Sonia Levi

List of Publications by Year
in descending order

131 papers	9,610 citations	30047 54 h-index	38368 95 g-index
131 all docs	131 docs citations	131 times ranked	6896 citing authors

#	Article	IF	Citations
1	Solving the structure of human H ferritin by genetically engineering intermolecular crystal contacts. Nature, 1991, 349, 541-544.	13.7	758
2	Ferritin, iron homeostasis, and oxidative damage1,2 1Guest Editor: Mario Comporti 2This article is part of a series of reviews on â€œIron and Cellular Redox Status.â€•The full list of papers may be found on the homepage of the journal.. Free Radical Biology and Medicine, 2002, 33, 457-463.	1.3	452
3	A Human Mitochondrial Ferritin Encoded by an Intronless Gene. Journal of Biological Chemistry, 2001, 276, 24437-24440.	1.6	344
4	Structure, function, and evolution of ferritins. Journal of Inorganic Biochemistry, 1992, 47, 161-174.	1.5	306
5	The human counterpart of zebrafish shiraz shows sideroblastic-like microcytic anemia and iron overload. Blood, 2007, 110, 1353-1358.	0.6	287
6	Identification of the ferroxidase centre in ferritin. FEBS Letters, 1989, 254, 207-210.	1.3	278
7	Cytosolic and mitochondrial ferritins in the regulation of cellular iron homeostasis and oxidative damage. Biochimica Et Biophysica Acta - General Subjects, 2010, 1800, 783-792.	1.1	248
8	Early Embryonic Lethality of H Ferritin Gene Deletion in Mice. Journal of Biological Chemistry, 2000, 275, 3021-3024.	1.6	232
9	Overexpression of Wild Type and Mutated Human Ferritin H-chain in HeLa Cells. Journal of Biological Chemistry, 2000, 275, 25122-25129.	1.6	222
10	Reconstitution of manganese oxide cores in horse spleen and recombinant ferritins. Journal of Inorganic Biochemistry, 1995, 58, 59-68.	1.5	187
11	Mitochondrial ferritin expression in erythroid cells from patients with sideroblastic anemia. Blood, 2003, 101, 1996-2000.	0.6	181
12	The Role of the L-Chain in Ferritin Iron Incorporation. Journal of Molecular Biology, 1994, 238, 649-654.	2.0	170
13	Mitochondrial Ferritin: A New Player in Iron Metabolism. Blood Cells, Molecules, and Diseases, 2002, 29, 376-383.	0.6	165
14	Influence of site-directed modifications on the formation of iron cores in ferritin. Journal of Molecular Biology, 1991, 221, 1443-1452.	2.0	162
15	RNA silencing of the mitochondrial ABCB7 transporter in HeLa cells causes an iron-deficient phenotype with mitochondrial iron overload. Blood, 2007, 109, 3552-3559.	0.6	156
16	Multiple Pathways for Mineral Core Formation in Mammalian Apoferritin. The Role of Hydrogen Peroxideâ€. Biochemistry, 2003, 42, 3142-3150.	1.2	151
17	The role of iron in mitochondrial function. Biochimica Et Biophysica Acta - General Subjects, 2009, 1790, 629-636.	1.1	151
18	Mitochondrial Ferritin Expression in Adult Mouse Tissues. Journal of Histochemistry and Cytochemistry, 2007, 55, 1129-1137.	1.3	147

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19	Neurodegeneration with brain iron accumulation: update on pathogenic mechanisms. Frontiers in Pharmacology, 2014, 5, 99.	1.6	141
20	Human Mitochondrial Ferritin Expressed in HeLa Cells Incorporates Iron and Affects Cellular Iron Metabolism. Journal of Biological Chemistry, 2002, 277, 22430-22437.	1.6	139
21	Expression and structural and functional properties of human ferritin L-chain from Escherichia coli. Biochemistry, 1989, 28, 5179-5184.	1.2	132
22	The dentate nucleus in Friedreichâ€™s ataxia: the role of iron-responsive proteins. Acta Neuropathologica, 2007, 114, 163-173.	3.9	130
23	Mitochondrial ferritin limits oxidative damage regulating mitochondrial iron availability: hypothesis for a protective role in Friedreich ataxia. Human Molecular Genetics, 2008, 18, 1-11.	1.4	128
24	Evidence that the specificity of iron incorporation into homopolymers of human ferritin L- and H-chains is conferred by the nucleation and ferroxidase centres. Biochemical Journal, 1996, 314, 139-144.	1.7	125
25	Mitochondrial ferritin. International Journal of Biochemistry and Cell Biology, 2004, 36, 1887-1889.	1.2	119
26	Flow cytometry evaluation of erythroid dysplasia in patients with myelodysplastic syndrome. Leukemia, 2006, 20, 549-555.	3.3	118
27	Multiple mechanisms of iron-induced ferritin synthesis in HeLa cells. Biochemical and Biophysical Research Communications, 1985, 133, 314-321.	1.0	117
28	Ferroxidase kinetics of human liver apoferritin, recombinant H-chain apoferritin, and site-directed mutants. Biochemistry, 1993, 32, 9362-9369.	1.2	114
29	Analysis of the biologic functions of H- and L-ferritins in HeLa cells by transfection with siRNAs and cDNAs: evidence for a proliferative role of L-ferritin. Blood, 2004, 103, 2377-2383.	0.6	112
30	Crystal Structure and Biochemical Properties of the Human Mitochondrial Ferritin and its Mutant Ser144Ala. Journal of Molecular Biology, 2004, 340, 277-293.	2.0	111
31	The Pathogenesis of Cardiomyopathy in Friedreich Ataxia. PLoS ONE, 2015, 10, e0116396.	1.1	106
32	The expression of human mitochondrial ferritin rescues respiratory function infrataxin-deficient yeast. Human Molecular Genetics, 2004, 13, 2279-2288.	1.4	100
33	Functional and Immunological Analysis of Recombinant Mouse H- and L-Ferritins from Escherichia coli. Protein Expression and Purification, 2000, 19, 212-218.	0.6	99
34	Immunochemical characterization of human liver and heart ferritins with monoclonal antibodies. BBA - Proteins and Proteomics, 1986, 872, 61-71.	2.1	92
35	Evidence that residues exposed on the three-fold channels have active roles in the mechanism of ferritin iron incorporation. Biochemical Journal, 1996, 317, 467-473.	1.7	92
36	Pantothenate kinase-associated neurodegeneration: altered mitochondria membrane potential and defective respiration in Pank2 knock-out mouse model. Human Molecular Genetics, 2012, 21, 5294-5305.	1.4	87

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37	Analysis of Ferritins in Lymphoblastoid Cell Lines and in the Lens of Subjects With Hereditary Hyperferritinemia-Cataract Syndrome. Blood, 1998, 91, 4180-4187.	0.6	85
38	Mutated recombinant human heavy-chain ferritins and myelosuppression in vitro and in vivo: a link between ferritin ferroxidase activity and biological function.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 770-774.	3.3	82
39	Genetic hyperferritinaemia and reticuloendothelial iron overload associated with a three base pair deletion in the coding region of the ferroportin gene (SLC11A3). British Journal of Haematology, 2002, 119, 539-546.	1.2	80
40	Iron detoxifying activity of ferritin. FEBS Letters, 1990, 277, 119-122.	1.3	79
41	Unique Iron Binding and Oxidation Properties of Human Mitochondrial Ferritin: A Comparative Analysis with Human H-chain Ferritin. Journal of Molecular Biology, 2005, 347, 543-554.	2.0	79
42	Defective targeting of hemojuvelin to plasma membrane is a common pathogenetic mechanism in juvenile hemochromatosis. Blood, 2007, 109, 4503-4510.	0.6	78
43	Coenzyme A corrects pathological defects in human neurons of <scp>PANK</scp> 2â€associated neurodegeneration. EMBO Molecular Medicine, 2016, 8, 1197-1211.	3.3	74
44	Neuroferritinopathy: a neurodegenerative disorder associated with L-ferritin mutation. Best Practice and Research in Clinical Haematology, 2005, 18, 265-276.	0.7	73
45	Oxidative stress and cell death in cells expressing L-ferritin variants causing neuroferritinopathy. Neurobiology of Disease, 2010, 37, 77-85.	2.1	72
46	Overexpression of the hereditary hemochromatosis protein, HFE, in HeLa cells induces an iron-deficient phenotype. FEBS Letters, 1999, 460, 149-152.	1.3	71
47	Iron availability is increased in individual human ovarian follicles in close proximity to an endometrioma compared with distal ones. Human Reproduction, 2014, 29, 577-583.	0.4	70
48	Mitochondrial Ferritin in the Substantia Nigra in Restless Legs Syndrome. Journal of Neuropathology and Experimental Neurology, 2009, 68, 1193-1199.	0.9	68
49	Role of iron and ferritin in TNFÎ±-induced apoptosis in HeLa cells. FEBS Letters, 2003, 537, 187-192.	1.3	66
50	Functional roles of the ferritin receptors of human liver, hepatoma, lymphoid and erythroid cells. Journal of Inorganic Biochemistry, 1992, 47, 219-227.	1.5	64
51	Human serum ferritin G-peptide is recognized by anti-L ferritin subunit antibodies and concanavalin-A. British Journal of Haematology, 1987, 65, 235-237.	1.2	64
52	Clinical, biochemical and molecular findings in a series of families with hereditary hyperferritinaemia-cataract syndrome. British Journal of Haematology, 2001, 115, 334-340.	1.2	61
53	Mitochondrial iron and energetic dysfunction distinguish fibroblasts and induced neurons from pantothenate kinase-associated neurodegeneration patients. Neurobiology of Disease, 2015, 81, 144-153.	2.1	61
54	Neurodegeneration with Brain Iron Accumulation Disorders: Valuable Models Aimed at Understanding the Pathogenesis of Iron Deposition. Pharmaceuticals, 2019, 12, 27.	1.7	60

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55	Characterization of human ferritin H chain synthetized in Escherichia coli. Gene, 1987, 51, 269-274.	1.0	58
56	Relationship between TNF-Î± and iron metabolism in differentiating human monocytic THP-1 cells. British Journal of Haematology, 2000, 110, 978-984.	1.2	52
57	Relation of Cytosolic Iron Excess to Cardiomyopathy of Friedreich's Ataxia. American Journal of Cardiology, 2012, 110, 1820-1827.	0.7	50
58	Neuroferritinopathy: From ferritin structure modification to pathogenetic mechanism. Neurobiology of Disease, 2015, 81, 134-143.	2.1	50
59	Effects of modifications near the 2-, 3- and 4-fold symmetry axes on human ferritin renaturation. Biochemical Journal, 1997, 322, 461-468.	1.7	49
60	Mutant Ferritin L-chains That Cause Neurodegeneration Act in a Dominant-negative Manner to Reduce Ferritin Iron Incorporation. Journal of Biological Chemistry, 2010, 285, 11948-11957.	1.6	48
61	Iron Oxidation and Core Formation in Recombinant Heteropolymeric Human Ferritins. Biochemistry, 2017, 56, 3900-3912.	1.2	48
62	Stem Cell Modeling of Neuroferritinopathy Reveals Iron as a Determinant of Senescence and Ferroptosis during Neuronal Aging. Stem Cell Reports, 2019, 13, 832-846.	2.3	46
63	Defining metal ion inhibitor interactions with recombinant human H- and L-chain ferritins and site-directed variants: an isothermal titration calorimetry study. Journal of Biological Inorganic Chemistry, 2003, 8, 489-497.	1.1	44
64	Skin fibroblasts from pantothenate kinase-associated neurodegeneration patients show altered cellular oxidative status and have defective iron-handling properties. Human Molecular Genetics, 2012, 21, 4049-4059.	1.4	44
65	Transient overexpression of human H- and L-ferritin chains in COS cells. Biochemical Journal, 1998, 330, 315-320.	1.7	43
66	A new mutation (G51C) in the iron-responsive element (IRE) of l -ferritin associated with hyperferritinaemia-cataract syndrome decreases the binding affinity of the mutated IRE for iron-regulatory proteins. British Journal of Haematology, 2000, 108, 480-482.	1.2	39
67	Human L-ferritin deficiency is characterized by idiopathic generalized seizures and atypical restless leg syndrome. Journal of Experimental Medicine, 2013, 210, 1779-1791.	4.2	39
68	Microelectronic DNA chip for hereditary hyperferritinemia cataract syndrome, a model for large-scale analysis of disorders of iron metabolism. Human Mutation, 2006, 27, 201-208.	1.1	38
69	Characterization of the l-ferritin variant 460InsA responsible of a hereditary ferritinopathy disorder. Neurobiology of Disease, 2006, 23, 644-652.	2.1	37
70	Structural and Functional Studies of Human Ferritin H and L Chains1. Current Studies in Hematology and Blood Transfusion, 1991, 58, 127-131.	0.2	35
71	A novel neuroferritinopathy mouse model (FTL 498InsTC) shows progressive brain iron dysregulation, morphological signs of early neurodegeneration and motor coordination deficits. Neurobiology of Disease, 2015, 81, 119-133.	2.1	35
72	Peroxiredoxin-2: A Novel Regulator of Iron Homeostasis in Ineffective Erythropoiesis. Antioxidants and Redox Signaling, 2018, 28, 1-14.	2.5	33

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73	Double-Gradient Denaturing Gradient Gel Electrophoresis Assay for Identification of L-Ferritin Iron-responsive Element Mutations Responsible for Hereditary Hyperferritinemia-Cataract Syndrome: Identification of the New Mutation C14G. Clinical Chemistry, 2001, 47, 491-497.	1.5	32
74	Over-expression of mitochondrial ferritin affects the JAK2/STAT5 pathway in K562 cells and causes mitochondrial iron accumulation. Haematologica, 2011, 96, 1424-1432.	1.7	31
75	Role of intracellular labile iron, ferritin, and antioxidant defence in resistance of chronically adapted Jurkat T cells to hydrogen peroxide. Free Radical Biology and Medicine, 2014, 68, 87-100.	1.3	31
76	Characteristics of a ferritinâ€binding protein present in human serum. British Journal of Haematology, 1987, 65, 489-493.	1.2	30
77	Development of an immunoassay for all human isoferritins, and its application to serum ferritin evaluation. Clinica Chimica Acta, 1989, 184, 197-206.	0.5	30
78	Case report: a subject with a mutation in the ATG start codon of L-ferritin has no haematological or neurological symptoms. Journal of Medical Genetics, 2004, 41, e81-e81.	1.5	30
79	Iron Homeostasis in Peripheral Nervous System, Still a Black Box?. Antioxidants and Redox Signaling, 2014, 21, 634-648.	2.5	30
80	Recombinant human hepcidin expressed in Escherichia coli isolates as an iron containing protein. Blood Cells, Molecules, and Diseases, 2005, 35, 177-181.	0.6	29
81	Peroxiredoxin-2 plays a pivotal role as multimodal cytoprotector in the early phase of pulmonary hypertension. Free Radical Biology and Medicine, 2017, 112, 376-386.	1.3	28
82	Ferroportin gene silencing induces iron retention and enhances ferritin synthesis in human macrophages. British Journal of Haematology, 2004, 127, 598-603.	1.2	27
83	A novel deletion of the l -ferritin iron-responsive element responsible for severe hereditary hyperferritinaemia-cataract syndrome. British Journal of Haematology, 2002, 116, 667-670.	1.2	26
84	H ferritin silencing induces protein misfolding in K562 cells: A Raman analysis. Free Radical Biology and Medicine, 2015, 89, 614-623.	1.3	26
85	Iron Administration Overcomes Resistance to Erastin-Mediated Ferroptosis in Ovarian Cancer Cells. Frontiers in Oncology, 2022, 12, 868351.	1.3	26
86	Study of FTMT and ABCA4 genes in a patient affected by age-related macular degeneration: identification and analysis of new mutations. Clinical Chemistry and Laboratory Medicine, 2012, 50, 1021-9.	1.4	24
87	Mitochondrial Ferritin Is a Hypoxia-Inducible Factor 1Î±-Inducible Gene That Protects from Hypoxia-Induced Cell Death in Brain. Antioxidants and Redox Signaling, 2019, 30, 198-212.	2.5	24
88	Analysis of ferritin genes in Parkinson disease. Clinical Chemistry and Laboratory Medicine, 2007, 45, 1450-6.	1.4	23
89	Characterization of human mitochondrial ferritin promoter: identification of transcription factors and evidences of epigenetic control. Scientific Reports, 2016, 6, 33432.	1.6	23
90	Identification of two novel mutations in the 5'-untranslated region of H-ferritin using denaturing high performance liquid chromatography scanning. Haematologica, 2003, 88, 1110-6.	1.7	23

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91	Blotting Analysis of Native IRP1:Â A Novel Approach to Distinguish the Different Forms of IRP1 in Cells and Tissuesâ€. Biochemistry, 2004, 43, 195-204.	1.2	22
92	Regulation of ferritin synthesis in malignant and non-malignant lymphoid cells. Biochemical and Biophysical Research Communications, 1986, 139, 652-657.	1.0	21
93	Characteristics of ferritins in human milk secretions: Similarities to serum and tissue isoferritins. Clinica Chimica Acta, 1986, 161, 201-208.	0.5	20
94	Ferritins in malignant and non-malignant lymphoid cells. British Journal of Haematology, 1986, 62, 105-110.	1.2	19
95	Harmful Iron-Calcium Relationship in Pantothenate kinase Associated Neurodegeneration. International Journal of Molecular Sciences, 2020, 21, 3664.	1.8	19
96	Massive iron accumulation in PKAN-derived neurons and astrocytes: light on the human pathological phenotype. Cell Death and Disease, 2022, 13, 185.	2.7	19
97	Iron Pathophysiology in Neurodegeneration with Brain Iron Accumulation. Advances in Experimental Medicine and Biology, 2019, 1173, 153-177.	0.8	18
98	Mitochondrial Ferritin: Its Role in Physiological and Pathological Conditions. Cells, 2021, 10, 1969.	1.8	17
99	A mutational analysis of the epitopes of recombinant human H-ferritin. BBA - Proteins and Proteomics, 1990, 1039, 197-203.	2.1	16
100	Binding and suppressive activity of human recombinant ferritins on erythroid cells. American Journal of Hematology, 1992, 39, 264-268.	2.0	15
101	Properties of ferritin from the earthworm Octolasium complanatum. BBA - Proteins and Proteomics, 1984, 787, 264-269.	2.1	14
102	Human ferritin H-chains can be obtained in non-assembled stable forms which have ferroxidase activity. FEBS Letters, 1993, 336, 309-312.	1.3	14
103	C29G in the iron-responsive element of l-ferritin: a new mutation associated with hyperferritinemia-cataract. Blood Cells, Molecules, and Diseases, 2004, 33, 31-34.	0.6	14
104	Regional and cellular distribution of mitochondrial ferritin in the mouse brain. Journal of Neuroscience Research, 2010, 88, 3133-3143.	1.3	14
105	Antibodies for denatured human H-ferritin stain only reticuloendothelial cells within the bone marrow. British Journal of Haematology, 1992, 81, 118-124.	1.2	13
106	Serum ferritin in type I diabetes. Clinica Chimica Acta, 1985, 152, 165-170.	0.5	11
107	Characteristics of the Membrane Receptor for Human H-Ferritin. Current Studies in Hematology and Blood Transfusion, 1991, 58, 164-170.	0.2	11
108	H and L ferritins in myocardium in iron overload. American Journal of Cardiology, 1991, 68, 1233-1236.	0.7	10

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109	Effects of mitochondrial ferritin overexpression in normal and sideroblastic erythroid progenitors. British Journal of Haematology, 2013, 161, 726-737.	1.2	10
110	Structural studies on recombinant human ferritins. Biochemical Society Transactions, 1990, 18, 1028-1029.	1.6	9
111	Sequence Variations in Mitochondrial Ferritin: Distribution in Healthy Controls and Different Types of Patients. Genetic Testing and Molecular Biomarkers, 2010, 14, 793-796.	0.3	9
112	Neuronal Ablation of CoA Synthase Causes Motor Deficits, Iron Dyshomeostasis, and Mitochondrial Dysfunctions in a CoPAN Mouse Model. International Journal of Molecular Sciences, 2020, 21, 9707.	1.8	9
113	The relevance of mitochondrial DNA variants fluctuation during reprogramming and neuronal differentiation of human iPSCs. Stem Cell Reports, 2021, 16, 1953-1967.	2.3	8
114	Unexplained isolated hyperferritinemia without iron overload. American Journal of Hematology, 2017, 92, 338-343.	2.0	7
115	Pathogenic mechanism and modeling of neuroferritinopathy. Cellular and Molecular Life Sciences, 2021, 78, 3355-3367.	2.4	7
116	Mitochondrial Ferritin Expression and Clonality of Hematopoiesis in Patients with Refractory Anemia with Ringed Sideroblasts.. Blood, 2005, 106, 3444-3444.	0.6	7
117	Crystallographic data for horse heart ferritin. FEBS Letters, 1984, 165, 63-66.	1.3	6
118	Measurement of Ferritin-Bearing Lymphocytes in Man. Preliminary Studies on the Use of Monoclonal Antibodies Specific for the L and H Subunits of Ferritin. Tumori, 1987, 73, 37-41.	0.6	5
119	Iron Oxidation in Sheep, Horse and Recombinant Human Apoferritins. Advances in Experimental Medicine and Biology, 1994, 356, 23-30.	0.8	5
120	PKAN hiPS-Derived Astrocytes Show Impairment of Endosomal Trafficking: A Potential Mechanism Underlying Iron Accumulation. Frontiers in Cellular Neuroscience, 0, 16, .	1.8	4
121	Ferritin-H and a Phytotherapeutic, Alone or Combined, Reprogram RBC Precursor Cells From SCD Patients to Produce Levels of Fetal Hemoglobin That Constitute a Phenotypic Cure for Sickle Cell As Well As Providing Resistance to Malaria and a Probable Treatment for Beta-Thalassemia. Blood, 2011, 118, 903-903.	0.6	3
122	Human serum ferritin Gâ€peptide is recognized by antiâ€L ferritin subunit antibodies and concanavalinâ€A. British Journal of Haematology, 1987, 65, 235-237.	1.2	2
123	Chemico-Physical and Functional Differences Between H and L Chains of Human Ferritin. Advances in Experimental Medicine and Biology, 1994, 356, 13-21.	0.8	2
124	Peroxiredoxin-2: A Novel Factor Involved in Iron Homeostasis. Blood, 2015, 126, 406-406.	0.6	1
125	Ferritin Heavy Chain Stimulates HbS-to-HbF Switching in Erythroid Precursor Cells from Sickle Cell Patients.. Blood, 2006, 108, 790-790.	0.6	1
126	Analysis of Ferritins in Lymphoblastoid Cell Lines and in the Lens of Subjects With Hereditary Hyperferritinemia-Cataract Syndrome. Blood, 1998, 91, 4180-4187.	0.6	1

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127	Data demonstrating the role of peroxiredoxin 2 as important anti-oxidant system in lung homeostasis. Data in Brief, 2017, 15, 376-381.	0.5	0
128	Flow Cytometry Evaluation of Erythroid Dysplasia in Patients with Myelodysplastic Syndrome.. Blood, 2004, 104, 2365-2365.	0.6	0
129	The Effects of Mitochondrial Ferritin Expression in Normal and Sideroblastic Erythropoiesis.. Blood, 2009, 114, 736-736.	0.6	0
130	Ultrastructure of Two Mutants in the H-Subunit of Recombinant Human Ferritin: Ordered Arrays Indicate Altered Surface Properties. Proceedings Annual Meeting Electron Microscopy Society of America, 1990, 48, 288-289.	0.0	0
131	Mechanisms of Ferritin Iron Incorporation: A Study with Recombinant and Mutant Human Ferritins. , 1991, , 339-348.		0