Brian M Polster

List of Publications by Year
in descending order

54 papers	3,940 citations	147801 31 h-index	168389 53 g-index
55 all docs	55 docs citations	55 times ranked	6941 citing authors

#	Article	IF	Citations
1	The Non-Specific Drp1 Inhibitor Mdivi-1 Has Modest Biochemical Antioxidant Activity. Antioxidants, 2022, 11, 450.	5.1	15
2	Intrinsic epigenetic control of angiogenesis in induced pluripotent stem cell-derived endothelium regulates vascular regeneration. Npj Regenerative Medicine, 2022, 7, 28.	5.2	2
3	ALS/FTD mutations in UBQLN2 are linked to mitochondrial dysfunction through loss-of-function in mitochondrial protein import. Human Molecular Genetics, 2021, 30, 1230-1246.	2.9	10
4	Parkin-independent mitophagy via Drp1-mediated outer membrane severing and inner membrane ubiquitination. Journal of Cell Biology, 2021, 220, .	5.2	29
5	Mithramycin selectively attenuates DNA-damage-induced neuronal cell death. Cell Death and Disease, 2020, 11, 587.	6.3	8
6	Idebenone Has Distinct Effects on Mitochondrial Respiration in Cortical Astrocytes Compared to Cortical Neurons Due to Differential NQO1 Activity. Journal of Neuroscience, 2020, 40, 4609-4619.	3.6	30
7	Mapping mitochondrial respiratory chain deficiencies by respirometry: Beyond the Mito Stress Test. Experimental Neurology, 2020, 328, 113282.	4.1	16
8	Targeting breast cancer metabolism with a novel inhibitor of mitochondrial ATP synthesis. Oncotarget, 2020, 11, 3863-3885.	1.8	13
9	Fetal Programming and Sexual Dimorphism of Mitochondrial Protein Expression and Activity of Hearts of Prenatally Hypoxic Guinea Pig Offspring. Oxidative Medicine and Cellular Longevity, 2019, 2019, 1-11.	4.0	13
10	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
11	Mitochondria in the nervous system: From health to disease, part II. Neurochemistry International, 2018, 117, 1-4.	3.8	6
12	Role of hypoxia in Diffuse Large B-cell Lymphoma: Metabolic repression and selective translation of HK2 facilitates development of DLBCL. Scientific Reports, 2018, 8, 744.	3.3	36
13	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
14	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
15	Comparing effects of CDK inhibition and E2F1/2 ablation on neuronal cell death pathways in vitro and after traumatic brain injury. Cell Death and Disease, 2018, 9, 1121.	6.3	17
16	Prenatal hypoxia impairs cardiac mitochondrial and ventricular function in guinea pig offspring in a sex-related manner. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2018, 315, R1232-R1241.	1.8	24
17	An inÂvitro model yields â€˜importinâ€™ new insights into chronic traumatic encephalopathy: damaged astrocytes stop â€˜thrombospondinâ€™ to the injury. Journal of Neurochemistry, 2017, 140, 531-535.	3.9	2
18	The Putative Drp1 Inhibitor mdivi-1 Is a Reversible Mitochondrial Complex I Inhibitor that Modulates Reactive Oxygen Species. Developmental Cell, 2017, 40, 583-594.e6.	7.0	406

#	Article	IF	Citations
19	Mitochondria in the nervous system: From health to disease, Part I. Neurochemistry International, 2017, 109, 1-4.	3.8	7
20	Inhibition of Bcl-xL prevents pro-death actions of Î”N-Bcl-xL at the mitochondrial inner membrane during glutamate excitotoxicity. Cell Death and Differentiation, 2017, 24, 1963-1974.	11.2	38
21	Mitochondrial E3 ubiquitin ligase MARCH5 controls mitochondrial fission and cell sensitivity to stress-induced apoptosis through regulation of MiD49 protein. Molecular Biology of the Cell, 2016, 27, 349-359.	2.1	117
22	Targeting <scp>DDX</scp>3 with a small molecule inhibitor for lung cancer therapy. EMBO Molecular Medicine, 2015, 7, 648-669.	6.9	189
23	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
24	Low micromolar concentrations of the superoxide probe MitoSOX uncouple neural mitochondria and inhibit complex IV. Free Radical Biology and Medicine, 2015, 86, 250-258.	2.9	60
25	The RUNX2 Transcription Factor Negatively Regulates SIRT6 Expression to Alter Glucose Metabolism in Breast Cancer Cells. Journal of Cellular Biochemistry, 2015, 116, 2210-2226.	2.6	56
26	Idebenone and neuroprotection: antioxidant, pro-oxidant, or electron carrier?. Journal of Bioenergetics and Biomembranes, 2015, 47, 111-118.	2.3	99
27	Use of Potentiometric Fluorophores in the Measurement of Mitochondrial Reactive Oxygen Species. Methods in Enzymology, 2014, 547, 225-250.	1.0	62
28	Cyclin D1 Represses Gluconeogenesis via Inhibition of the Transcriptional Coactivator PGC1Î±. Diabetes, 2014, 63, 3266-3278.	0.6	51
29	NADPH oxidase- and mitochondria-derived reactive oxygen species in proinflammatory microglial activation: a bipartisan affair?. Free Radical Biology and Medicine, 2014, 76, 34-46.	2.9	160
30	Augmentation of Normal and Glutamate-Impaired Neuronal Respiratory Capacity by Exogenous Alternative Biofuels. Translational Stroke Research, 2013, 4, 643-651.	4.2	19
31	AIF, reactive oxygen species, and neurodegeneration: A â€œcomplexâ€•problem. Neurochemistry International, 2013, 62, 695-702.	3.8	50
32	Magnesium Sulfate Protects Against the Bioenergetic Consequences of Chronic Glutamate Receptor Stimulation. PLoS ONE, 2013, 8, e79982.	2.5	35
33	Improved Mitochondrial Function with Diet-Induced Increase in Either Docosahexaenoic Acid or Arachidonic Acid in Membrane Phospholipids. PLoS ONE, 2012, 7, e34402.	2.5	72
34	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
35	Protein Aggregation and Multiple Organelle Damage After Brain Ischemia. , 2012, , 101-116.		3
36	Investigation of Mitochondrial Dysfunction by Sequential Microplate-Based Respiration Measurements from Intact and Permeabilized Neurons. PLoS ONE, 2012, 7, e34465.	2.5	52

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37	Rapid Detection of an ABT-737-Sensitive Primed for Death State in Cells Using Microplate-Based Respirometry. PLoS ONE, 2012, 7, e42487.	2.5	7
38	Mitochondrial Mechanisms of Neural Cell Death in Cerebral Ischemia. , 2011, , 153-163.		2
39	Adaptation of microplateâ€based respirometry for hippocampal slices and analysis of respiratory capacity. Journal of Neuroscience Research, 2011, 89, 1979-1988.	2.9	47
40	The dynamin-related GTPase Opa1 is required for glucose-stimulated ATP production in pancreatic beta cells. Molecular Biology of the Cell, 2011, 22, 2235-2245.	2.1	142
41	Perilipin 5, a lipid droplet-associated protein, provides physical and metabolic linkage to mitochondria. Journal of Lipid Research, 2011, 52, 2159-2168.	4.2	365
42	Dietary supplementation with docosahexaenoic acid, but not eicosapentaenoic acid, dramatically alters cardiac mitochondrial phospholipid fatty acid composition and prevents permeability transition. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1555-1562.	1.0	68
43	Reactive oxygen species regulation by AIF- and complex I-depleted brain mitochondria. Free Radical Biology and Medicine, 2009, 46, 939-947.	2.9	58
44	Realâ€time visualization of cytoplasmic calpain activation and calcium deregulation in acute glutamate excitotoxicity. Journal of Neurochemistry, 2009, 110, 990-1004.	3.9	33
45	Solid Phase Synthesis of Dual Labeled Peptides: Development of Cell Permeable Calpain Specific Substrates. International Journal of Peptide Research and Therapeutics, 2007, 13, 83-91.	1.9	4
46	Zinc-Dependent Multi-Conductance Channel Activity in Mitochondria Isolated from Ischemic Brain. Journal of Neuroscience, 2006, 26, 6851-6862.	3.6	93
47	Calpain I Induces Cleavage and Release of Apoptosis-inducing Factor from Isolated Mitochondria. Journal of Biological Chemistry, 2005, 280, 6447-6454.	3.4	375
48	Proapoptotic N-truncated BCL-xL protein activates endogenous mitochondrial channels in living synaptic terminals. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 13590-13595.	7.1	95
49	Mitochondrial mechanisms of neural cell apoptosis. Journal of Neurochemistry, 2004, 90, 1281-1289.	3.9	295
50	Viral Bcl-2 homologs and their role in virus replication and associated diseases. Biochimica Et Biophysica Acta - Molecular Cell Research, 2004, 1644, 211-227.	4.1	67
51	Inhibition of Bax-Induced CytochromecRelease from Neural Cell and Brain Mitochondria by Dibucaine and Propranolol. Journal of Neuroscience, 2003, 23, 2735-2743.	3.6	73
52	Bax, along with Lipid Conspirators, Allows Cytochrome c to Escape Mitochondria. Molecular Cell, 2002, 10, 963-965.	9.7	41
53	Regulation of hydrogen peroxide production by brain mitochondria by calcium and Bax. Journal of Neurochemistry, 2002, 83, 220-228.	3.9	215
54	Mitochondrial Precursor Signal Peptide Induces a Unique Permeability Transition and Release of Cytochrome c from Liver and Brain Mitochondria. Archives of Biochemistry and Biophysics, 2001, 386, 251-260.	3.0	34