Jean-Marc Moulis

List of Publications by Year
in descending order

67 papers	2,353 citations	186265 28 h-index	214800 47 g-index
74 all docs	74 docs citations	74 times ranked	2604 citing authors

#	Article	IF	Citations
1	Cellular mechanisms of cadmium toxicity related to the homeostasis of essential metals. BioMetals, 2010, 23, 877-896.	4.1	223
2	Atomic Resolution (0.94 Ã…) Structure of Clostridium acidurici Ferredoxin. Detailed Geometry of [4Fe-4S] Clusters in a Protein,. Biochemistry, 1997, 36, 16065-16073.	2.5	153
3	Crystal Structure of Human Iron Regulatory Protein 1 as Cytosolic Aconitase. Structure, 2006, 14, 129-139.	3.3	133
4	New perspectives in cadmium toxicity: an introduction. BioMetals, 2010, 23, 763-768.	4.1	107
5	Human Cytoplasmic Aconitase (Iron Regulatory Protein 1) Is Converted into Its [3Fe-4S] Form by Hydrogen Peroxide in Vitro but Is Not Activated for Iron-responsive Element Binding. Journal of Biological Chemistry, 1999, 274, 21625-21630.	3.4	104
6	The Bioinorganic Chemistry of Cadmium in the Context of Its Toxicity. Metal Ions in Life Sciences, 2013, 11, 1-29.	2.8	101
7	Refined crystal structure of the 2[4Fe-4S] ferredoxin from Clostridium acidurici at 1.84 Ã… resolution. Journal of Molecular Biology, 1994, 243, 683-695.	4.2	74
8	Crystal structure of the 2[4Feâ€4S] ferredoxin from <i>Chromatium vinosum</i>: Evolutionary and mechanistic inferences for [3/4Feâ€4S] ferredoxins. Protein Science, 1996, 5, 1765-1775.	7.6	72
9	Detection and Classification of Hyperfine-Shifted 1H, 2H, and 15N Resonances from the Four Cysteines That Ligate Iron in Oxidized and Reduced Clostridium pasteurianum Rubredoxin. Journal of the American Chemical Society, 1995, 117, 5347-5350.	13.7	60
10	Use of1H Longitudinal Relaxation Times in the Solution Structure of Paramagnetic Proteins. Application to [4Fe-4S] Proteins. Biochemistry, 1996, 35, 12705-12711.	2.5	57
11	Probing the Role of Electrostatic Forces in the Interaction of Clostridium pasteurianum Ferredoxin with Its Redox Partners. Biochemistry, 1995, 34, 16781-16788.	2.5	55
12	The coordination sphere of iron-sulfur clusters: lessons from site-directed mutagenesis experiments. Journal of Biological Inorganic Chemistry, 1996, 1, 2-14.	2.6	55
13	Peroxynitrite and Nitric Oxide Differently Target the Ironâˆ'Sulfur Cluster and Amino Acid Residues of Human Iron Regulatory Protein 1â€. Biochemistry, 2003, 42, 7648-7654.	2.5	53
14	Zinc and cadmium specifically interfere with RNA-binding activity of human iron regulatory protein 1. Journal of Inorganic Biochemistry, 2004, 98, 1413-1420.	3.5	47
15	NMR of Chromatium vinosum ferredoxin: evidence for structural inequivalence and impeded electron transfer between the two [4Fe-4S] clusters. Biochemistry, 1995, 34, 194-205.	2.5	46
16	On the role of conserved proline residues in the structure and function of Clostridium pasteurianum 2[4Feâ€"4S] ferredoxin. Protein Engineering, Design and Selection, 1994, 7, 681-687.	2.1	45
17	Emerging Links between Cadmium Exposure and Insulin Resistance: Human, Animal, and Cell Study Data. Toxics, 2020, 8, 63.	3.7	43
18	The Two [4Fe-4S] Clusters in Chromatium vinosumFerredoxin Have Largely Different Reduction Potentials. Journal of Biological Chemistry, 1998, 273, 15404-15411.	3.4	42

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19	Site-Directed Mutagenesis of Rubredoxin Reveals the Molecular Basis of Its Electron Transfer Properties. Biochemistry, 1997, 36, 15983-15991.	2.5	36
20	The structure of the 2[4Feâ€“4S] ferredoxin from Pseudomonas aeruginosa at 1.32-Ã… resolution: comparison with other high-resolution structures of ferredoxins and contributing structural features to reduction potential values. Journal of Biological Inorganic Chemistry, 2006, 11, 445-458.	2.6	36
21	High-yield chemical assembly of [2Fe-2X] (X = S, Se) clusters into spinach apoferredoxin: product characterization by resonance Raman spectroscopy. BBA - Proteins and Proteomics, 1986, 871, 243-249.	2.1	34
22	Replacement Of Sulfur By Selenium In Ironâ€”Sulfur Proteins. Advances in Inorganic Chemistry, 1992, 38, 73-115.	1.0	34
23	Hydrogen-1 nuclear magnetic resonance of selenium-substituted clostridial ferredoxins. Inorganic Chemistry, 1987, 26, 320-324.	4.0	32
24	Structural differences between [2Fe-2S] clusters in spinach ferredoxin and in the â€œRed paramagnetic proteinâ€• from Clostridium pasteurianum. A resonance Raman study. Biochemical and Biophysical Research Communications, 1984, 119, 828-835.	2.1	30
25	IRP1 Ser-711 is a phosphorylation site, critical for regulation of RNA-binding and aconitase activities. Biochemical Journal, 2005, 388, 143-150.	3.7	30
26	Iron for proliferation of cell lines and hematopoietic progenitors: Nailing down the intracellular functional iron concentration. Biochimica Et Biophysica Acta - Molecular Cell Research, 2015, 1853, 1596-1605.	4.1	30
27	Intramolecular Electron Transfer between [4Fe-4S] Clusters Studied by Proton Magnetic Resonance Spectroscopy. Biochemistry, 1997, 36, 7839-7846.	2.5	29
28	Structural Changes Associated with Switching Activities of Human Iron Regulatory Protein 1. Journal of Biological Chemistry, 2002, 277, 11995-12000.	3.4	29
29	Intramolecular electron transfer in [4Fe-4S] proteins: estimates of the reorganization energy and electronic coupling in Chromatium vinosum ferredoxin. Journal of Biological Inorganic Chemistry, 2001, 6, 446-451.	2.6	28
30	Molecular mechanism of pyruvate-ferredoxin oxidoreductases based on data obtained with theClostridium pasteurianumenzyme. FEBS Letters, 1996, 380, 287-290.	2.8	27
31	Sulfide is an efficient iron releasing agent for mammalian ferritins. BBA - Proteins and Proteomics, 2001, 1547, 174-182.	2.1	27
32	Impact of chronic and low cadmium exposure of rats: sex specific disruption of glucose metabolism. Chemosphere, 2018, 207, 764-773.	8.2	27
33	Insight into the protein and solvent contributions to the reduction potentials of [4Feâ€“4S]2+/+ clusters: crystal structures of the Allochromatium vinosum ferredoxin variants C57A and V13G and the homologous Escherichia coli ferredoxin. Journal of Biological Inorganic Chemistry, 2009, 14, 783-799.	2.6	26
34	Unusual NMR, EPR, and MÃ¶ssbauer Properties ofChromatium vinosum2[4Fe-4S] Ferredoxinâ€. Biochemistry, 1999, 38, 6335-6345.	2.5	25
35	Human iron regulatory protein 2 is easily cleaved in its specific domain: consequences for the haem binding properties of the protein. Biochemical Journal, 2007, 408, 429-439.	3.7	24
36	Replacement of sulfide by selenide in the [4Fe-4S] clusters of the ferredoxin fromClostridium pasteurianum. Biochemical and Biophysical Research Communications, 1981, 103, 667-673.	2.1	23

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37	Interactions between doxorubicin and the human iron regulatory system. Biochimica Et Biophysica Acta - Molecular Cell Research, 2003, 1593, 209-218.	4.1	23
38	Resonance Raman spectroscopy of [2Feâˆ'2X]2+ (X = S, Se) clusters in ferredoxins. BBA - Proteins and Proteomics, 1986, 873, 108-118.	2.1	22
39	Design and functional expression in Escherichia coli of a synthetic gene encoding Clostridium pasteurianum 2[4Fe-4S] ferredoxin. Biochemical and Biophysical Research Communications, 1992, 185, 341-349.	2.1	22
40	Electron transfer properties of ironâ€"sulfur proteins. Journal of Inorganic Biochemistry, 2000, 79, 83-91.	3.5	22
41	Human mesenchymal stem cells improve rat islet functionality under cytokine stress with combined upregulation of heme oxygenase-1 and ferritin. Stem Cell Research and Therapy, 2019, 10, 85.	5.5	21
42	Chronic Exposure to Low-Level Cadmium in Diabetes: Role of Oxidative Stress and Comparison with Polychlorinated Biphenyls. Current Drug Targets, 2016, 17, 1385-1413.	2.1	21
43	Impact of maternal low-level cadmium exposure on glucose and lipid metabolism of the litter at different ages after weaning. Chemosphere, 2019, 219, 109-121.	8.2	17
44	A zinc-resistant human epithelial cell line is impaired in cadmium and manganese import. Toxicology and Applied Pharmacology, 2008, 230, 312-319.	2.8	15
45	Mitochondrial Morphology and Function of the Pancreatic Î²-Cells INS-1 Model upon Chronic Exposure to Sub-Lethal Cadmium Doses. Toxics, 2018, 6, 20.	3.7	15
46	Sequential assignments by1H 2D NMR of oxidized ferredoxins fromClostridium pasteurianum andClostridium acidurici. Magnetic Resonance in Chemistry, 1993, 31, S27-S33.	1.9	14
47	The influence of conserved aromatic residues on the electron transfer reactivity of 2[4Fe-4S] ferredoxins. BBA - Proteins and Proteomics, 1996, 1295, 201-208.	2.1	14
48	Folding and turnover of human iron regulatory proteinâ€ƒ1 depend on its subcellular localization. FEBS Journal, 2007, 274, 1083-1092.	4.7	13
49	Zinc adaptation and resistance to cadmium toxicity in mammalian cells: Molecular insight by proteomic analysis. Proteomics, 2008, 8, 2244-2255.	2.2	13
50	Cellular Dynamics of Transition Metal Exchange on Proteins: A Challenge but a Bonanza for Coordination Chemistry. Biomolecules, 2020, 10, 1584.	4.0	13
51	Resonance Raman spectroscopy of Azotobacter vinelandii ferredoxin I. FEBS Letters, 1983, 163, 212-216.	2.8	12
52	Nuclear-Magnetic-Resonance Determination of the Electron Self-Exchange Rate Constant of Clostridium pasteurianum Rubredoxin. FEBS Journal, 1996, 238, 346-349.	0.2	12
53	Association between iron level, glucose impairment and increased DNA damage during pregnancy. Journal of Trace Elements in Medicine and Biology, 2017, 43, 52-57.	3.0	10
54	A role for lysosomes in the turnover of human iron regulatory protein 2. International Journal of Biochemistry and Cell Biology, 2008, 40, 2826-2832.	2.8	9

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55	The SOUL family of heme-binding proteins: Structure and function 15Âyears later. Coordination Chemistry Reviews, 2021, 448, 214189.	18.8	9
56	An anionic six-coordinate high-spin iron(III) porphyrin. Polyhedron, 1982, 1, 737-738.	2.2	7
57	Information about the biologically relevant properties of Clostridium pasteurianum rubredoxin obtained from modeling and dynamics simulations of molecular variants. Theoretical Chemistry Accounts, 1999, 101, 223-227.	1.4	5
58	Iron regulatory protein 1 is not an early target of cadmium toxicity in mice, but it is sensitive to cadmium stress in a human epithelial cell line. Biochemistry and Cell Biology, 2008, 86, 416-424.	2.0	5
59	Theoretical Modeling of Oral Glucose Tolerance Tests Guides the Interpretation of the Impact of Perinatal Cadmium Exposure on the Offspringâ€™s Glucose Homeostasis. Toxics, 2020, 8, 30.	3.7	5
60	Preparation and intramolecular electron-transfer rate constant for the ruthenium-modified selenium-substituted [4Feâ€"4Se] high-potential protein from Chromatium vinosum and related studies. Journal of the Chemical Society Dalton Transactions, 1993, , 643-647.	1.1	4
61	The iron regulatory proteins are defective in repressing translation<i>via</i>exogenous 5â€² iron responsive elements despite their relative abundance in leukemic cellular models. Metallomics, 2018, 10, 639-649.	2.4	4
62	Threshold in the toxicology of metals: Challenges and pitfalls of the concept. Current Opinion in Toxicology, 2020, 19, 28-33.	5.0	4
63	Low-level cadmium doses do not jeopardize the insulin secretion pathway of Î²-cell models until the onset of cell death. Journal of Trace Elements in Medicine and Biology, 2021, 68, 126834.	3.0	3
64	Iron-Sulfur Cluster Proteins, Ferredoxins. , 2013, , 1044-1053.		1
65	Iron and Oxidative Stress in Gestational Diabetes. , 2018, , 479-491.		0
66	Insight into the reduction potentials ofAllochromatium vinosum-like ferredoxins. Acta Crystallographica Section A: Foundations and Advances, 2009, 65, s172-s172.	0.3	0
67	Cadmium Exposure, Cellular and Molecular Adaptations. , 2013, , 364-371.		0