Robert K Naviaux

List of Publications by Year
in descending order

86 papers	6,032 citations	81900 39 h-index	74163 75 g-index
91 all docs	91 docs citations	91 times ranked	8463 citing authors

#	Article	IF	Citations
1	Metabolomics Reveals Signature of Mitochondrial Dysfunction in Diabetic Kidney Disease. Journal of the American Society of Nephrology: JASN, 2013, 24, 1901-1912.	6.1	454
2	POLG mutations associated with Alpers' syndrome and mitochondrial DNA depletion. Annals of Neurology, 2004, 55, 706-712.	5.3	434
3	The in-depth evaluation of suspected mitochondrial disease. Molecular Genetics and Metabolism, 2008, 94, 16-37.	1.1	320
4	Metabolic features of chronic fatigue syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E5472-80.	7.1	277
5	ERRÎ³ Directs and Maintains the Transition toÂOxidative Metabolism in the Postnatal Heart. Cell Metabolism, 2007, 6, 13-24.	16.2	274
6	Molecular and clinical genetics of mitochondrial diseases due toPOLGmutations. Human Mutation, 2008, 29, E150-E172.	2.5	256
7	Alpers-Huttenlocher Syndrome. Pediatric Neurology, 2013, 48, 167-178.	2.1	203
8	Antipurinergic therapy corrects the autism-like features in the Fragile X (Fmr1 knockout) mouse model. Molecular Autism, 2015, 6, 1.	4.9	194
9	Mitochondrial DNA polymerase ? deficiency and mtDNA depletion in a child with Alpers' syndrome. Annals of Neurology, 1999, 45, 54-58.	5.3	192
10	Regulation of lipid accumulation by AMK-activated kinase in high fat dietâ€“induced kidney injury. Kidney International, 2014, 85, 611-623.	5.2	188
11	The GAAS Metagenomic Tool and Its Estimations of Viral and Microbial Average Genome Size in Four Major Biomes. PLoS Computational Biology, 2009, 5, e1000593.	3.2	177
12	Metabolic features of the cell danger response. Mitochondrion, 2014, 16, 7-17.	3.4	167
13	Autism Associated With the Mitochondrial DNA G8363A Transfer RNALys Mutation. Journal of Child Neurology, 2000, 15, 357-361.	1.4	153
14	Antipurinergic Therapy Corrects the Autism-Like Features in the Poly(IC) Mouse Model. PLoS ONE, 2013, 8, e57380.	2.5	147
15	POLG DNA testing as an emerging standard of care before instituting valproic acid therapy for pediatric seizure disorders. Seizure: the Journal of the British Epilepsy Association, 2010, 19, 140-146.	2.0	136
16	Comprehensive Nutritional and Dietary Intervention for Autism Spectrum Disorderâ€”A Randomized, Controlled 12-Month Trial. Nutrients, 2018, 10, 369.	4.1	126
17	Molecular diagnosis of Alpers syndrome. Journal of Hepatology, 2006, 45, 108-116.	3.7	123
18	Monitoring phosphorylation of the pyruvate dehydrogenase complex. Analytical Biochemistry, 2009, 389, 157-164.	2.4	122

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19	Oxidative Shielding or Oxidative Stress?. Journal of Pharmacology and Experimental Therapeutics, 2012, 342, 608-618.	2.5	121
20	AMPD2 Regulates GTP Synthesis and Is Mutated in a Potentially Treatable Neurodegenerative Brainstem Disorder. Cell, 2013, 154, 505-517.	28.9	94
21	Lowâ€dose suramin in autism spectrum disorder: a small, phase I/II, randomized clinical trial. Annals of Clinical and Translational Neurology, 2017, 4, 491-505.	3.7	84
22	Epigenome-wide meta-analysis of PTSD across 10 military and civilian cohorts identifies methylation changes in AHRR. Nature Communications, 2020, 11, 5965.	12.8	84
23	Cytokine Gene Therapy with Interleukin-2-Transduced Fibroblasts: Effects of IL-2 Dose on Anti-Tumor Immunity. Human Gene Therapy, 1995, 6, 591-601.	2.7	82
24	Polymerase gamma disease through the ages. Developmental Disabilities Research Reviews, 2010, 16, 163-174.	2.9	70
25	Retained features of embryonic metabolism in the adult MRL mouse. Molecular Genetics and Metabolism, 2009, 96, 133-144.	1.1	69
26	Developing a systematic approach to the diagnosis and classification of mitochondrial disease. Mitochondrion, 2004, 4, 351-361.	3.4	59
27	Nerve conduction changes in patients with mitochondrial diseases treated with dichloroacetate. Muscle and Nerve, 2001, 24, 916-924.	2.2	55
28	Chronic treatment of mitochondrial disease patients with dichloroacetate. Molecular Genetics and Metabolism, 2004, 83, 138-149.	1.1	53
29	Mitochondrial control of epigenetics. Cancer Biology and Therapy, 2008, 7, 1191-1193.	3.4	53
30	A modelâ€driven quantitative metabolomics analysis of aerobic and anaerobic metabolism in E. coli Kâ€12 MG1655 that is biochemically and thermodynamically consistent. Biotechnology and Bioengineering, 2014, 111, 803-815.	3.3	53
31	Defects in maintenance of mitochondrial DNA are associated with intramitochondrial nucleotide imbalances. Human Molecular Genetics, 2007, 16, 1400-1411.	2.9	50
32	Neurometabolic Disorders: Potentially Treatable Abnormalities in Patients With Treatment-Refractory Depression and Suicidal Behavior. American Journal of Psychiatry, 2017, 174, 42-50.	7.2	50
33	POLG mutations associated with Alpers syndrome and mitochondrial DNA depletion. Annals of Neurology, 2005, 58, 491-491.	5.3	49
34	Mitochondrial DNA disorders. European Journal of Pediatrics, 2000, 159, S219-S226.	2.7	48
35	Mitochondrial and ion channel gene alterations in autism. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1796-1802.	1.0	47
36	High-fat diet and FGF21 cooperatively promote aerobic thermogenesis in mtDNA mutator mice. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8714-8719.	7.1	47

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37	Role of Reactive Oxygen Species in Hyperadrenergic Hypertension. Circulation: Cardiovascular Genetics, 2010, 3, 414-425.	5.1	42
38	A robust, single-injection method for targeted, broad-spectrum plasma metabolomics. Metabolomics, 2017, 13, 122.	3.0	42
39	Improved Dried Blood Spot-Based Metabolomics: A Targeted, Broad-Spectrum, Single-Injection Method. Metabolites, 2020, 10, 82.	2.9	42
40	Metabolic features and regulation of the healing cycleâ€"A new model for chronic disease pathogenesis and treatment. Mitochondrion, 2019, 46, 278-297.	3.4	41
41	Human Herpesvirus-6 Reactivation, Mitochondrial Fragmentation, and the Coordination of Antiviral and Metabolic Phenotypes in Myalgic Encephalomyelitis/Chronic Fatigue Syndrome. ImmunoHorizons, 2020, 4, 201-215.	1.8	39
42	Mono-allelic POLG expression resulting from nonsense-mediated decay and alternative splicing in a patient with Alpers syndrome. DNA Repair, 2005, 4, 1381-1389.	2.8	38
43	Restoration of Growth Arrest by p16INK4, p21WAF1, pRB, and p53 Is Dependent on the Integrity of the Endogenous Cell-Cycle Control Pathways in Human Glioblastoma Cell Lines. Experimental Cell Research, 1998, 238, 51-62.	2.6	37
44	Retroviral vectors for persistent expression in vivo. Current Opinion in Biotechnology, 1992, 3, 540-547.	6.6	32
45	Mitochondrial Correlation Microscopy and Nanolaser Spectroscopy â€" New Tools for Biophotonic Detection of Cancer in Single Cells. Technology in Cancer Research and Treatment, 2005, 4, 585-592.	1.9	30
46	Metabolic features of Gulf War illness. PLoS ONE, 2019, 14, e0219531.	2.5	29
47	Fast Swinnex filtration (FSF): a fast and robust sampling and extraction method suitable for metabolomics analysis of cultures grown in complex media. Metabolomics, 2015, 11, 198-209.	3.0	28
48	Englerin A induces an acute inflammatory response and reveals lipid metabolism and ER stress as targetable vulnerabilities in renal cell carcinoma. PLoS ONE, 2017, 12, e0172632.	2.5	27
49	Pyruvate carboxylase deficiencyâ€"insights from liver transplantation. Molecular Genetics and Metabolism, 2002, 77, 143-149.	1.1	25
50	Naturally occurring mitochondrial DNA heteroplasmy in the MRL mouse. Mitochondrion, 2008, 8, 358-366.	3.4	25
51	Antipurinergic therapy for autismâ€"An in-depth review. Mitochondrion, 2018, 43, 1-15.	3.4	22
52	Impact of Nucleoside Reverse Transcriptase Inhibitors on Mitochondrial DNA and RNA in Human Skeletal Muscle Cells. Antimicrobial Agents and Chemotherapy, 2008, 52, 2825-2830.	3.2	20
53	The Role of Methionine in Ethylmalonic Encephalopathy with Petechiae. Archives of Neurology, 2004, 61, 570.	4.5	19
54	Leschâ€“Nyhan Syndrome: mRNA expression of HPRT in patients with enzyme proven deficiency of HPRT and normal HPRT coding region of the DNA. Molecular Genetics and Metabolism, 2012, 106, 498-501.	1.1	18

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55	Proteomic Analysis of Urine Exosomes Reveals Renal Tubule Response to Leptospiral Colonization in Experimentally Infected Rats. PLoS Neglected Tropical Diseases, 2015, 9, e0003640.	3.0	18
56	Metabolic features of recurrent major depressive disorder in remission, and the risk of future recurrence. Translational Psychiatry, 2021, 11, 37.	4.8	18
57	Mitochondrial DNA Mutation Detection by Electrospray Mass Spectrometry. Clinical Chemistry, 2007, 53, 195-203.	3.2	17
58	Identification of Maltase Glucoamylase as a Biomarker of Acute Kidney Injury in Patients with Cirrhosis. Critical Care Research and Practice, 2019, 2019, 1-8.	1.1	17
59	Metabolic and behavioral features of acute hyperpurinergia and the maternal immune activation mouse model of autism spectrum disorder. PLoS ONE, 2021, 16, e0248771.	2.5	17
60	Perspective: Cell danger response Biologyâ€"The new science that connects environmental health with mitochondria and the rising tide of chronic illness. Mitochondrion, 2020, 51, 40-45.	3.4	16
61	Medium-Chain Acyl Coenzyme A Dehydrogenase Deficiency. Archives of Neurology, 2001, 58, 811.	4.5	15
62	Proteomic analyses of Urine Exosomes reveal New Biomarkers of Diabetes in Pregnancy. Madridge Journal of Diabetes, 2016, 1, 11-22.	0.1	15
63	Kearnsâ€"Sayre Syndrome Presenting as 2-Oxoadipic Aciduria. Molecular Genetics and Metabolism, 2000, 69, 64-68.	1.1	14
64	Novel Mutations in the Human HPRT Gene. Nucleosides, Nucleotides and Nucleic Acids, 2011, 30, 440-445.	1.1	14
65	Incomplete Healing as a Cause of Aging: The Role of Mitochondria and the Cell Danger Response. Biology, 2019, 8, 27.	2.8	14
66	Pitfalls in the Denaturing High-Performance Liquid Chromatography Analysis of Mitochondrial DNA Mutation. Journal of Molecular Diagnostics, 2008, 10, 102-108.	2.8	13
67	Autistic disorder with complex IV overactivity: A new mitochondrial syndrome. Journal of Pediatric Neurology, 2015, 09, 427-434.	0.2	13
68	Leschâ€"Nyhan Variant Syndrome: Real-Time RT-PCR for mRNA Quantification in Variable Presentation in Three Affected Family Members. Nucleosides, Nucleotides and Nucleic Acids, 2012, 31, 616-629.	1.1	12
69	A Mutation in the Mitochondrial Aspartate/Glutamate Carrier Leads to a More Oxidizing Intramitochondrial Environment and an Inflammatory Myopathy in Dutch Shepherd Dogs. Journal of Neuromuscular Diseases, 2019, 6, 485-501.	2.6	11
70	Quantitative Mitochondrial DNA Mutation Analysis by Denaturing HPLC. Clinical Chemistry, 2007, 53, 1046-1052.	3.2	10
71	Novel mutations in the human MCCA and MCCB gene causing methylcrotonylglycinuria. Molecular Genetics and Metabolism, 2011, 102, 218-221.	1.1	10
72	Oxygen consumption by cultured human cells is impaired by a nucleoside analogue cocktail that inhibits mitochondrial DNA synthesis. Mitochondrion, 2005, 5, 154-161.	3.4	8

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73	De novo mutation in POLG leads to haplotype insufficiency and Alpers syndrome. Mitochondrion, 2009, 9, 340-345.	3.4	8
74	Lesch-Nyhan disease: I. Construction of expression vectors for hypoxanthine-guanine phosphoribosyltransferase (HGprt) enzyme and amyloid precursor protein (APP). Nucleosides, Nucleotides and Nucleic Acids, 2020, 39, 905-922.	1.1	8
75	Assessing Bioenergetic Compromise in Autism Spectrum Disorder With ³¹P Magnetic Resonance Spectroscopy. Journal of Child Neurology, 2014, 29, 187-193.	1.4	7
76	Novel mutation in the human HPRT1 gene and the Lesch-Nyhan disease. Nucleosides, Nucleotides and Nucleic Acids, 2017, 36, 704-711.	1.1	5
77	Restingâ€state magnetoencephalography source magnitude imaging with deepâ€learning neural network for classification of symptomatic combatâ€related mild traumatic brain injury. Human Brain Mapping, 2021, 42, 1987-2004.	3.6	5
78	Reply to Vogt et al.: Metabolomics and chronic fatigue syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E7142-E7143.	7.1	3
79	Reply to Roerink et al.: Metabolomics of chronic fatigue syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E911-E912.	7.1	3
80	Human HPRT1 gene and the Leschâ€“Nyhan disease: Substitution of alanine for glycine and inversely in the HGprt enzyme protein. Nucleosides, Nucleotides and Nucleic Acids, 2017, 36, 151-157.	1.1	3
81		2.4	2
82	Assay of mtDNA Polymerase Î³ from Human Tissues. , 2002, 197, 259-271.		2
83	Lesch-Nyhan disease in two families from ChiloÃ© Island with mutations in the HPRT1 gene. Nucleosides, Nucleotides and Nucleic Acids, 2017, 36, 452-462.	1.1	2
84	Mitochondrial DNA Depletion Associated With Partial Complex II and IV Deficiencies and 3-Methylglutaconic Aciduria. Journal of Child Neurology, 2001, 16, 136.	1.4	2
85	Fibroblast immuno-diagnosis of cytochrome oxidase (COX) deficiency in mitochondrial disease. Mitochondrion, 2011, 11, 430-436.	3.4	0
86	Mitochondrial Function and Superoxide Production is Reduced in the Diabetic Kidney and Restored by AMPK Activation. FASEB Journal, 2012, 26, 687.7.	0.5	0