Michael K Georgieff

List of Publications by Year
in descending order

86 papers	3,806 citations	147801 31 h-index	138484 58 g-index
92 all docs	92 docs citations	92 times ranked	3301 citing authors

#	Article	IF	Citations
1	Iron Deficiency and Brain Development. Seminars in Pediatric Neurology, 2006, 13, 158-165.	2.0	543
2	Iron deficiency in pregnancy. American Journal of Obstetrics and Gynecology, 2020, 223, 516-524.	1.3	237
3	Iron deficiency of liver, heart, and brain in newborn infants of diabetic mothers. Journal of Pediatrics, 1992, 121, 109-114.	1.8	195
4	Nutritional influences on brain development. Acta Paediatrica, International Journal of Paediatrics, 2018, 107, 1310-1321.	1.5	154
5	The role of iron in neurodevelopment: fetal iron deficiency and the developing hippocampus. Biochemical Society Transactions, 2008, 36, 1267-1271.	3.4	152
6	Abnormal iron distribution in infants of diabetic mothers: Spectrum and maternal antecedents. Journal of Pediatrics, 1990, 117, 455-461.	1.8	147
7	Greater Early Gains in Fat-Free Mass, but Not Fat Mass, Are Associated with Improved Neurodevelopment at 1 Year Corrected Age for Prematurity in Very Low Birth Weight Preterm Infants. Journal of Pediatrics, 2016, 173, 108-115.	1.8	119
8	Choline supplementation in children with fetal alcohol spectrum disorders: a randomized, double-blind, placebo-controlled trial. American Journal of Clinical Nutrition, 2015, 102, 1113-1125.	4.7	94
9	Iron status at 9 months of infants with low iron stores at birth. Journal of Pediatrics, 2002, 141, 405-409.	1.8	90
10	The Benefits and Risks of Iron Supplementation in Pregnancy and Childhood. Annual Review of Nutrition, 2019, 39, 121-146.	10.1	89
11	Consequences of Low Neonatal Iron Status Due to Maternal Diabetes Mellitus on Explicit Memory Performance in Childhood. Developmental Neuropsychology, 2009, 34, 762-779.	1.4	88
12	Iron Deficiency Impairs Developing Hippocampal Neuron Gene Expression, Energy Metabolism, and Dendrite Complexity. Developmental Neuroscience, 2016, 38, 264-276.	2.0	84
13	Perinatal Brain Iron Deficiency Increases the Vulnerability of Rat Hippocampus to Hypoxic Ischemic Insult. Journal of Nutrition, 1999, 129, 199-206.	2.9	81
14	Four-year follow-up of a randomized controlled trial of choline for neurodevelopment in fetal alcohol spectrum disorder. Journal of Neurodevelopmental Disorders, 2020, 12, 9.	3.1	78
15	Iron is prioritized to red blood cells over the brain in phlebotomized anemic newborn lambs. Pediatric Research, 2016, 79, 922-928.	2.3	66
16	Fetal iron deficiency induces chromatin remodeling at the Bdnf locus in adult rat hippocampus. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 308, R276-R282.	1.8	64
17	Measuring the impact of manganese exposure on childrenâ€™s neurodevelopment: advances and research gaps in biomarker-based approaches. Environmental Health, 2016, 15, 91.	4.0	63
18	Approaches for Reducing the Risk of Early-Life Iron Deficiency-Induced Brain Dysfunction in Children. Nutrients, 2018, 10, 227.	4.1	62

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19	Fetal and neonatal iron deficiency causes volume loss and alters the neurochemical profile of the adult rat hippocampus. Nutritional Neuroscience, 2011, 14, 59-65.	3.1	59
20	Choline supplementation in children with fetal alcohol spectrum disorders has high feasibility and tolerability. Nutrition Research, 2013, 33, 897-904.	2.9	59
21	Prenatal Iron Supplementation Reduces Maternal Anemia, Iron Deficiency, and Iron Deficiency Anemia in a Randomized Clinical Trial in Rural China, but Iron Deficiency Remains Widespread in Mothers and Neonates. Journal of Nutrition, 2015, 145, 1916-1923.	2.9	57
22	Hippocampus specific iron deficiency alters competition and cooperation between developing memory systems. Journal of Neurodevelopmental Disorders, 2010, 2, 133-143.	3.1	51
23	Reduced neonatal liver iron concentrations after uteroplacental insufficiency. Journal of Pediatrics, 1995, 127, 308-311.	1.8	47
24	Striking While the Iron is Hot: Understanding the Biological and Neurodevelopmental Effects of Iron Deficiency to Optimize Intervention in Early Childhood. Current Pediatrics Reports, 2014, 2, 291-298.	4.0	47
25	Electrophysiological indices of memory for temporal order in early childhood: implications for the development of recollection. Developmental Science, 2009, 12, 209-219.	2.4	45
26	Chronic Energy Depletion due to Iron Deficiency Impairs Dendritic Mitochondrial Motility during Hippocampal Neuron Development. Journal of Neuroscience, 2019, 39, 802-813.	3.6	42
27	Prenatal Choline Supplementation Ameliorates the Long-Term Neurobehavioral Effects of Fetal-Neonatal Iron Deficiency in Rats. Journal of Nutrition, 2014, 144, 1858-1865.	2.9	40
28	The Effects of Early-Life Iron Deficiency on Brain Energy Metabolism. Neuroscience Insights, 2020, 15, 263310552093510.	1.6	38
29	Iron supplementation dose for perinatal iron deficiency differentially alters the neurochemistry of the frontal cortex and hippocampus in adult rats. Pediatric Research, 2013, 73, 31-37.	2.3	37
30	Micronutrient status and neurodevelopment in internationally adopted children. Acta Paediatrica, International Journal of Paediatrics, 2016, 105, e67-76.	1.5	37
31	Maternal prenatal iron status and tissue organization in the neonatal brain. Pediatric Research, 2016, 79, 482-488.	2.3	37
32	Early-Life Neuronal-Specific Iron Deficiency Alters the Adult Mouse Hippocampal Transcriptome. Journal of Nutrition, 2018, 148, 1521-1528.	2.9	36
33	Anemia induces gut inflammation and injury in an animal model of preterm infants. Transfusion, 2019, 59, 1233-1245.	1.6	36
34	Nutrient Supplementation and Neurodevelopment. JAMA Pediatrics, 2012, 166, 481.	3.0	34
35	Fetal and Neonatal Iron Deficiency Exacerbates Mild Thyroid Hormone Insufficiency Effects on Male Thyroid Hormone Levels and Brain Thyroid Hormone-Responsive Gene Expression. Endocrinology, 2014, 155, 1157-1167.	2.8	33
36	Iron as a model nutrient for understanding the nutritional origins of neuropsychiatric disease. Pediatric Research, 2019, 85, 176-182.	2.3	32

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37	Metabolomic analysis of CSF indicates brain metabolic impairment precedes hematological indices of anemia in the iron-deficient infant monkey. Nutritional Neuroscience, 2018, 21, 40-48.	3.1	29
38	Defiant: (DMRs: easy, fast, identification and ANnoTation) identifies differentially Methylated regions from iron-deficient rat hippocampus. BMC Bioinformatics, 2018, 19, 31.	2.6	29
39	Metabolomic Analysis of Cerebrospinal Fluid Indicates Iron Deficiency Compromises Cerebral Energy Metabolism in the Infant Monkey. Neurochemical Research, 2013, 38, 573-580.	3.3	28
40	Inadequate intake of nutrients essential for neurodevelopment in children with fetal alcohol spectrum disorders (FASD). Neurotoxicology and Teratology, 2013, 39, 128-132.	2.4	27
41	Effect of Sepsis Syndrome on Neonatal Protein and Energy Metabolism. Journal of Perinatology, 2000, 20, 96-100.	2.0	26
42	Reticulocyte hemoglobin content as an early predictive biomarker of brain iron deficiency. Pediatric Research, 2018, 84, 765-769.	2.3	25
43	Intravenous iron supplementation effect on tissue iron and hemoproteins in chronically phlebotomized lambs. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 1997, 273, R2124-R2131.	1.8	23
44	Prenatal and Postnatal Choline Supplementation in Fetal Alcohol Spectrum Disorder. Nutrients, 2022, 14, 688.	4.1	22
45	Phlebotomy-induced anemia alters hippocampal neurochemistry in neonatal mice. Pediatric Research, 2015, 77, 765-771.	2.3	20
46	Catch-up growth, metabolic, and cardiovascular risk in post-institutionalized Romanian adolescents. Pediatric Research, 2018, 84, 842-848.	2.3	20
47	Prenatal alcohol-related alterations in maternal, placental, neonatal, and infant iron homeostasis. American Journal of Clinical Nutrition, 2021, 114, 1107-1122.	4.7	20
48	Cord Blood-Derived Exosomal CNTN2 and BDNF: Potential Molecular Markers for Brain Health of Neonates at Risk for Iron Deficiency. Nutrients, 2019, 11, 2478.	4.1	19
49	The Relationship between Decreased Iron Stores, Serum Iron and Neonatal Hypoglycemia in Largeâ€forâ€Date Newborn Infants. Acta Paediatrica, International Journal of Paediatrics, 1989, 78, 538-543.	1.5	18
50	Visual event-related brain potentials in 4-month-old infants at risk for neurodevelopmental impairments. , 1997, 30, 11-28.		18
51	Delaying Iron Therapy until 28 Days after Antimalarial Treatment Is Associated with Greater Iron Incorporation and Equivalent Hematologic Recovery after 56 Days in Children: A Randomized Controlled Trial. Journal of Nutrition, 2016, 146, 1769-1774.	2.9	18
52	Beneficial effects of postnatal choline supplementation on long-Term neurocognitive deficit resulting from fetal-Neonatal iron deficiency. Behavioural Brain Research, 2018, 336, 40-43.	2.2	17
53	Fetal inflammation is associated with persistent systemic and hippocampal inflammation and dysregulation of hippocampal glutamatergic homeostasis. Pediatric Research, 2019, 85, 703-710.	2.3	14
54	Early-Life Iron Deficiency and Its Natural Resolution Are Associated with Altered Serum Metabolomic Profiles in Infant Rhesus Monkeys. Journal of Nutrition, 2020, 150, 685-693.	2.9	14

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55	Sex-specific cytokine responses and neurocognitive outcome after blood transfusions in preterm infants. Pediatric Research, 2021, , .	2.3	14
56	Early-Life Iron Deficiency Anemia Programs the Hippocampal Epigenomic Landscape. Nutrients, 2021, 13, 3857.	4.1	14
57	Correcting iron deficiency anemia with iron dextran alters the serum metabolomic profile of the infant Rhesus Monkey. American Journal of Clinical Nutrition, 2021, 113, 915-923.	4.7	13
58	Polymorphisms in SLC44A1 are associated with cognitive improvement in children diagnosed with fetal alcohol spectrum disorder: an exploratory study of oral choline supplementation. American Journal of Clinical Nutrition, 2021, 114, 617-627.	4.7	13
59	Parenteral artemisinins are associated with reduced mortality and neurologic deficits and improved long-term behavioral outcomes in children with severe malaria. BMC Medicine, 2021, 19, 168.	5.5	13
60	Comparison of iron status 28 d after provision of antimalarial treatment with iron therapy compared with antimalarial treatment alone in Ugandan children with severe malaria. American Journal of Clinical Nutrition, 2016, 103, 919-925.	4.7	12
61	Neonatal mouse hippocampus: phlebotomy-induced anemia diminishes and treatment with erythropoietin partially rescues mammalian target of rapamycin signaling. Pediatric Research, 2017, 82, 501-508.	2.3	12
62	Infants exposed to antibiotics after birth have altered recognition memory responses at one month of age. Pediatric Research, 2021, 89, 1500-1507.	2.3	12
63	Enteral Iron Supplementation in Infants Born Extremely Preterm and its Positive Correlation with Neurodevelopment; Post Hoc Analysis of the Preterm Erythropoietin Neuroprotection Trial Randomized Controlled Trial. Journal of Pediatrics, 2021, 238, 102-109.e8.	1.8	10
64	High Prevalence of Iron Deficiency Despite Standardized High-Dose Iron Supplementation During Recombinant Erythropoietin Therapy in Extremely Low Gestational Age Newborns. Journal of Pediatrics, 2020, 222, 98-105.e3.	1.8	10
65	Multiomic profiling of iron-deficient infant monkeys reveals alterations in neurologically important biochemicals in serum and cerebrospinal fluid before the onset of anemia. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2022, 322, R486-R500.	1.8	10
66	Early-Life Iron Deficiency Alters Glucose Transporter-1 Expression in the Adult Rodent Hippocampus. Journal of Nutrition, 2019, 149, 1660-1666.	2.9	9
67	Infantile Iron Deficiency Affects Brain Development in Monkeys Even After Treatment of Anemia. Frontiers in Human Neuroscience, 2021, 15, 624107.	2.0	9
68	Choline Supplementation Partially Restores Dendrite Structural Complexity in Developing Iron-Deficient Mouse Hippocampal Neurons. Journal of Nutrition, 2022, 152, 747-757.	2.9	9
69	The impact of erythropoietin and iron status on brain myelination in the newborn rat. Journal of Neuroscience Research, 2018, 96, 1586-1599.	2.9	8
70	Delayed iron improves iron status without altering malaria risk in severe malarial anemia. American Journal of Clinical Nutrition, 2020, 111, 1059-1067.	4.7	8
71	Prenatal Iron Deficiency and Choline Supplementation Interact to Epigenetically Regulate Jarid1b and Bdnf in the Rat Hippocampus into Adulthood. Nutrients, 2021, 13, 4527.	4.1	8
72	Sex differences in adult social, cognitive, and affective behavioral deficits following neonatal phlebotomyâ€induced anemia in mice. Brain and Behavior, 2021, 11, e01780.	2.2	7

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73	Fetal inflammation induces acute immune tolerance in the neonatal rat hippocampus. Journal of Neuroinflammation, 2021, 18, 69.	7.2	7
74	Dose- and sex-dependent effects of phlebotomy-induced anemia on the neonatal mouse hippocampal transcriptome. Pediatric Research, 2022, 92, 712-720.	2.3	7
75	Restricted, Repetitive, and Reciprocal Social Behavior in Toddlers Born Small for Gestation Duration. Journal of Pediatrics, 2018, 200, 118-124.e9.	1.8	6
76	Sex Differences in the Association of Pretransfusion Hemoglobin Levels with Brain Structure and Function in the Preterm Infant. Journal of Pediatrics, 2022, 243, 78-84.e5.	1.8	6
77	Delaying the start of iron until 28 days after antimalarial treatment is associated with lower incidence of subsequent illness in children with malaria and iron deficiency. PLoS ONE, 2017, 12, e0183977.	2.5	5
78	ERP evidence of preserved early memory function in term infants with neonatal encephalopathy following therapeutic hypothermia. Pediatric Research, 2016, 80, 800-808.	2.3	4
79	Endogenous erythropoietin concentrations and association with retinopathy of prematurity and brain injury in preterm infants. PLoS ONE, 2021, 16, e0252655.	2.5	4
80	Delayed iron does not alter cognition or behavior among children with severe malaria and iron deficiency. Pediatric Research, 2020, 88, 429-437.	2.3	3
81	Reducing Iron Deficiency in 18â€“36-months-old US Children: Is the Solution Less Calcium?. Maternal and Child Health Journal, 2016, 20, 1798-1803.	1.5	2
82	Preserved speed of processing and memory in infants with a history of moderate neonatal encephalopathy treated with therapeutic hypothermia. Journal of Perinatology, 2018, 38, 1666-1673.	2.0	2
83	Safety of single-pulse TMS in two infants with implanted patent ductus arteriosus closure devices. Brain Stimulation, 2020, 13, 861-862.	1.6	2
84	Predictive Value of Developmental Assessment in a Neonatal Intensive Care Unit (NICU) Follow-Up Clinic. Journal of Pediatric Psychology, 2021, 46, 814-823.	2.1	2
85	Nutrition and Brain Development. Current Topics in Behavioral Neurosciences, 2021, , 131-165.	1.7	2
86	Nutrition for Ill Neonates. Pediatrics in Review, 1999, 20, e56-e62.	0.4	0