Marco T Nunez

List of Publications by Year
in descending order

102	5,043	94381 37	98753 67
papers	citations	h-index	g-index

104	104	104	6432
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Iron and copper metabolism. Molecular Aspects of Medicine, 2005, 26, 313-327.	2.7	404
2	Divalent metal transporter 1 (DMT1) contributes to neurodegeneration in animal models of Parkinson's disease. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18578-18583.	3.3	354
3	Inflammation alters the expression of <scp>DMT</scp>1, <scp>FPN</scp>1 and hepcidin, and it causes iron accumulation in central nervous system cells. Journal of Neurochemistry, 2013, 126, 541-549.	2.1	288
4	DMT1, a physiologically relevant apical Cu¹⁺transporter of intestinal cells. American Journal of Physiology - Cell Physiology, 2003, 284, C1525-C1530.	2.1	220
5	The interplay between iron accumulation, mitochondrial dysfunction, and inflammation during the execution step of neurodegenerative disorders. Frontiers in Pharmacology, 2014, 5, 38.	1.6	186
6	Iron toxicity in neurodegeneration. BioMetals, 2012, 25, 761-776.	1.8	155
7	Hepcidin inhibits apical iron uptake in intestinal cells. American Journal of Physiology - Renal Physiology, 2008, 294, G192-G198.	1.6	137
8	Mitochondrial iron homeostasis and its dysfunctions in neurodegenerative disorders. Mitochondrion, 2015, 21, 92-105.	1.6	128
9	Structure and function of amyloid in Alzheimer's disease. Progress in Neurobiology, 2004, 74, 323-349.	2.8	126
10	Iron Mediates N-Methyl-d-aspartate Receptor-dependent Stimulation of Calcium-induced Pathways and Hippocampal Synaptic Plasticity. Journal of Biological Chemistry, 2011, 286, 13382-13392.	1.6	121
11	Caco-2 Intestinal Epithelial Cells Absorb Soybean Ferritin by Î¼2 (AP2)-Dependent Endocytosis. Journal of Nutrition, 2008, 138, 659-666.	1.3	110
12	Iron-induced oxidative stress modify tau phosphorylation patterns in hippocampal cell cultures. BioMetals, 2003, 16, 215-223.	1.8	107
13	Inhibition of iron and copper uptake by iron, copper and zinc. Biological Research, 2006, 39, 95-102.	1.5	105
14	New Perspectives in Iron Chelation Therapy for the Treatment of Neurodegenerative Diseases. Pharmaceuticals, 2018, 11, 109.	1.7	101
15	Absorption of Iron from Ferritin Is Independent of Heme Iron and Ferrous Salts in Women and Rat Intestinal Segments3. Journal of Nutrition, 2012, 142, 478-483.	1.3	97
16	Oxidative stress promotes Ï„ dephosphorylation in neuronal cells: the roles of cdk5 and PP1. Free Radical Biology and Medicine, 2004, 36, 1393-1402.	1.3	79
17	A Role for Reactive Oxygen/Nitrogen Species and Iron on Neuronal Synaptic Plasticity. Antioxidants and Redox Signaling, 2007, 9, 245-255.	2.5	78
18	Coumarin-Based Fluorescent Probes for Dual Recognition of Copper(II) and Iron(III) Ions and Their Application in Bio-Imaging. Sensors, 2014, 14, 1358-1371.	2.1	76

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19	Calcium, iron and neuronal function. IUBMB Life, 2007, 59, 280-285.	1.5	74
20	The dopamine metabolite aminochrome inhibits mitochondrial complex I and modifies the expression of iron transporters DMT1 and FPN1. BioMetals, 2012, 25, 795-803.	1.8	74
21	Abnormal iron metabolism and oxidative stress in mice expressing a mutant form of the ferritin light polypeptide gene. Journal of Neurochemistry, 2009, 109, 1067-1078.	2.1	66
22	Iron homeostasis in neuronal cells: a role for IREG1. BMC Neuroscience, 2005, 6, 3.	0.8	60
23	Effect of mitochondrial complex I inhibition on Feâ€“S cluster protein activity. Biochemical and Biophysical Research Communications, 2011, 409, 241-246.	1.0	60
24	Dissecting the role of redox signaling in neuronal development. Journal of Neurochemistry, 2016, 137, 506-517.	2.1	59
25	Effect of iron on the activation of the MAPK/ERK pathway in PC12 neuroblastoma cells. Biological Research, 2006, 39, 189-90.	1.5	58
26	Design and synthesis of a new coumarin-based â€˜turn-onâ€™ fluorescent probe selective for Cu+2. Tetrahedron Letters, 2012, 53, 5280-5283.	0.7	50
27	Hepcidin attenuates amyloid betaâ€induced inflammatory and proâ€oxidant responses in astrocytes and microglia. Journal of Neurochemistry, 2017, 142, 140-152.	2.1	49
28	Inflaming the Brain with Iron. Antioxidants, 2021, 10, 61.	2.2	49
29	Progressive iron accumulation induces a biphasic change in the glutathione content of neuroblastoma cells. Free Radical Biology and Medicine, 2004, 37, 953-960.	1.3	48
30	Parkinsonâ€™s Disease: The Mitochondria-Iron Link. Parkinson's Disease, 2016, 2016, 1-21.	0.6	48
31	An oxidative stress-mediated positive-feedback iron uptake loop in neuronal cells. Journal of Neurochemistry, 2002, 82, 240-248.	2.1	46
32	Clathrin-Mediated Endocytosis of Soybean Ferritin by Caco-2 Cells.. Blood, 2006, 108, 1571-1571.	0.6	46
33	Noxious Ironâ€“Calcium Connections in Neurodegeneration. Frontiers in Neuroscience, 2019, 13, 48.	1.4	44
34	The novel mitochondrial iron chelator 5-((methylamino)methyl)-8-hydroxyquinoline protects against mitochondrial-induced oxidative damage and neuronal death. Biochemical and Biophysical Research Communications, 2015, 463, 787-792.	1.0	42
35	Oligodendrocytes: Functioning in a Delicate Balance Between High Metabolic Requirements and Oxidative Damage. Advances in Experimental Medicine and Biology, 2016, 949, 167-181.	0.8	42
36	Copper overload affects copper and iron metabolism in Hep-G2 cells. American Journal of Physiology - Renal Physiology, 2004, 287, G27-G32.	1.6	41

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37	Iron-induced oxidative stress up-regulates calreticulin levels in intestinal epithelial (Caco-2) cells. Journal of Cellular Biochemistry, 2001, 82, 660-665.	1.2	39
38	Iron induces protection and necrosis in cultured cardiomyocytes: Role of reactive oxygen species and nitric oxide. Free Radical Biology and Medicine, 2010, 48, 526-534.	1.3	39
39	Iron supply determines apical/basolateral membrane distribution of intestinal iron transporters DMT1 and ferroportin 1. American Journal of Physiology - Cell Physiology, 2010, 298, C477-C485.	2.1	38
40	Kinetic characterization of reductant dependent processes of iron mobilization from endocytic vesicles. Biochemistry, 1992, 31, 5820-5830.	1.2	37
41	Increased Hippocampal Expression of the Divalent Metal Transporter 1 (DMT1) mRNA Variants 1B and +IRE and DMT1 Protein After NMDA-Receptor Stimulation or Spatial Memory Training. Neurotoxicity Research, 2010, 17, 238-247.	1.3	37
42	Mathematical modeling of the dynamic storage of iron in ferritin. BMC Systems Biology, 2010, 4, 147.	3.0	35
43	The calciumâ€“iron connection in ferroptosis-mediated neuronal death. Free Radical Biology and Medicine, 2021, 175, 28-41.	1.3	35
44	HFE inhibits apical iron uptake by intestinal epithelial (Cacoâ€2) cells. FASEB Journal, 2001, 15, 1276-1278.	0.2	34
45	Design, synthesis and cellular dynamics studies in membranes of a new coumarin-based â€œturn-offâ€• fluorescent probe selective for Fe2+. European Journal of Medicinal Chemistry, 2013, 67, 60-63.	2.6	34
46	Neuroprotective Effect of a New 7,8-Dihydroxycoumarin-Based Fe2+/Cu2+Chelator in Cell and Animal Models of Parkinsonâ€™s Disease. ACS Chemical Neuroscience, 2017, 8, 178-185.	1.7	34
47	Iron-induced oxidative damage in colon carcinoma (caco-2) cells. Free Radical Research, 2001, 34, 57-68.	1.5	32
48	Parallels and contrasts between iron and copper metabolism. BioMetals, 2003, 16, 1-8.	1.8	31
49	Iron overloadâ€“modulated nuclear factor kappa-B activation in human endometrial stromal cells as a mechanism postulated in endometriosis pathogenesis. Fertility and Sterility, 2015, 103, 439-447.	0.5	31
50	Transferrin-binding and iron-binding proteins of rabbit reticulocyte plasma membranes. Biochimica Et Biophysica Acta - Biomembranes, 1980, 598, 293-304.	1.4	30
51	Apotransferrin and Holotransferrin Undergo Different Endocytic Cycles in Intestinal Epithelia (Caco-2) Cells. Journal of Biological Chemistry, 1997, 272, 19425-19428.	1.6	29
52	The development of a fluorescence turn-on sensor for cysteine, glutathione and other biothiols. A kinetic study. Tetrahedron Letters, 2011, 52, 6606-6609.	0.7	28
53	Regulatory mechanisms of intestinal iron absorptionâ€"Uncovering of a fastâ€response mechanism based on DMT1 and ferroportin endocytosis. BioFactors, 2010, 36, 88-97.	2.6	27
54	Effect of Copper, Cadmium, Mercury, Manganese and Lead on Fe²⁺ and Fe³⁺ Absorption in Perfused Mouse Intestine. Digestion, 1998, 59, 671-675.	1.2	25

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55	Ryanodine receptor-mediated Ca2+ release underlies iron-induced mitochondrial fission and stimulates mitochondrial Ca2+ uptake in primary hippocampal neurons. Frontiers in Molecular Neuroscience, 2014, 7, 13.	1.4	25
56	Cell death induced by mitochondrial complex I inhibition is mediated by Iron Regulatory Protein 1. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2017, 1863, 2202-2209.	1.8	25
57	Overexpression of the Ferritin Iron-responsive Element Decreases the Labile Iron Pool and Abolishes the Regulation of Iron Absorption by Intestinal Epithelial (Caco-2) Cells. Journal of Biological Chemistry, 2000, 275, 1651-1655.	1.6	24
58	Iron-activated iron uptake: a positive feedback loop mediated by iron regulatory protein 1. BioMetals, 2003, 16, 83-90.	1.8	24
59	Transferrin stimulates iron absorption, exocytosis, and secretion in cultured intestinal cells. American Journal of Physiology - Cell Physiology, 1999, 276, C1085-C1090.	2.1	23
60	Iron and glutathione at the crossroad of redox metabolism in neurons. Biological Research, 2006, 39, 157-65.	1.5	22
61	Regulation of transepithelial transport of iron by hepcidin. Biological Research, 2006, 39, 191-3.	1.5	22
62	Assay and characteristics of the iron binding moiety of reticulocyte endocytic vesicles. Journal of Membrane Biology, 1989, 107, 129-135.	1.0	20
63	A selective fluorescent probe for the detection of mercury (II) in aqueous media and its applications in living cells. Tetrahedron Letters, 2012, 53, 6598-6601.	0.7	20
64	Intestinal Epithelia (Caco-2) Cells Acquire Iron through the Basolateral Endocytosis of Transferrin. Journal of Nutrition, 1996, 126, 2151-2158.	1.3	19
65	Iron Chelators and Antioxidants Regenerate Neuritic Tree and Nigrostriatal Fibers of MPP+/MPTP-Lesioned Dopaminergic Neurons. PLoS ONE, 2015, 10, e0144848.	1.1	19
66	Reactive oxygen species released from astrocytes treated with amyloid beta oligomers elicit neuronal calcium signals that decrease phospho-Ser727-STAT3 nuclear content. Free Radical Biology and Medicine, 2018, 117, 132-144.	1.3	19
67	A coumarinylaldoxime as a specific sensor for Cu2+ and its biological application. Tetrahedron Letters, 2014, 55, 873-876.	0.7	18
68	Effect of ascorbate in the reduction of transferrin-associated iron in endocytic vesicles. Journal of Bioenergetics and Biomembranes, 1992, 24, 227-233.	1.0	17
69	Apical distribution of HFEâ€“Î²2-microglobulin is associated with inhibition of apical iron uptake in intestinal epithelia cells. BioMetals, 2006, 19, 379-388.	1.8	17
70	Upregulation of Î³-glutamate-cysteine ligase as part of the long-term adaptation process to iron accumulation in neuronal SH-SY5Y cells. American Journal of Physiology - Cell Physiology, 2007, 292, C2197-C2203.	2.1	17
71	Endocytic pathway of exogenous iron-loaded ferritin in intestinal epithelial (Caco-2) cells. American Journal of Physiology - Renal Physiology, 2013, 304, G655-G661.	1.6	17
72	Kinetics of iron passage through subcellular compartments of rabbit reticulocytes. Journal of Membrane Biology, 1991, 119, 141-149.	1.0	16

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73	Iron mediates neuritic tree collapse in mesencephalic neurons treated with 1-methyl-4-phenylpyridinium (MPP+). Journal of Neural Transmission, 2011, 118, 421-431.	1.4	16
74	Iron-induced reactive oxygen species mediate transporter DMT1 endocytosis and iron uptake in intestinal epithelial cells. American Journal of Physiology - Cell Physiology, 2015, 309, C558-C567.	2.1	15
75	Development of an iron-selective antioxidant probe with protective effects on neuronal function. PLoS ONE, 2017, 12, e0189043.	1.1	15
76	Coumarin-Chalcone Hybrids as Inhibitors of MAO-B: Biological Activity and In Silico Studies. Molecules, 2021, 26, 2430.	1.7	15
77	The cellular mechanisms of body iron homeostasis. Biological Research, 2000, 33, 133-42.	1.5	15
78	Quiescence induced by iron challenge protects neuroblastoma cells from oxidative stress. Journal of Neurochemistry, 2006, 98, 11-19.	2.1	14
79	Ethanol increases tumor necrosis factor-alpha receptor-1 (TNF-R1) levels in hepatic, intestinal, and cardiac cells. Alcohol, 2004, 33, 9-15.	0.8	14
80	Synthesis and characterization of a novel fluorescent and colorimetric probe for the detection of mercury (II) even in the presence of relevant biothiols. Tetrahedron Letters, 2015, 56, 5761-5766.	0.7	13
81	Sub-lethal levels of amyloid Î²-peptide oligomers decrease non-transferrin-bound iron uptake and do not potentiate iron toxicity in primary hippocampal neurons. BioMetals, 2012, 25, 805-813.	1.8	12
82	Detection of SO₂ derivatives using a new chalco-coumarin derivative in cationic micellar media: application to real samples. RSC Advances, 2018, 8, 31261-31266.	1.7	11
83	Inhibitory effect of a toxic peptide isolated from a waterbloom of Microcystis sp. (cyanobacteria) on iron uptake by rabbit reticulocytes. Toxicon, 1990, 28, 1325-1332.	0.8	10
84	Hereditary hemochromatosis: An opportunity for gene therapy. Biological Research, 2006, 39, 113-24.	1.5	10
85	Endometrial expression and inÂvitro modulation of the iron transporter divalent metal transporter-1: implications for endometriosis. Fertility and Sterility, 2016, 106, 393-401.	0.5	10
86	The Mechanisms for Regulating Absorption of Fe Bis-Glycine Chelate and Fe-Ascorbate in Caco-2 Cells Are Similar. Journal of Nutrition, 2004, 134, 395-398.	1.3	9
87	Endocytic vesicles contain a calmodulin-activated Ca2+ pump that mediates the inhibition of acidification by calcium. Biochimica Et Biophysica Acta - Biomembranes, 1990, 1028, 21-24.	1.4	8
88	Antioxidant responses of cortex neurons to iron loading. Biological Research, 2006, 39, 103-4.	1.5	8
89	Mathematical Modeling of Intestinal Iron Absorption Using Genetic Programming. PLoS ONE, 2017, 12, e0169601.	1.1	8
90	New perspectives in iron chelation therapy for the treatment of Parkinsonâ€™s disease. Neural Regeneration Research, 2019, 14, 1905.	1.6	8

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91	Mathematical modeling of the relocation of the divalent metal transporter DMT1 in the intestinal iron absorption process. PLoS ONE, 2019, 14, e0218123.	1.1	7
92	Mechanism study of the thiol-addition reaction to benzothiazole derivative for sensing endogenous thiols. Tetrahedron Letters, 2015, 56, 2437-2440.	0.7	6
93	Iron, the endolysosomal system and neuroinflammation: a matter of balance. Neural Regeneration Research, 2022, 17, 1003.	1.6	6
94	Transferrin and iron salts modulate differently tumor necrosis factor-Î± secretion by cultured human mononuclear cells1â€"3. Nutrition Research, 1999, 19, 651-661.	1.3	5
95	Antisense gene delivered by an adenoassociated viral vector inhibits iron uptake in human intestinal cells: Potential application in hemochromatosis. Biochemical Pharmacology, 2005, 69, 1559-1566.	2.0	5
96	Substituent effects on reactivity of 3-cinnamoylcoumarins with thiols of biological interest. RSC Advances, 2014, 4, 697-704.	1.7	5
97	Synthesis of coumarin derivatives as fluorescent probes for membrane and cell dynamics studies. European Journal of Medicinal Chemistry, 2014, 76, 79-86.	2.6	5
98	Tumour necrosis factor-Î± transcription in transferrin-stimulated human blood mononuclear cells: is transferrin receptor involved in the signalling mechanism?. British Journal of Haematology, 2003, 120, 829-835.	1.2	3
99	A Role for Reactive Oxygen/Nitrogen Species and Iron on Neuronal Synaptic Plasticity. Antioxidants and Redox Signaling, 2006, .	2.5	1
100	Characterization of mitochondrial iron uptake in HepG2 cells. Biological Research, 2006, 39, 199-201.	1.5	1
101	Iron Neurotoxicity in Parkinsonâ€™s Disease. , 2014, , 789-818.		1
102	Iron Neurotoxicity in Parkinsonâ€™s Disease. , 2021, , 1-24.		0