Martina U Muckenthaler

List of Publications by Year
in descending order

		76326	43889
120	8,830	40	91
papers	citations	h-index	g-index

122	122	122	11568
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Two to Tango: Regulation of Mammalian Iron Metabolism. Cell, 2010, 142, 24-38.	28.9	1,692
2	A Red Carpet for Iron Metabolism. Cell, 2017, 168, 344-361.	28.9	847
3	Systemic Iron Homeostasis and the Iron-Responsive Element/Iron-Regulatory Protein (IRE/IRP) Regulatory Network. Annual Review of Nutrition, 2008, 28, 197-213.	10.1	572
4	Iron deficiency. Lancet, The, 2021, 397, 233-248.	13.7	396
5	Iron Toxicity in Diseases of Aging: Alzheimer's Disease, Parkinson's Disease and Atherosclerosis. Journal of Alzheimer's Disease, 2009, 16, 879-895.	2.6	349
6	Gain-of-function mutations in <i>interleukin-7 receptor-Î±</i> (<i>IL7R</i>) in childhood acute lymphoblastic leukemias. Journal of Experimental Medicine, 2011, 208, 901-908.	8.5	307
7	Regulatory defects in liver and intestine implicate abnormal hepcidin and Cybrd1 expression in mouse hemochromatosis. Nature Genetics, 2003, 34, 102-107.	21.4	274
8	Heme controls ferroportin1 (FPN1) transcription involving Bach1, Nrf2 and a MARE/ARE sequence motif at position -7007 of the FPN1 promoter. Haematologica, 2010, 95, 1261-1268.	3.5	228
9	The liver-specific microRNA miR-122 controls systemic iron homeostasis in mice. Journal of Clinical Investigation, 2011, 121, 1386-1396.	8.2	221
10	Hemopexin therapy reverts heme-induced proinflammatory phenotypic switching of macrophages in a mouse model of sickle cell disease. Blood, 2016, 127, 473-486.	1.4	213
11	Ex vivo drug response profiling detects recurrent sensitivity patterns in drug-resistant acute lymphoblastic leukemia. Blood, 2017, 129, e26-e37.	1.4	195
12	Atherosclerosis is aggravated by iron overload and ameliorated by dietary and pharmacological iron restriction. European Heart Journal, 2020, 41, 2681-2695.	2.2	162
13	Dicarbonyls and Advanced Glycation End-Products in the Development of Diabetic Complications and Targets for Intervention. International Journal of Molecular Sciences, 2017, 18, 984.	4.1	152
14	Out of Balanceâ€”Systemic Iron Homeostasis in Iron-Related Disorders. Nutrients, 2013, 5, 3034-3061.	4.1	144
15	A novel inflammatory pathway mediating rapid hepcidin-independent hypoferremia. Blood, 2015, 125, 2265-2275.	1.4	144
16	Hfe Acts in Hepatocytes to Prevent Hemochromatosis. Cell Metabolism, 2008, 7, 173-178.	16.2	139
17	Atherogenesis and iron: from epidemiology to cellular level. Frontiers in Pharmacology, 2014, 5, 94.	3.5	121
18	Iron Induces Anti-tumor Activity in Tumor-Associated Macrophages. Frontiers in Immunology, 2017, 8, 1479.	4.8	121

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19	The activating STAT5B N642H mutation is a common abnormality in pediatric T-cell acute lymphoblastic leukemia and confers a higher risk of relapse. Haematologica, 2014, 99, e188-e192.	3.5	114
20	Poly(A)-tail-promoted translation in yeast: Implications for translational control. Rna, 1998, 4, 1321-1331.	3.5	108
21	Resistance of Ferroportin to Hepcidin Binding causes Exocrine Pancreatic Failure and Fatal Iron Overload. Cell Metabolism, 2014, 20, 359-367.	16.2	98
22	Adaptation of iron requirement to hypoxic conditions at high altitude. Journal of Applied Physiology, 2015, 119, 1432-1440.	2.5	88
23	In vivo nanoparticle imaging of innate immune cells can serve as a marker of disease severity in a model of multiple sclerosis. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13227-13232.	7.1	87
24	miR-20a regulates expression of the iron exporter ferroportin in lung cancer. Journal of Molecular Medicine, 2016, 94, 347-359.	3.9	83
25	Fine Tuning of Hepcidin Expression by Positive and Negative Regulators. Cell Metabolism, 2008, 8, 1-3.	16.2	81
26	Dietary stearic acid regulates mitochondria in vivo in humans. Nature Communications, 2018, 9, 3129.	12.8	80
27	Pediatric T-cell lymphoblastic leukemia evolves into relapse by clonal selection, acquisition of mutations and promoter hypomethylation. Haematologica, 2015, 100, 1442-1450.	3.5	65
28	Five years of experience with biochemical cystic fibrosis newborn screening based on IRT/PAP in Germany. Pediatric Pulmonology, 2015, 50, 655-664.	2.0	62
29	Iron overload in adult Hfe-deficient mice independent of changes in the steady-state expression of the duodenal iron transporters DMT1 and Ireg1/ferroportin. Journal of Molecular Medicine, 2004, 82, 39-48.	3.9	61
30	The increase in hemoglobin concentration with altitude varies among human populations. Annals of the New York Academy of Sciences, 2019, 1450, 204-220.	3.8	61
31	Transferrin receptor 2 controls bone mass and pathological bone formation via BMP and Wnt signalling. Nature Metabolism, 2019, 1, 111-124.	11.9	59
32	Hypoferremia is Associated With Increased Hospitalization and Oxygen Demand in COVIDâ€•19ÂPatients. HemaSphere, 2020, 4, e492.	2.7	58
33	Relationships and distinctions in iron-regulatory networks responding to interrelated signals. Blood, 2003, 101, 3690-3698.	1.4	57
34	Iron Homeostasis in the Lungsâ€"A Balance between Health and Disease. Pharmaceuticals, 2019, 12, 5.	3.8	54
35	Iron-regulatory protein-1 (IRP-1) is highly conserved in two invertebrate species. Characterization of IRP-1 homologues in Drosophila melanogaster and Caenorhabditis elegans. FEBS Journal, 1998, 254, 230-237.	0.2	51
36	Novel activating mutations lacking cysteine in type I cytokine receptors in acute lymphoblastic leukemia. Blood, 2014, 124, 106-110.	1.4	50

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37	Hemochromatosis classification: update and recommendations by the BIOIRON Society. Blood, 2022, 139, 3018-3029.	1.4	50
38	miR-148a regulates expression of the transferrin receptor 1 in hepatocellular carcinoma. Scientific Reports, 2019, 9, 1518.	3.3	46
39	Iron aggravates hepatic insulin resistance in the absence of inflammation in a novel db/db mouse model with iron overload. Molecular Metabolism, 2021, 51, 101235.	6.5	46
40	Disruption of the Hepcidin/Ferroportin Regulatory System Causes Pulmonary Iron Overload and Restrictive Lung Disease. EBioMedicine, 2017, 20, 230-239.	6.1	45
41	Hepcidin is regulated by promoter-associated histone acetylation and HDAC3. Nature Communications, 2017, 8, 403.	12.8	45
42	Molecular analysis of iron overload in Î²2-microglobulin-deficient mice. Blood Cells, Molecules, and Diseases, 2004, 33, 125-131.	1.4	39
43	Comparison of different IRT-PAP protocols to screen newborns for cystic fibrosis in three central European populations. Journal of Cystic Fibrosis, 2014, 13, 15-23.	0.7	39
44	Methylglyoxal and Advanced Glycation End Products in Patients with Diabetes â€“ What We Know so Far and the Missing Links. Experimental and Clinical Endocrinology and Diabetes, 2019, 127, 497-504.	1.2	39
45	<scp>PDX</scp> models recapitulate the genetic and epigenetic landscape of pediatric Tâ€cell leukemia. EMBO Molecular Medicine, 2018, 10, .	6.9	38
46	Modelling Systemic Iron Regulation during Dietary Iron Overload and Acute Inflammation: Role of Hepcidin-Independent Mechanisms. PLoS Computational Biology, 2017, 13, e1005322.	3.2	37
47	Uncoupled iron homeostasis in type 2 diabetes mellitus. Journal of Molecular Medicine, 2017, 95, 1387-1398.	3.9	35
48	Regulation of iron metabolism in the sanguivore lamprey Lampetra fluviatilis . Molecular cloning of two ferritin subunits and two iron-regulatory proteins (IRP) reveals evolutionary conservation of the iron-regulatory element (IRE)/IRP regulatory system. FEBS Journal, 1998, 254, 223-229.	0.2	32
49	Mice with hepcidinâ€resistant ferroportin accumulate iron in the retina. FASEB Journal, 2016, 30, 813-823.	0.5	32
50	Lack of Haptoglobin Affects Iron Transport Across Duodenum by Modulating Ferroportin Expression. Gastroenterology, 2007, 133, 1261-1271.e3.	1.3	31
51	Iron accumulation in tumor-associated macrophages marks an improved overall survival in patients with lung adenocarcinoma. Scientific Reports, 2019, 9, 11326.	3.3	31
52	Maternal Iron Status in Pregnancy and Child Health Outcomes after Birth: A Systematic Review and Meta-Analysis. Nutrients, 2021, 13, 2221.	4.1	30
53	Transforming Growth Factor Î²1 (TGF-Î²1) Activates Hepcidin mRNA Expression in Hepatocytes. Journal of Biological Chemistry, 2016, 291, 13160-13174.	3.4	29
54	Significant prevalence of sickle cell disease in Southwest Germany: results from a birth cohort study indicate the necessity for newborn screening. Annals of Hematology, 2016, 95, 397-402.	1.8	29

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55	Transferrin receptor 2 is a potential novel therapeutic target for Î²-thalassemia: evidence from a murine model. Blood, 2018, 132, 2286-2297.	1.4	28
56	Vaccine efficacy and iron deficiency: an intertwined pair?. Lancet Haematology,the, 2021, 8, e666-e669.	4.6	28
57	Cdk6 contributes to cytoskeletal stability in erythroid cells. Haematologica, 2017, 102, 995-1005.	3.5	24
58	A Multi-Scale Model of Hepcidin Promoter Regulation Reveals Factors Controlling Systemic Iron Homeostasis. PLoS Computational Biology, 2014, 10, e1003421.	3.2	22
59	Vasculoâ€toxic and proâ€inflammatory action of unbound haemoglobin, haem and iron in transfusionâ€dependent patients with haemolytic anaemias. British Journal of Haematology, 2021, 193, 637-658.	2.5	22
60	Hepatocyte Nuclear Factor 4Î± Controls Iron Metabolism and Regulates Transferrin Receptor 2 in Mouse Liver. Journal of Biological Chemistry, 2015, 290, 30855-30865.	3.4	20
61	Newborn screening for severe combined immunodeficiency using a novel and simplified method to measure T-cell excision circles (TREC). Clinical Immunology, 2017, 175, 51-55.	3.2	20
62	Elevated hepcidin serum level in response to inflammatory and iron signals in exercising athletes is independent of moderate supplementation with vitamin C and E. Physiological Reports, 2015, 3, e12475.	1.7	19
63	High expression of miR-125b-2 and SNORD116 noncoding RNA clusters characterize ERG-related B cell precursor acute lymphoblastic leukemia. Oncotarget, 2017, 8, 42398-42413.	1.8	19
64	Mutating heme oxygenase-1 into a peroxidase causes a defect in bilirubin synthesis associated with microcytic anemia and severe hyperinflammation. Haematologica, 2016, 101, e436-e439.	3.5	18
65	ALK3 undergoes ligand-independent homodimerization and BMP-induced heterodimerization with ALK2. Free Radical Biology and Medicine, 2018, 129, 127-137.	2.9	17
66	Regulation of iron homeostasis: Lessons from mouse models. Molecular Aspects of Medicine, 2020, 75, 100872.	6.4	16
67	How mutant HFE causes hereditary hemochromatosis. Blood, 2014, 124, 1212-1213.	1.4	15
68	Hfe Deficiency Impairs Pulmonary Neutrophil Recruitment in Response to Inflammation. PLoS ONE, 2012, 7, e39363.	2.5	14
69	Hemoglobin concentration of young men at residential altitudes between 200 and 2000m mirrors Switzerland's topography. Blood, 2020, 135, 1066-1069.	1.4	14
70	Increased hepcidin levels in high-altitude pulmonary edema. Journal of Applied Physiology, 2015, 118, 292-298.	2.5	13
71	EHA Research Roadmap on Hemoglobinopathies and Thalassemia: An Update. HemaSphere, 2019, 3, e208.	2.7	13
72	Chromatin accessibility landscape of pediatric Tâ€lymphoblastic leukemia and human Tâ€cell precursors. EMBO Molecular Medicine, 2020, 12, e12104.	6.9	13

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73	Core Crossâ€Linked Polymeric Micelles for Specific Iron Delivery: Inducing Sterile Inflammation in Macrophages. Advanced Healthcare Materials, 2021, 10, e2100385.	7.6	13
74	Liver Sinusoidal Endothelial Cells Suppress Bone Morphogenetic Protein 2 Production in Response to TGFÎ² Pathway Activation. Hepatology, 2021, 74, 2186-2200.	7.3	13
75	The Macrophage Iron Signature in Health and Disease. International Journal of Molecular Sciences, 2021, 22, 8457.	4.1	13
76	Orphan nuclear receptor SHP regulates iron metabolism through inhibition of BMP6-mediated hepcidin expression. Scientific Reports, 2016, 6, 34630.	3.3	12
77	Iron metabolism in high-altitude residents. Journal of Applied Physiology, 2020, 129, 920-925.	2.5	12
78	No changes in heme synthesis in human FriedreichÂ´s ataxia erythroid progenitor cells. Gene, 2017, 621, 5-11.	2.2	11
79	Modulation of glutathione peroxidase activity by age-dependent carbonylation in glomeruli of diabetic mice. Journal of Diabetes and Its Complications, 2018, 32, 130-138.	2.3	11
80	Disruption of the hepcidin/ferroportin regulatory circuitry causes low axial bone mass in mice. Bone, 2020, 137, 115400.	2.9	11
81	Hepatic Smad7 overexpression causes severe iron overload in mice. Blood, 2018, 131, 581-585.	1.4	10
82	Cellular citrate levels establish a regulatory link between energy metabolism and the hepatic iron hormone hepcidin. Journal of Molecular Medicine, 2017, 95, 851-860.	3.9	8
83	Hemochromatosis proteins are dispensable for the acute hepcidin response to BMP2. Haematologica, 2020, 105, e493.	3.5	8
84	Maternal Iron Status in Early Pregnancy and Blood Pressure Throughout Pregnancy, Placental Hemodynamics, and the Risk of Gestational Hypertensive Disorders. Journal of Nutrition, 2022, 152, 525-534.	2.9	8
85	Final results of the southwest German pilot study on cystic fibrosis newborn screening â€" Evaluation of an IRT/PAP protocol with IRT-dependent safety net. Journal of Cystic Fibrosis, 2022, 21, 422-433.	0.7	8
86	Constitutional PIGA mutations cause a novel subtype of hemochromatosis in patients with neurologic dysfunction. Blood, 2022, 139, 1418-1422.	1.4	8
87	Maternal earlyâ€pregnancy ferritin and offspring neurodevelopment: A prospective cohort study from gestation to school age. Paediatric and Perinatal Epidemiology, 2022, 36, 425-434.	1.7	8
88	Macrophage-HFE controls iron metabolism and immune responses in aged mice. Haematologica, 2020, 106, 259-263.	3.5	7
89	The role of cellular iron deficiency in controlling iron export. Biochimica Et Biophysica Acta - General Subjects, 2021, 1865, 129829.	2.4	7
90	The EHA Research Roadmap: Anemias. HemaSphere, 2021, 5, e607.	2.7	7

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91	NOTCH1 mutation, TP53 alteration and myeloid antigen expression predict outcome heterogeneity in children with first relapse of T-cell acute lymphoblastic leukemia. Haematologica, 2017, 102, e249-e252.	3.5	6
92	Iron-Related Parameters are Altered Between C57BL/6N and C57BL/6J Mus Musculus Wild-Type Substrains. HemaSphere, 2019, 3, e304.	2.7	5
93	Airâ€"blood barrier thickening and alterations of alveolar epithelial type 2 cells in mouse lungs with disrupted hepcidin/ferroportin regulatory system. Histochemistry and Cell Biology, 2019, 151, 217-228.	1.7	5
94	Targeted Disruption of the Mouse Mitoferrin (Slc25A37) Mitochondrial Solute Carrier Results in Defective Primitive and Definitive Erythropoiesis.. Blood, 2006, 108, 265-265.	1.4	5
95	Cell-specific expression of <i>Hfe</i> determines the outcome of <i>Salmonella enterica</i> serovar Typhimurium infection in mice. Haematologica, 2021, 106, 0-0.	3.5	4
96	Pediatric T-ALL type-1 and type-2 relapses develop along distinct pathways of clonal evolution. Leukemia, 2022, 36, 1759-1768.	7.2	4
97	Intravenous Iron Promotes Low-Grade Inflammation in Anemic Patients By Triggering Macrophage Activation. Blood, 2019, 134, 957-957.	1.4	3
98	SLN124, a GalNAc Conjugated 19-Mer Double-Stranded SiRNA Reduces Iron and Increases Hepcidin Levels of Healthy Volunteers in a Phase 1 Clinical Study. Blood, 2021, 138, 2009-2009.	1.4	3
99	Iron- and erythropoietin-resistant anemia in a spontaneous breast cancer mouse model. Haematologica, 2022, 107, 2454-2465.	3.5	3
100	Hfe Is Highly Expressed in Liver Sinusoidal Endothelial Cells But Is Not Needed to Maintain Systemic Iron Homeostasis In Vivo. HemaSphere, 2022, 6, e667.	2.7	3
101	Ethnic differences in adverse iron status in early pregnancy: a cross-sectional population-based study. Journal of Nutritional Science, 2022, 11, .	1.9	3
102	Mechanismen der Translationskontrolle in Eukaryonten. , 2003, , 152-180.		2
103	Low-Iron Diet and Chelation Therapy Rescue Severe Atherosclerosis Associated with High Circulating Iron Levels. Blood, 2016, 128, 199-199.	1.4	2
104	The Polycistronic miRNA Cluster miR-17-92 Is Over-Expressed in Early Phase Chronic Myeloid Leukemia (CML) CD34+ Cells.. Blood, 2006, 108, 741-741.	1.4	1
105	Hfe Acts in Hepatocytes To Prevent Hemochromatosis.. Blood, 2007, 110, 703-703.	1.4	1
106	Sensing of Liver Iron Content Requires Cell-Cell Communication between Hepatocytes and Liver Sinusoidal Endothelial Cells. Blood, 2019, 134, 432-432.	1.4	1
107	Dissecting the Mechanisms of Hepcidin and BMP-SMAD Pathway Regulation By FKBP12. Blood, 2021, 138, 2008-2008.	1.4	1
108	Iron Deficiency Caused by Intestinal Iron Lossâ€"Novel Candidate Genes for Severe Anemia. Genes, 2021, 12, 1869.	2.4	1

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109	Eliezer Rachmilewitz (1935â€"2017). HemaSphere, 2018, 2, e21.	2.7	0
110	Iron deficiency anemia. HemaSphere, 2019, 3, 99.	2.7	0
111	Mild Attenuation of the Pulmonary Inflammatory Response in a Mouse Model of Hereditary Hemochromatosis Type 4. Frontiers in Physiology, 2020, 11, 589351.	2.8	0
112	The Molecular Signature of Iron Metabolism in Polycythaemia Mice.. Blood, 2005, 106, 3579-3579.	1.4	0
113	The Early Treatment Response of the Clinically Challenging Group of Childhood T-ALL without NOTCH1 Mutations Is Signified by a Specific mRNA Gene Profile.. Blood, 2007, 110, 2789-2789.	1.4	0
114	A High Through-Put Screen Identifies MCP-1 (CCL2) As a Novel Regulator of Iron Homeostasis and a Modifier of Hereditary Hemochromatosis Disease Severity. Blood, 2011, 118, 685-685.	1.4	0
115	An Inflammatory Pathway Mediating Rapid Hepcidin-Independent Hypoferremia. Blood, 2014, 124, 214-214.	1.4	0
116	Gene Panel Sequencing of Primary and Relapsed Pediatric T-ALL Shows That Relapse-Specific Mutations Are Diverse and Mostly Non-Recurrent. Blood, 2015, 126, 1428-1428.	1.4	0
117	The Heme Scavenger Hemopexin Reverts Heme-Driven Pro-Inflammatory Phenotypic Switching of Macrophages in Sickle Cell Disease. Blood, 2015, 126, 2205-2205.	1.4	0
118	Exploring the Mechanisms of Thalassemic Erythropoiesis Improvement Caused By Bone Marrow Tfr2 Deletion. Blood, 2018, 132, 3624-3624.	1.4	0
119	TP53 and KRAS Variants at Initial Diagnosis Identify an Ultra-High Risk Group of Pediatric T-Lymphoblastic Leukemia (T-ALL). Blood, 2021, 138, 1315-1315.	1.4	0
120	Translational Control in Eukaryotes. , 2005, , 1904-1909.		0