Carlos T Moraes

List of Publications by Year
in descending order

101	12,319	28274	37204
papers	citations	55 h-index	96 g-index

105	105	105	12439
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mitochondrial genome engineering coming-of-age. Trends in Genetics, 2022, 38, 869-880.	6.7	20
2	Mitochondrial targeted meganuclease as a platform to eliminate mutant mtDNA in vivo. Nature Communications, 2021, 12, 3210.	12.8	42
3	Cybrid technology. Methods in Cell Biology, 2020, 155, 415-439.	1.1	5
4	Respiratory supercomplexes act as a platform for complex <scp>III</scp> â€mediated maturation of human mitochondrial complexes I and <scp>IV</scp>. EMBO Journal, 2020, 39, e102817.	7.8	102
5	MitoTALENs for mtDNA editing. , 2020, , 481-498.		0
6	Mitochondrial DNA Base Editing: Good Editing Things Still Come in Small Packages. Molecular Cell, 2020, 79, 708-709.	9.7	6
7	Mitochondrial <scp>DNA</scp> heteroplasmy in disease and targeted nucleaseâ€based therapeutic approaches. EMBO Reports, 2020, 21, e49612.	4.5	54
8	Manipulation of mitochondrial genes and mtDNA heteroplasmy. Methods in Cell Biology, 2020, 155, 441-487.	1.1	15
9	Mechanisms of Mitochondrial DNA Deletion Formation. Trends in Genetics, 2019, 35, 235-244.	6.7	62
10	Elimination of Mutant Mitochondrial DNA in Mitochondrial Myopathies Using Gene-Editing Enzymes. , 2019, , 597-620.		0
11	MitoTALEN reduces mutant mtDNA load and restores tRNAAla levels in a mouse model of heteroplasmic mtDNA mutation. Nature Medicine, 2018, 24, 1696-1700.	30.7	187
12	Targeted Mitochondrial Genome Elimination. , 2018, , 535-563.		2
13	The mitochondrial DNA polymerase gamma degrades linear DNA fragments precluding the formation of deletions. Nature Communications, 2018, 9, 2491.	12.8	91
14	mitoTevâ€TALE: a monomeric DNA editing enzyme toÂreduce mutant mitochondrial DNA levels. EMBO Molecular Medicine, 2018, 10, .	6.9	62
15	Mitochondrial methionyl N-formylation affects steady-state levels of oxidative phosphorylation complexes and their organization into supercomplexes. Journal of Biological Chemistry, 2018, 293, 15021-15032.	3.4	15
16	Mitochondrial Genome Engineering: The Revolution May Not Be CRISPR-Ized. Trends in Genetics, 2018, 34, 101-110.	6.7	230
17	Respiration-Deficient Astrocytes Survive As Glycolytic CellsIn Vivo. Journal of Neuroscience, 2017, 37, 4231-4242.	3.6	97
18	Mitochondrial DNA Double-Strand Breaks in Oligodendrocytes Cause Demyelination, Axonal Injury, and CNS Inflammation. Journal of Neuroscience, 2017, 37, 10185-10199.	3.6	34

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19	Current strategies towards therapeutic manipulation of mtDNA heteroplasmy. Frontiers in Bioscience - Landmark, 2017, 22, 991-1010.	3.0	22
20	The CoQH2/CoQ Ratio Serves as a Sensor of Respiratory Chain Efficiency. Cell Reports, 2016, 15, 197-209.	6.4	215
21	Pioglitazone ameliorates the phenotype of a novel Parkinsonâ€™s disease mouse model by reducing neuroinflammation. Molecular Neurodegeneration, 2016, 11, 25.	10.8	57
22	Sustained AMPK activation improves muscle function in a mitochondrial myopathy mouse model by promoting muscle fiber regeneration. Human Molecular Genetics, 2016, 25, 3178-3191.	2.9	23
23	MitoTALEN: A General Approach to Reduce Mutant mtDNA Loads and Restore Oxidative Phosphorylation Function in Mitochondrial Diseases. Molecular Therapy, 2015, 23, 1592-1599.	8.2	149
24	Selective Elimination of Mitochondrial Mutations in the Germline by Genome Editing. Cell, 2015, 161, 459-469.	28.9	245
25	A magic bullet to specifically eliminate mutated mitochondrial genomes from patients' cells. EMBO Molecular Medicine, 2014, 6, 434-435.	6.9	22
26	The Use of Mitochondria-Targeted Endonucleases to Manipulate mtDNA. Methods in Enzymology, 2014, 547, 373-397.	1.0	37
27	Manipulating mitochondrial genomes in the clinic: playing by different rules. Trends in Cell Biology, 2014, 24, 209-211.	7.9	12
28	Mitochondrial genome changes and neurodegenerative diseases. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2014, 1842, 1198-1207.	3.8	64
29	Specific elimination of mutant mitochondrial genomes in patient-derived cells by mitoTALENs. Nature Medicine, 2013, 19, 1111-1113.	30.7	350
30	Transient systemic mtDNA damage leads to muscle wasting by reducing the satellite cell pool. Human Molecular Genetics, 2013, 22, 3976-3986.	2.9	46
31	Adrenoleukodystrophy and the mitochondrial connection: clues for supplementing Lorenzoâ€™s oil. Brain, 2013, 136, 2339-2341.	7.6	3
32	Increased mitochondrial biogenesis in muscle improves aging phenotypes in the mtDNA mutator mouse. Human Molecular Genetics, 2012, 21, 2288-2297.	2.9	83
33	Cells Lacking Rieske Iron-Sulfur Protein Have a Reactive Oxygen Species-Associated Decrease in Respiratory Complexes I and IV. Molecular and Cellular Biology, 2012, 32, 415-429.	2.3	107
34	A defect in the mitochondrial complex III, but not complex IV, triggers early ROS-dependent damage in defined brain regions. Human Molecular Genetics, 2012, 21, 5066-5077.	2.9	81
35	Glycolytic oligodendrocytes maintain myelin and long-term axonal integrity. Nature, 2012, 485, 517-521.	27.8	1,120
36	The role of PGCâ€1 coactivators in aging skeletal muscle and heart. IUBMB Life, 2012, 64, 231-241.	3.4	99

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37	Increase in Muscle Mitochondrial Biogenesis Does Not Prevent Muscle Loss but Increased Tumor Size in a Mouse Model of Acute Cancer-Induced Cachexia. PLoS ONE, 2012, 7, e33426.	2.5	38
38	Long-Term Bezafibrate Treatment Improves Skin and Spleen Phenotypes of the mtDNA Mutator Mouse. PLoS ONE, 2012, 7, e44335.	2.5	57
39	Increases in mitochondrial biogenesis impair carcinogenesis at multiple levels. Molecular Oncology, 2011, 5, 399-409.	4.6	64
40	A metabolic shift induced by a PPAR panagonist markedly reduces the effects of pathogenic mitochondrial tRNA mutations. Journal of Cellular and Molecular Medicine, 2011, 15, 2317-2325.	3.6	27
41	Striatal Dysfunctions Associated with Mitochondrial DNA Damage in Dopaminergic Neurons in a Mouse Model of Parkinson's Disease. Journal of Neuroscience, 2011, 31, 17649-17658.	3.6	100
42	Emerging therapeutic approaches to mitochondrial diseases. Developmental Disabilities Research Reviews, 2010, 16, 219-229.	2.9	37
43	Mitochondrial myopathy induces a starvation-like response. Human Molecular Genetics, 2010, 19, 3948-3958.	2.9	249
44	35 Increased mitochondrial biogenesis as therapy for mitochondrial myopathies. Mitochondrion, 2010, 10, 209.	3.4	0
45	Lack of Cytochrome c in Mouse Fibroblasts Disrupts Assembly/Stability of Respiratory Complexes I and IV. Journal of Biological Chemistry, 2009, 284, 4383-4391.	3.4	58
46	PGC-1Î±/Î² induced expression partially compensates for respiratory chain defects in cells from patients with mitochondrial disorders. Human Molecular Genetics, 2009, 18, 1805-1812.	2.9	99
47	Endurance exercise is protective for mice with mitochondrial myopathy. Journal of Applied Physiology, 2009, 106, 1712-1719.	2.5	76
48	Intra- and inter-molecular recombination of mitochondrial DNA after in vivo induction of multiple double-strand breaks. Nucleic Acids Research, 2009, 37, 4218-4226.	14.5	106
49	Increased muscle PGC-1Î± expression protects from sarcopenia and metabolic disease during aging. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20405-20410.	7.1	554
50	Making the most of what you've got: Optimizing residual OXPHOS function in mitochondrial diseases. EMBO Molecular Medicine, 2009, 1, 357-359.	6.9	3
51	A 3â€² UTR Modification of the Mitochondrial Rieske Iron Sulfur Protein in Mice Produces a Specific Skin Pigmentation Phenotype. Journal of Investigative Dermatology, 2008, 128, 2343-2345.	0.7	8
52	Mitochondrial Disorders. , 2008, , 1785-1798.		1
53	Cytochrome c oxidase deficiency in neurons decreases both oxidative stress and amyloid formation in a mouse model of Alzheimer's disease. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 14163-14168.	7.1	160
54	The Qo site of the mitochondrial complex III is required for the transduction of hypoxic signaling via reactive oxygen species production. Journal of Cell Biology, 2007, 177, 1029-1036.	5.2	510

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55	Transmitochondrial Technology in Animal Cells. Methods in Cell Biology, 2007, 80, 503-524.	1.1	32
56	Superoxide released into the mitochondrial matrix. Free Radical Biology and Medicine, 2006, 41, 950-959.	2.9	26
57	Oxidative phosphorylation dysfunction modulates expression of extracellular matrixâ€"remodeling genes and invasion. Carcinogenesis, 2006, 27, 409-418.	2.8	68
58	Cytochrome c Oxidase Is Required for the Assembly/Stability of Respiratory Complex I in Mouse Fibroblasts. Molecular and Cellular Biology, 2006, 26, 4872-4881.	2.3	213
59	Double-strand breaks of mouse muscle mtDNA promote large deletions similar to multiple mtDNA deletions in humans. Human Molecular Genetics, 2005, 14, 893-902.	2.9	147
60	Rapid directional shift of mitochondrial DNA heteroplasmy in animal tissues by a mitochondrially targeted restriction endonuclease. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 14392-14397.	7.1	143
61	Mice lacking COX10 in skeletal muscle recapitulate the phenotype of progressive mitochondrial myopathies associated with cytochrome c oxidase deficiency. Human Molecular Genetics, 2005, 14, 2737-2748.	2.9	145
62	Erythromycin as a potential precipitating agent in the onset of Leber's hereditary optic neuropathy. Mitochondrion, 2004, 4, 31-36.	3.4	26
63	Respiratory Complex III Is Required to Maintain Complex I in Mammalian Mitochondria. Molecular Cell, 2004, 13, 805-815.	9.7	402
64	Techniques and Pitfalls in the Detection of Pathogenic Mitochondrial DNA Mutations. Journal of Molecular Diagnostics, 2003, 5, 197-208.	2.8	52
65	A chemical enucleation method for the transfer of mitochondrial DNA to ÂÂ cells. Nucleic Acids Research, 2003, 31, 98e-98.	14.5	38
66	BCL-2 Improves Oxidative Phosphorylation and Modulates Adenine Nucleotide Translocation in Mitochondria of Cells Harboring Mutant mtDNA. Journal of Biological Chemistry, 2003, 278, 5639-5645.	3.4	40
67	Human mitochondrial DNA with large deletions repopulates organelles faster than full-length genomes under relaxed copy number control. Nucleic Acids Research, 2002, 30, 4626-4633.	14.5	139
68	Generation of histocompatible tissues using nuclear transplantation. Nature Biotechnology, 2002, 20, 689-696.	17.5	367
69	Reactive oxygen species and mitochondrial diseases. Seminars in Cell and Developmental Biology, 2001, 12, 449-457.	5.0	308
70	Dysfunctional mitochondrial respiration in the wobbler mouse brain. Neuroscience Letters, 2001, 300, 141-144.	2.1	35
71	Transmitochondrial technology in animal cells. Methods in Cell Biology, 2001, 65, 397-412.	1.1	17
72	A helicase is born. Nature Genetics, 2001, 28, 200-201.	21.4	14

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73	An out-of-frame cytochromeb gene deletion from a patient with parkinsonism is associated with impaired complex III assembly and an increase in free radical production. Annals of Neurology, 2000, 48, 774-781.	5.3	126
74	ï0 tumor cells: a model for studying whether mitochondria are targets for rhodamine 123, doxorubicin, and other drugs. Biochemical Pharmacology, 2000, 60, 1897-1905.	4.4	35
75	Lack of Oxidative Phosphorylation and Low Mitochondrial Membrane Potential Decrease Susceptibility to Apoptosis and Do Not Modulate the Protective Effect of Bcl-xL in Osteosarcoma Cells. Journal of Biological Chemistry, 2000, 275, 7087-7094.	3.4	185
76	Cytochrome c Oxidase Assembly in Primates is Sensitive to Small Evolutionary Variations in Amino Acid Sequence. Molecular Biology and Evolution, 2000, 17, 1508-1519.	8.9	44
77	A novel myopathy-associated mitochondrial DNA mutation altering the conserved size of the tRNAGln anticodon loop. Neuromuscular Disorders, 2000, 10, 488-492.	0.6	12
78	Cloning of an Endangered Species (Bos gaurus) Using Interspecies Nuclear Transfer. Cloning, 2000, 2, 79-90.	2.1	333
79	Mechanisms of Human Mitochondrial DNA Maintenance: The Determining Role of Primary Sequence and Length over Function. Molecular Biology of the Cell, 1999, 10, 3345-3356.	2.1	75
80	Titrating the Effects of Mitochondrial Complex I Impairment in the Cell Physiology. Journal of Biological Chemistry, 1999, 274, 16188-16197.	3.4	342
81	Duplication and triplication with staggered breakpoints in human mitochondrial DNA. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1998, 1406, 73-80.	3.8	14
82	Human Xenomitochondrial Cybrids. Journal of Biological Chemistry, 1998, 273, 14210-14217.	3.4	174
83	Characteristics of Mitochondrial DNA Diseases. , 1998, , 167-184.		2
84	Functional and Structural Features of a Tandem Duplication of the Human mtDNA Promoter Region. American Journal of Human Genetics, 1997, 60, 1363-1372.	6.2	16
85	A Novel Mitochondrial G8313A Mutation Associated with Prominent Initial Gastrointestinal Symptoms and Progressive Encephaloneuropathy. Pediatric Research, 1997, 42, 448-454.	2.3	48
86	Functional and Molecular Mitochondrial Abnormalities Associated with a C â†' T Transition at Position 3256 of the Human Mitochondrial Genome. Journal of Biological Chemistry, 1996, 271, 2347-2352.	3.4	56
87	Replication of a heteroplasmic population of normal and partially-deleted human mitochondrial genomes. Progress in Cell Research, 1995, 5, 209-215.	0.3	8
88	Cytochrome oxidase deficiency: progress and problems. , 1994, , 91-115.		16
89	A mitochondrial tRNA anticodon swap associated with a muscle disease. Nature Genetics, 1993, 4, 284-288.	21.4	146
90	Atypical clinical presentations associated with the MELAS mutation at position 3243 of human mitochondrial DNA. Neuromuscular Disorders, 1993, 3, 43-50.	0.6	219

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91	New Morphological Approaches to the Study of Mitochondrial Encephalomyopathies. Brain Pathology, 1992, 2, 113-119.	4.1	67
92	Fatal infantile liver failure associated with mitochondrial DNA depletion. Journal of Pediatrics, 1992, 121, 896-901.	1.8	123
93	The mitochondrial tRNALeu(UUR) mutation in MELAS: a model for pathogenesis. Biochimica Et Biophysica Acta - Bioenergetics, 1992, 1101, 206-209.	1.0	27
94	Molecular analysis of the muscle pathology associated with mitochondrial DNA deletions. Nature Genetics, 1992, 1, 359-367.	21.4	156
95	Structural and functional mitochondrial abnormalities associated with high levels of partially deleted mitochondrial DNAs in somatic cell hybrids. Somatic Cell and Molecular Genetics, 1992, 18, 431-442.	0.7	19
96	Mitochondrial DNA deletion in a girl with manifestations of Kearns-Sayre and Lowe syndromes: An example of phenotypic mimicry?. American Journal of Medical Genetics Part A, 1991, 41, 301-305.	2.4	23
97	Deletion of mitochondrial DNA in patients with combined features of kearns-sayre and MELAS syndromes. Annals of Neurology, 1991, 29, 680-683.	5.3	91
98	Mitochondrial Encephalomyopathies. Neurologic Clinics, 1990, 8, 483-506.	1.8	51
99	Recombination via flanking direct repeats is a major cause of large-scale deletions of human mitochondrial DNA. Nucleic Acids Research, 1990, 18, 561-567.	14.5	345
100	Mitochondrial DNA Deletions in Progressive External Ophthalmoplegia and Kearns-Sayre Syndrome. New England Journal of Medicine, 1989, 320, 1293-1299.	27.0	1,012
101	MitoTALEN reduces mutant mtDNA load and restores tRNAAla levels in a mouse model of heteroplasmic mtDNA mutation. , 0, .		1