Mitchell D Knutson

List of Publications by Year
in descending order

81 papers	7,264 citations	76031 42 h-index	116156 66 g-index
82 all docs	82 docs citations	82 times ranked	8583 citing authors

#	Article	IF	Citations
1	Iron and manganese transport in mammalian systems. Biochimica Et Biophysica Acta - Molecular Cell Research, 2021, 1868, 118890.	1.9	30
2	Genetic screens reveal CCDC115 as a modulator of erythroid iron and heme trafficking. American Journal of Hematology, 2020, 95, 1085-1098.	2.0	10
3	Non-transferrin-bound iron transporters. Free Radical Biology and Medicine, 2019, 133, 101-111.	1.3	126
4	SLC39A14 deficiency alters manganese homeostasis and excretion resulting in brain manganese accumulation and motor deficits in mice. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E1769-E1778.	3.3	99
5	Mobilization of iron from ferritin: new steps and details. Metallomics, 2018, 10, 154-168.	1.0	40
6	A missense variant in SLC39A8 is associated with severe idiopathic scoliosis. Nature Communications, 2018, 9, 4171.	5.8	59
7	Metastatic cancers promote cachexia through ZIP14 upregulation in skeletal muscle. Nature Medicine, 2018, 24, 770-781.	15.2	121
8	Iron transport proteins: Gateways of cellular and systemic iron homeostasis. Journal of Biological Chemistry, 2017, 292, 12735-12743.	1.6	98
9	The plasma membrane metal-ion transporter ZIP14 contributes to nontransferrin-bound iron uptake by human Î²-cells. American Journal of Physiology - Cell Physiology, 2017, 312, C169-C175.	2.1	48
10	The Tumor Suppressor, P53, Decreases the Metal Transporter, ZIP14. Nutrients, 2017, 9, 1335.	1.7	24
11	Iron Transporters and Iron Homeostasis. , 2017, , 215-226.		0
12	Sirtuin 2 regulates cellular iron homeostasis via deacetylation of transcription factor NRF2. Journal of Clinical Investigation, 2017, 127, 1505-1516.	3.9	101
13	Measurement of Transferrin- and Non-transferrin-bound Iron Uptake by Mouse Tissues. Bio-protocol, 2016, 6, .	0.2	4
14	SLC39A14 Is Required for the Development of Hepatocellular Iron Overload in Murine Models of Hereditary Hemochromatosis. Cell Metabolism, 2015, 22, 138-150.	7.2	171
15	Prion protein functions as a ferrireductase partner for ZIP14 and DMT1. Free Radical Biology and Medicine, 2015, 84, 322-330.	1.3	67
16	An iron-regulated and glycosylation-dependent proteasomal degradation pathway for the plasma membrane metal transporter ZIP14. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9175-9180.	3.3	54
17	Microarray Analysis of Rat Pancreas Reveals Altered Expression of Alox15 and Regenerating Islet-Derived Genes in Response to Iron Deficiency and Overload. PLoS ONE, 2014, 9, e86019.	1.1	13
18	Hepatocyte divalent metal-ion transporter-1 is dispensable for hepatic iron accumulation and non-transferrin-bound iron uptake in mice. Hepatology, 2013, 58, 788-798.	3.6	72

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19	ZIP14 and DMT1 in the liver, pancreas, and heart are differentially regulated by iron deficiency and overload: implications for tissue iron uptake in iron-related disorders. Haematologica, 2013, 98, 1049-1057.	1.7	134
20	Fine-Mapping and Genetic Analysis of the Loci Affecting Hepatic Iron Overload in Mice. PLoS ONE, 2013, 8, e63280.	1.1	2
21	Impaired Iron Status in Aging Research. International Journal of Molecular Sciences, 2012, 13, 2368-2386.	1.8	81
22	ZIP8 Is an Iron and Zinc Transporter Whose Cell-surface Expression Is Up-regulated by Cellular Iron Loading. Journal of Biological Chemistry, 2012, 287, 34032-34043.	1.6	292
23	Hypoferraemia during the early inflammatory response is dependent on tumour necrosis factor activity in a murine model of protracted peritonitis. Molecular Medicine Reports, 2012, 6, 838-842.	1.1	7
24	Physiologic implications of metal-ion transport by ZIP14 and ZIP8. BioMetals, 2012, 25, 643-655.	1.8	203
25	Long-term perturbation of muscle iron homeostasis following hindlimb suspension in old rats is associated with high levels of oxidative stress and impaired recovery from atrophy. Experimental Gerontology, 2012, 47, 100-108.	1.2	37
26	Effect of dietary iron deficiency and overload on the expression of ZIP metal-ion transporters in rat liver. BioMetals, 2012, 25, 115-124.	1.8	35
27	Iron overload upregulates the expression of regenerating isletderived family genes in rat pancreas. FASEB Journal, 2012, 26, 641.25.	0.2	0
28	Iron transport ability of the Slc39a (ZIP) family of metalâ€ion transporters. FASEB Journal, 2012, 26, 641.24.	0.2	0
29	Role of the ironâ€import protein DMT1 (Divalent Metal Transporter 1) in liver iron uptake. FASEB Journal, 2012, 26, 641.27.	0.2	0
30	Role of clathrinâ€mediated endocytosis in transferrinâ€bound iron uptake by hepatocytes. FASEB Journal, 2012, 26, 641.23.	0.2	0
31	Metal transport, subcellular localization, and tissue distribution of Zip8, a Zip14 homologue. FASEB Journal, 2012, 26, 641.32.	0.2	1
32	Zip14 is a complex broad-scope metal-ion transporter whose functional properties support roles in the cellular uptake of zinc and nontransferrin-bound iron. American Journal of Physiology - Cell Physiology, 2011, 301, C862-C871.	2.1	177
33	Metabolic crossroads of iron and copper. Nutrition Reviews, 2010, 68, 133-147.	2.6	252
34	Anemic Copper-Deficient Rats, but Not Mice, Display Low Hepcidin Expression and High Ferroportin Levels. Journal of Nutrition, 2010, 140, 723-730.	1.3	22
35	ZRT/IRT-like Protein 14 (ZIP14) Promotes the Cellular Assimilation of Iron from Transferrin. Journal of Biological Chemistry, 2010, 285, 32141-32150.	1.6	139
36	Iron-Sensing Proteins that Regulate Hepcidin and Enteric Iron Absorption. Annual Review of Nutrition, 2010, 30, 149-171.	4.3	73

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37	Effect of dietary iron deficiency and overload on hepatic ZIP transporter expression in rats. FASEB Journal, 2010, 24, 717.9.	0.2	0
38	Iron Loading Increases Ferroportin Heterogeneous Nuclear RNA and mRNA Levels in Murine J774 Macrophages. Journal of Nutrition, 2009, 139, 434-438.	1.3	45
39	The dorsal root ganglion in Friedreichâ€™s ataxia. Acta Neuropathologica, 2009, 118, 763-776.	3.9	112
40	BMP6 is a key endogenous regulator of hepcidin expression and iron metabolism. Nature Genetics, 2009, 41, 482-487.	9.4	678
41	Uptake of Materials from the Nasal Cavity into the Blood and Brain. Annals of the New York Academy of Sciences, 2009, 1170, 623-628.	1.8	35
42	Into the matrix: regulation of the iron regulatory hormone hepcidin by matriptase-2. Nutrition Reviews, 2009, 67, 284-288.	2.6	10
43	Mechanisms of iron release from lysosomes. FASEB Journal, 2009, 23, 921.11.	0.2	0
44	Copper deficiency increases ferroportin expression in rats. FASEB Journal, 2009, 23, 231.6.	0.2	0
45	Subcellular localization of the metalâ€ion transporters Zip14 and DMT1 in human hepatoma (HepG2) cells. FASEB Journal, 2009, 23, 105.3.	0.2	0
46	Properties of the zinc transporter ZIP14 suggest a role in cellular uptake of nontransferrinâ€bound iron (NTBI) characteristic of ironâ€overload conditions. FASEB Journal, 2009, 23, 975.1.	0.2	1
47	Resveratrol and novel potent activators of SIRT1: effects on aging and age-related diseases. Nutrition Reviews, 2008, 66, 591-596.	2.6	159
48	Mitochondrial iron accumulation with age and functional consequences. Aging Cell, 2008, 7, 706-716.	3.0	99
49	Increased iron content and RNA oxidative damage in skeletal muscle with aging and disuse atrophy. Experimental Gerontology, 2008, 43, 563-570.	1.2	118
50	Iron Accumulation with Age, Oxidative Stress and Functional Decline. PLoS ONE, 2008, 3, e2865.	1.1	100
51	The Hereditary Hemochromatosis Protein, HFE, Inhibits Iron Uptake via Down-regulation of Zip14 in HepG2 Cells. Journal of Biological Chemistry, 2008, 283, 21462-21468.	1.6	71
52	Daily Supplementation with Iron Increases Lipid Peroxidation in Young Women with Low Iron Stores. Experimental Biology and Medicine, 2008, 233, 701-707.	1.1	57
53	Calorie restriction attenuates ageâ€related iron accumulation and oxidative stress in skeletal muscle and improves indices of sarcopenia. FASEB Journal, 2008, 22, 141-141.	0.2	1
54	Modulation of transferrinâ€bound iron uptake by Zip14. FASEB Journal, 2008, 22, 304.2.	0.2	0

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55	HFE inhibits non transferrinâ€bound iron uptake via downregulating Zip14 in HepG2 cells. FASEB Journal, 2008, 22, 304.1.	0.2	0
56	Dietary iron deficiency increases Zip14 expression in rats. FASEB Journal, 2008, 22, 155.4.	0.2	0
57	Alveolar macrophage cytokine response to air pollution particles: Oxidant mechanisms. Toxicology and Applied Pharmacology, 2007, 218, 256-264.	1.3	68
58	The dentate nucleus in Friedreichâ€™s ataxia: the role of iron-responsive proteins. Acta Neuropathologica, 2007, 114, 163-173.	3.9	130
59	Steap Proteins: Implications for Iron and Copper Metabolism. Nutrition Reviews, 2007, 65, 335-340.	2.6	70
60	Steap Proteins: Implications for Iron and Copper Metabolism. Nutrition Reviews, 2007, 65, 335-340.	2.6	74
61	Zip14 expression in hepatic iron overload. FASEB Journal, 2007, 21, A1117.	0.2	0
62	Iron deficiency increases Zip14 expression in hepatocytes. FASEB Journal, 2007, 21, A1118.	0.2	0
63	Steap Proteins: Implications for Iron and Copper Metabolism. Nutrition Reviews, 2007, 65, 335-340.	2.6	6
64	Iron and iron-responsive proteins in the cardiomyopathy of Friedreich's ataxia. Cerebellum, 2006, 5, 257-267.	1.4	109
65	Effects of Iron Status on Transpulmonary Transport and Tissue Distribution of Mn and Fe. American Journal of Respiratory Cell and Molecular Biology, 2006, 34, 330-337.	1.4	44
66	The Iron Efflux Protein Ferroportin Regulates the Intracellular Growth of Salmonella enterica. Infection and Immunity, 2006, 74, 3065-3067.	1.0	137
67	Zip14 (Slc39a14) mediates non-transferrin-bound iron uptake into cells. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13612-13617.	3.3	469
68	Murine zinc deficiency alters lymphocyte phenotypes and CCL25 expression in the colon. FASEB Journal, 2006, 20, A603.	0.2	0
69	Regulation of macrophage ferroportin gene transcription by iron. FASEB Journal, 2006, 20, A194.	0.2	1
70	Overexpression of the zinc transporter Zip14 increases nonâ€transferrinâ€bound iron uptake in cells. FASEB Journal, 2006, 20, .	0.2	0
71	Interleukin-6 regulates the zinc transporter Zip14 in liver and contributes to the hypozincemia of the acute-phase response. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 6843-6848.	3.3	487
72	Iron release from macrophages after erythrophagocytosis is up-regulated by ferroportin 1 overexpression and down-regulated by hepcidin. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 1324-1328.	3.3	407

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73	Developmental, regional, and cellular expression of SFT/UbcH5A and DMT1 mRNA in brain. Journal of Neuroscience Research, 2004, 76, 633-641.	1.3	22
74	Iron Metabolism in the Reticuloendothelial System. Critical Reviews in Biochemistry and Molecular Biology, 2003, 38, 61-88.	2.3	271
75	Iron loading and erythrophagocytosis increase ferroportin 1 (FPN1) expression in J774 macrophages. Blood, 2003, 102, 4191-4197.	0.6	202
76	Iron deficiency and iron excess damage mitochondria and mitochondrial DNA in rats. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2264-2269.	3.3	291
77	Expression of Stimulator of Fe Transport Is Not Enhanced in Hfe Knockout Mice. Journal of Nutrition, 2001, 131, 1459-1464.	1.3	15
78	Both Iron Deficiency and Daily Iron Supplements Increase Lipid Peroxidation in Rats. Journal of Nutrition, 2000, 130, 621-628.	1.3	139
79	Methods for measuring ethane and pentane in expired air from rats and humans. Free Radical Biology and Medicine, 2000, 28, 514-519.	1.3	51
80	A practical and reliable method for measuring ethane and pentane in expired air from humans. Free Radical Biology and Medicine, 1999, 27, 560-571.	1.3	29
81	Concentrating Breath Samples Using Liquid Nitrogen: A Reliable Method for the Simultaneous Determination of Ethane and Pentane. Analytical Biochemistry, 1996, 242, 129-135.	1.1	30