	1.9	50
97	Monitoring of the metal displacement from the recombinant mouse liver metallothionein Zn7-complex by capillary zone electrophoresis with electrospray MS detection. Talanta, 2002, 57, 1011-1017.	2.9	43
98	First Evidence of Fast Sï£¿Hâ‹…â‹…â‹…S Proton Transfer in a Transition Metal Complex. Angewandte Chemie - International Edition, 2002, 41, 2776-2778.	7.2	23
99	Monitoring of the metal displacement from the recombinant mouse liver metallothionein Zn(7)-complex by capillary zone electrophoresis with electrospray MS detection. Talanta, 2002, 57, 1011-7.	2.9	7
100	Zinc(II) is required for the in vivo and in vitro folding of mouse copper metallothionein in two domains. Journal of Biological Inorganic Chemistry, 2001, 6, 405-417.	1.1	33
101	Metallothionein-III Prevents Glutamate and Nitric Oxide Neurotoxicity in Primary Cultures of Cerebellar Neurons. Journal of Neurochemistry, 2001, 75, 266-273.	2.1	56
102	A New Insight into Metallothionein (MT) Classification and Evolution. Journal of Biological Chemistry, 2001, 276, 32835-32843.	1.6	85
103	DrosophilaMTN: a metazoan copper-thionein related to fungal forms. FEBS Letters, 2000, 467, 189-194.	1.3	33
104	In vivo copper- and cadmium-binding ability of mammalian metallothionein Î² domain. Protein Engineering, Design and Selection, 1999, 12, 265-269.	1.0	25
105	A new insight into the Ag+ and Cu+ binding sites in the metallothionein Î² domain. Journal of Inorganic Biochemistry, 1999, 73, 57-64.	1.5	57
106	Replacement of terminal cysteine with histidine in the metallothionein Î± and Î² domains maintains its binding capacity. FEBS Journal, 1999, 259, 519-527.	0.2	32
107	Extending knowledge on the nucleophilicity of the {Pt2S2} core: Ph2PCH2CH2PPh2 as an alternative terminal ligand in [L2Pt(Î¼-S)2PtL2] metalloligandsâ€Šâ€. Journal of the Chemical Society Dalton Transactions, 1999, , 3103-3113.	1.1	37
108	Recombinant synthesis and metal-binding abilities of mouse metallothionein 1 and its Î±- and Î²-domains. , 1999, , 55-61.		1

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109	Metal binding properties of three Cys2X2 (X = His, Asp) metallothionein-related peptides. Inorganica Chimica Acta, 1998, 278, 10-14.	1.2	7
110	Palladium(II) complexes with Pd2S2 rings. Synthesis and theoretical characterization of [Pd2(dppe)2(Î¼-S)2] and X-ray characterization of [Pd3(dppe)3(Î¼3-S)2]Cl2. Inorganic Chemistry Communication, 1998, 1, 466-468.	1.8	18
111	The first stable copper(II) complex containing four sulfide ligands: synthesis and structural characterization of [Pt2(dppe)2(Î¼-S)2] and [Cu{Pt2(dppe)2(Î¼3-S)2}2]2+. Chemical Communications, 1998, , 597-598.	2.2	30
112	Recombinant synthesis of mouse Zn 3 - ? and Zn 4 - ? metallothionein 1 domains and characterization of their cadmium(II) binding capacity. Cellular and Molecular Life Sciences, 1997, 53, 681-688.	2.4	84
113	Binding of excess cadmium(II) to Cd7-metallothionein from recombinant mouse Zn7-metallothionein 1. UV-VIS absorption and circular dichroism studies and theoretical location approach by surface accessibility analysis. Journal of Inorganic Biochemistry, 1997, 68, 157-166.	1.5	100
114	Hinge Distortion in Platinum(II) Dimers with a Pt2S2Ring. Anab InitioMolecular Orbital Study. Inorganic Chemistry, 1996, 35, 490-497.	1.9	47
115	Computational Analysis of Cysteine Substitutions Modelled on the ?- and ?-domains of Cd5,Zn2-Metallothionein 2. Journal of Molecular Modeling, 1996, 2, 417-426.	0.8	26
116	Structural investigation of homonuclear Pt2 and heteronuclear PdPt complexes containing a metalâ€“metal bond bridged by hydrido and sulfido ligands. Acta Crystallographica Section B: Structural Science, 1996, 52, 270-276.	1.8	17
117	Dipalladium and diplatinum bis(Âµ-alkanethiolato) complexes with a planar M2S2ring. Journal of the Chemical Society Dalton Transactions, 1992, , 2817-2826.	1.1	55
118	Displacement of ligands in [PtBr2(en)](en = ethylenediamine) by Î²- and Î³-mercaptoamines. Journal of the Chemical Society Dalton Transactions, 1992, , 173-181.	1.1	23
119	Synthesis and X-ray crystal structure of [Pt2(Î¼-H)(Î¼-S)(dppe)2]+, a diplatinum cation with hydrido and sulphido ligands bridging a Ptî—¸Pt bond. Polyhedron, 1992, 11, 3091-3093.	1.0	12
120	Synthesis and characterization of homo- and hetero-nuclear mixed thiolate phosphine complexes with NiII, PdII, and PtII. Crystal and molecular structure of bis[Âµ-(3-dimethylamino-1-propanethiolato)]-bis{[1,2-bis(diphenylphosphino)-ethane]nickel(II)} tetraphenylborate. Journal of the Chemical Society Dalton Transactions, 1990, , 143-149.	1.1	36
121	Preparation and X-ray crystal structure of [Ni6{Î¼-S(CH2)3N(CH3)2}12], a cyclic hexameric homothiolate of nickel. Polyhedron, 1989, 8, 1253-1259.	1.0	33