Gary Fiskum

List of Publications by Year
in descending order

102 papers	6,978 citations	47006 47 h-index	58581 82 g-index
103 all docs	103 docs citations	103 times ranked	7009 citing authors

#	Article	IF	Citations
1	Mitochondrial Participation in Ischemic and Traumatic Neural Cell Death. Journal of Neurotrauma, 2000, 17, 843-855.	3.4	328
2	Mitochondria in Neurodegeneration: Acute Ischemia and Chronic Neurodegenerative Diseases. Journal of Cerebral Blood Flow and Metabolism, 1999, 19, 351-369.	4.3	324
3	Mitochondrial calcium and oxidative stress as mediators of ischemic brain injury. Cell Calcium, 2004, 36, 257-264.	2.4	298
4	Mitochondrial mechanisms of neural cell apoptosis. Journal of Neurochemistry, 2004, 90, 1281-1289.	3.9	295
5	Cerebral Ischemia and Reperfusion: Prevention of Brain Mitochondrial Injury by Lidoflazine. Journal of Cerebral Blood Flow and Metabolism, 1987, 7, 752-758.	4.3	255
6	Mitochondrial Mechanisms of Neural Cell Death and Neuroprotective Interventions in Parkinson's Disease. Annals of the New York Academy of Sciences, 2003, 991, 111-119.	3.8	216
7	Regulation of hydrogen peroxide production by brain mitochondria by calcium and Bax. Journal of Neurochemistry, 2002, 83, 220-228.	3.9	215
8	Shift of the Cellular Oxidationâ€Reduction Potential in Neural Cells Expressing Bclâ€2. Journal of Neurochemistry, 1996, 67, 1259-1267.	3.9	203
9	Normoxic Resuscitation after Cardiac Arrest Protects against Hippocampal Oxidative Stress, Metabolic Dysfunction, and Neuronal Death. Journal of Cerebral Blood Flow and Metabolism, 2006, 26, 821-835.	4.3	193
10	Normoxic Ventilation After Cardiac Arrest Reduces Oxidation of Brain Lipids and Improves Neurological Outcome. Stroke, 1998, 29, 1679-1686.	2.0	185
11	Oximetry-Guided Reoxygenation Improves Neurological Outcome After Experimental Cardiac Arrest. Stroke, 2006, 37, 3008-3013.	2.0	184
12	Calcium induced release of mitochondrial cytochrome c by different mechanisms selective for brain versus liver. Cell Death and Differentiation, 1999, 6, 825-832.	11.2	177
13	Protection Against Ischemic Brain Injury by Inhibition of Mitochondrial Oxidative Stress. Journal of Bioenergetics and Biomembranes, 2004, 36, 347-352.	2.3	137
14	Pyruvate dehydrogenase complex: Metabolic link to ischemic brain injury and target of oxidative stress. Journal of Neuroscience Research, 2005, 79, 240-247.	2.9	136
15	Hyperoxic Reperfusion After Global Ischemia Decreases Hippocampal Energy Metabolism. Stroke, 2007, 38, 1578-1584.	2.0	135
16	Cytochromecrelease from brain mitochondria is independent of the mitochondrial permeability transition. FEBS Letters, 1998, 439, 373-376.	2.8	134
17	Novel Mitochondrial Targets for Neuroprotection. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 1362-1376.	4.3	128
18	Postischemic inhibition of cerebral cortex pyruvate dehydrogenase. Free Radical Biology and Medicine, 1994, 16, 811-820.	2.9	125

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19	Cyclosporin A-insensitive Permeability Transition in Brain Mitochondria. Journal of Biological Chemistry, 2003, 278, 27382-27389.	3.4	123
20	Mitochondrial mechanisms of cell death and neuroprotection in pediatric ischemic and traumatic brain injury. Experimental Neurology, 2009, 218, 371-380.	4.1	122
21	Guidelines on experimental methods to assess mitochondrial dysfunction in cellular models of neurodegenerative diseases. Cell Death and Differentiation, 2018, 25, 542-572.	11.2	120
22	BH3 Death Domain Peptide Induces Cell Type-selective Mitochondrial Outer Membrane Permeability. Journal of Biological Chemistry, 2001, 276, 37887-37894.	3.4	119
23	Sulforaphane protects astrocytes against oxidative stress and delayed death caused by oxygen and glucose deprivation. Glia, 2009, 57, 645-656.	4.9	118
24	Mechanisms of Ischemic Neuroprotection by Acetyl-l-carnitine. Annals of the New York Academy of Sciences, 2005, 1053, 153-161.	3.8	112
25	Bclâ€2 Protects Neural Cells from Cyanide/Aglycemiaâ€Induced Lipid Oxidation, Mitochondrial Injury, and Loss of Viability. Journal of Neurochemistry, 1995, 65, 2432-2440.	3.9	109
26	Mechanisms of impaired mitochondrial energy metabolism in acute and chronic neurodegenerative disorders. Journal of Neuroscience Research, 2007, 85, 3407-3415.	2.9	103
27	Neuroprotection by Acetyl-<i>L</i>-Carnitine after Traumatic Injury to the Immature Rat Brain. Developmental Neuroscience, 2010, 32, 480-487.	2.0	102
28	Metabolism of acetylâ€lâ€carnitine for energy and neurotransmitter synthesis in the immature rat brain. Journal of Neurochemistry, 2010, 114, 820-831.	3.9	90
29	Hyperoxic Reperfusion after Global Cerebral Ischemia Promotes Inflammation and Long-Term Hippocampal Neuronal Death. Journal of Neurotrauma, 2010, 27, 753-762.	3.4	87
30	Mitochondrial dysfunction early after traumatic brain injury in immature rats. Journal of Neurochemistry, 2007, 101, 1248-1257.	3.9	86
31	Redox Mechanisms of Cytoprotection by Bcl-2. Antioxidants and Redox Signaling, 2005, 7, 508-514.	5.4	82
32	Nrf2 activators provide neuroprotection against 6â€hydroxydopamine toxicity in rat organotypic nigrostriatal cocultures. Journal of Neuroscience Research, 2009, 87, 1659-1669.	2.9	81
33	Bcl-2 family proteins regulate mitochondrial reactive oxygen production and protect against oxidative stress. Free Radical Biology and Medicine, 2004, 37, 1845-1853.	2.9	77
34	Sulforaphane protects immature hippocampal neurons against death caused by exposure to hemin or to oxygen and glucose deprivation. Journal of Neuroscience Research, 2010, 88, 1355-1363.	2.9	75
35	Sulforaphane inhibits mitochondrial permeability transition and oxidative stress. Free Radical Biology and Medicine, 2011, 51, 2164-2171.	2.9	74
36	Inhibition of Bax-Induced Cytochrome<i>c</i>Release from Neural Cell and Brain Mitochondria by Dibucaine and Propranolol. Journal of Neuroscience, 2003, 23, 2735-2743.	3.6	73

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37	Postischemic hyperoxia reduces hippocampal pyruvate dehydrogenase activity. Free Radical Biology and Medicine, 2006, 40, 1960-1970.	2.9	72
38	Heterogeneity of the calcium-induced permeability transition in isolated non-synaptic brain mitochondria. Journal of Neurochemistry, 2002, 83, 1297-1308.	3.9	71
39	Inhibition of postcardiac arrest brain protein oxidation by acetyl-l-carnitine. Free Radical Biology and Medicine, 1993, 15, 667-670.	2.9	67
40	Sexâ€dependent mitochondrial respiratory impairment and oxidative stress in a rat model of neonatal hypoxicâ€ischemic encephalopathy. Journal of Neurochemistry, 2016, 137, 714-729.	3.9	67
41	Influence of aging on membrane permeability transition in brain mitochondria. Journal of Bioenergetics and Biomembranes, 2011, 43, 3-10.	2.3	62
42	The Potential Role of Mitochondria in Pediatric Traumatic Brain Injury. Developmental Neuroscience, 2006, 28, 432-446.	2.0	59
43	Delayed cerebral oxidative glucose metabolism after traumatic brain injury in young rats. Journal of Neurochemistry, 2009, 109, 189-197.	3.9	57
44	Quantitative imaging of mitochondrial and cytosolic free zinc levels in an in vitro model of ischemia/reperfusion. Journal of Bioenergetics and Biomembranes, 2012, 44, 253-263.	2.3	57
45	Early and Sustained Alterations in Cerebral Metabolism after Traumatic Brain Injury in Immature Rats. Journal of Neurotrauma, 2008, 25, 603-614.	3.4	54
46	Early processing of Bid and caspase-6, -8, -10, -14 in the canine brain during cardiac arrest and resuscitation. Experimental Neurology, 2004, 189, 261-279.	4.1	49
47	Cyclosporin a Increases Mitochondrial Calcium Uptake Capacity in Cortical Astrocytes but not Cerebellar Granule Neurons. Journal of Bioenergetics and Biomembranes, 2006, 38, 43-47.	2.3	49
48	Brain mitochondria from rats treated with sulforaphane are resistant to redox-regulated permeability transition. Journal of Bioenergetics and Biomembranes, 2010, 42, 491-497.	2.3	49
49	Neuroprotective Effects of Acetyl-l-Carnitine After Stroke in Rats. Annals of Emergency Medicine, 1997, 29, 758-765.	0.6	47
50	Neuronal Subclass-Selective Loss of Pyruvate Dehydrogenase Immunoreactivity Following Canine Cardiac Arrest and Resuscitation. Experimental Neurology, 2000, 161, 115-126.	4.1	47
51	Mechanisms of Ischemic Neuroprotection by Acetylâ€lâ€carnitine. Annals of the New York Academy of Sciences, 2005, 1053, 153-161.	3.8	44
52	Hyperoxia promotes astrocyte cell death after oxygen and glucose deprivation. Glia, 2008, 56, 801-808.	4.9	40
53	Postischemic Oxidative Stress Promotes Mitochondrial Metabolic Failure in Neurons and Astrocytes. Annals of the New York Academy of Sciences, 2008, 1147, 129-138.	3.8	39
54	Mitochondrial response to calcium in the developing brain. Developmental Brain Research, 2004, 151, 141-148.	1.7	35

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55	Transcriptional activation of antioxidant gene expression by Nrf2 protects against mitochondrial dysfunction and neuronal death associated with acute and chronic neurodegeneration. Experimental Neurology, 2020, 328, 113247.	4.1	35
56	Postnatal developmental regulation of Bclâ€2 family proteins in brain mitochondria. Journal of Neuroscience Research, 2008, 86, 1267-1276.	2.9	34
57	Neuroprotection through Stimulation of Mitochondrial Antioxidant Protein Expression. Journal of Alzheimer's Disease, 2010, 20, S427-S437.	2.6	33
58	Normoxic ventilatory resuscitation following controlled cortical impact reduces peroxynitrite-mediated protein nitration in the hippocampus. Journal of Neurosurgery, 2008, 108, 124-131.	1.6	31
59	Simulated Aeromedical Evacuation Exacerbates Experimental Brain Injury. Journal of Neurotrauma, 2016, 33, 1292-1302.	3.4	29
60	Cerebral Glucose Metabolism in an Immature Rat Model of Pediatric Traumatic Brain Injury. Journal of Neurotrauma, 2013, 30, 2066-2072.	3.4	27
61	Sex dependent alterations in mitochondrial electron transport chain proteins following neonatal rat cerebral hypoxic-ischemia. Journal of Bioenergetics and Biomembranes, 2016, 48, 591-598.	2.3	24
62	Sex differences in the mitochondrial bioenergetics of astrocytes but not microglia at a physiologically relevant brain oxygen tension. Neurochemistry International, 2018, 117, 82-90.	3.8	24
63	Alteration of Voltage-Dependent Calcium Channels in Canine Brain during Global Ischemia and Reperfusion. Journal of Cerebral Blood Flow and Metabolism, 1992, 12, 418-424.	4.3	23
64	A fluorescence-based technique for screening compounds that protect against damage to brain mitochondria. Brain Research Protocols, 2004, 13, 176-182.	1.6	22
65	Hyperhomocysteinemia-Induced Oxidative Stress Exacerbates Cortical Traumatic Brain Injury Outcomes in Rats. Cellular and Molecular Neurobiology, 2021, 41, 487-503.	3.3	22
66	Effects of FK506 and cyclosporin a on calcium ionophoreâ€induced mitochondrial depolarization and cytosolic calcium in astrocytes and neurons. Journal of Neuroscience Research, 2011, 89, 1973-1978.	2.9	20
67	Bcl-2 and Ca2+-mediated mitochondrial dysfunction in neural cell death. Biochemical Society Symposia, 1999, 66, 33-41.	2.7	20
68	Augmentation of Normal and Glutamate-Impaired Neuronal Respiratory Capacity by Exogenous Alternative Biofuels. Translational Stroke Research, 2013, 4, 643-651.	4.2	19
69	Calcium uptake and cytochrome c release from normal and ischemic brain mitochondria. Neurochemistry International, 2018, 117, 15-22.	3.8	18
70	Aeromedical evacuation-relevant hypobaria worsens axonal and neurologic injury in rats after underbody blast-induced hyperacceleration. Journal of Trauma and Acute Care Surgery, 2017, 83, S35-S42.	2.1	15
71	A review and synthesis of correlates of fatigue in osteoarthritis. International Journal of Orthopaedic and Trauma Nursing, 2019, 33, 4-10.	0.9	15
72	Increased Activation of Lâ€Type Voltageâ€Dependent Calcium Channels Is Associated with Glycine Enhancement of <i>N</i>â€Methylâ€<scp>d</scp>â€Aspartateâ€Stimulated Dopamine Release in Global Cerebral Ischemia/Reperfusion. Journal of Neurochemistry, 1994, 63, 215-221.	3.9	13

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73	Delayed therapy of experimental global cerebral ischemia with acetyl-l-carnitine in dogs. Neuroscience Letters, 2005, 378, 82-87.	2.1	13
74	Anoxia-Induced Changes in Pyridine Nucleotide Redox State in Cortical Neurons and Astrocytes. Neurochemical Research, 2007, 32, 799-806.	3.3	13
75	Effect of cardiopulmonary bypass on platelet mitochondrial respiration and correlation with aggregation and bleeding: a pilot study. Perfusion (United Kingdom), 2016, 31, 508-515.	1.0	13
76	Visualization and quantification of NAD(H) in brain sections by a novel histo-enzymatic nitrotetrazolium blue staining technique. Brain Research, 2010, 1316, 112-119.	2.2	12
77	Permeability transition pore-dependent and PARP-mediated depletion of neuronal pyridine nucleotides during anoxia and glucose deprivation. Journal of Bioenergetics and Biomembranes, 2015, 47, 53-61.	2.3	12
78	Neuropathology and neurobehavioral alterations in a rat model of traumatic brain injury to occupants of vehicles targeted by underbody blasts. Experimental Neurology, 2017, 289, 9-20.	4.1	10
79	Central Nervous System Changes Induced by Underbody Blast-Induced Hyperacceleration: An <i>in Vivo</i> Diffusion Tensor Imaging and Magnetic Resonance Spectroscopy Study. Journal of Neurotrauma, 2017, 34, 1972-1980.	3.4	9
80	Rat Model of Brain Injury to Occupants of Vehicles Targeted by Land Mines: Mitigation by Elastomeric Frame Designs. Journal of Neurotrauma, 2018, 35, 1192-1203.	3.4	9
81	Post-stroke fatigue as an indicator of underlying bioenergetics alterations. Journal of Bioenergetics and Biomembranes, 2019, 51, 165-174.	2.3	9
82	ATP synthesis is coupled to rat liver mitochondrial RNA synthesis. Molecular and Cellular Biochemistry, 2001, 221, 3-10.	3.1	8
83	Rat model of brain injury caused by under-vehicle blast-induced hyperacceleration. Journal of Trauma and Acute Care Surgery, 2014, 77, S83-S87.	2.1	8
84	Platelets in preeclamptic pregnancies fail to exhibit the decrease in mitochondrial oxygen consumption rate seen in normal pregnancies. Bioscience Reports, 2018, 38, .	2.4	7
85	Hypobaria-Induced Oxidative Stress Facilitates Homocysteine Transsulfuration and Promotes Glutathione Oxidation in Rats with Mild Traumatic Brain Injury. Journal of Central Nervous System Disease, 2021, 13, 117957352098819.	1.9	6
86	Hypobaria Exposure Worsens Cardiac Function and Endothelial Injury in AN Animal Model of Polytrauma: Implications for Aeromedical Evacuation. Shock, 2021, 56, 601-610.	2.1	6
87	Oximetry-Guided normoxic resuscitation following canine cardiac arrest reduces cerebellar Purkinje neuronal damage. Resuscitation, 2019, 140, 23-28.	3.0	5
88	Effect of hypobaria and hyperoxia during sepsis on survival and energy metabolism. Journal of Trauma and Acute Care Surgery, 2018, 85, S68-S76.	2.1	4
89	Air-Evacuation-Relevant Hypobaria Following Traumatic Brain Injury Plus Hemorrhagic Shock in Rats Increases Mortality and Injury to the Gut, Lungs, and Kidneys. Shock, 2021, 56, 793-802.	2.1	4
90	Enhancing Metabolic Imaging of Energy Metabolism in Traumatic Brain Injury Using Hyperpolarized [1-13C]Pyruvate and Dichloroacetate. Metabolites, 2021, 11, 335.	2.9	4

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91	A Nonlethal Murine Flame Burn Model Leads to a Transient Reduction in Host Defenses and Enhanced Susceptibility to Lethal Pseudomonas aeruginosa Infection. Infection and Immunity, 2021, 89, e0009121.	2.2	4
92	Combined traumatic brain injury and hemorrhagic shock in ferrets leads to structural, neurochemical, and functional impairments. Journal of Neurotrauma, 2022, , .	3.4	4
93	Oxygen: could there be too much of a good thing?. British Journal of Hospital Medicine (London,) Tj ETQq1 1 0.784314 rgBT /Overlock 1	0.5	3
94	Mitochondrial Mechanisms of Neural Cell Death in Cerebral Ischemia. , 2011, , 153-163.		2
95	A non-lethal full-thickness flame burn produces a seroma beneath the forming eschar thereby promoting Pseudomonas aeruginosa sepsis in mice. Journal of Burn Care and Research, 2021, , .	0.4	2
96	Hyperoxidation of NAD(P)H redox state after anoxia and reoxygenation: Effects of nitric oxide and PARP-1 inhibition. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S77-S77.	4.3	1
97	Introduction: Mitochondria and Neuroprotectionâ€"In Memory of Albert L. Lehninger. Journal of Bioenergetics and Biomembranes, 2004, 36, 275-276.	2.3	0
98	Ultrastructural Analysis of Platelets During Storage in Different Buffers. Microscopy and Microanalysis, 2018, 24, 1250-1251.	0.4	0
99	Editorial: Mitochondria and neurological diseases. Experimental Neurology, 2020, 334, 113467.	4.1	0
100	Normoxic resuscitation after cardiac arrest protects against hippocampal oxidative stress, metabolic failure, and neuronal death. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S42-S42.	4.3	0
101	Neuroprotection after Cardiac Arrest by Avoiding Acute Hyperoxia and by Antioxidant Genomic Postconditioning. Oxidative Stress and Disease, 2009, , .	0.3	0
102	Mitochondrial Antioxidants in Neuroprotection. Oxidative Stress and Disease, 2012, , 469-492.	0.3	0