Plamena R Angelova

List of Publications by Year
in descending order

63 papers	4,784 citations	159585 30 h-index	123424 61 g-index
68 all docs	68 docs citations	68 times ranked	6934 citing authors

#	Article	IF	Citations
1	Role of mitochondrial <scp>ROS</scp> in the brain: from physiology to neurodegeneration. FEBS Letters, 2018, 592, 692-702.	2.8	515
2	Nrf2 regulates ROS production by mitochondria and NADPH oxidase. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 794-801.	2.4	444
3	Î±-synuclein oligomers interact with ATP synthase and open the permeability transition pore in Parkinsonâ€™s disease. Nature Communications, 2018, 9, 2293.	12.8	351
4	Alpha-Synuclein Oligomers Interact with Metal Ions to Induce Oxidative Stress and Neuronal Death in Parkinson's Disease. Antioxidants and Redox Signaling, 2016, 24, 376-391.	5.4	266
5	Functional Oxygen Sensitivity of Astrocytes. Journal of Neuroscience, 2015, 35, 10460-10473.	3.6	219
6	Nrf2 affects the efficiency of mitochondrial fatty acid oxidation. Biochemical Journal, 2014, 457, 415-424.	3.7	192
7	Functional role of mitochondrial reactive oxygen species in physiology. Free Radical Biology and Medicine, 2016, 100, 81-85.	2.9	191
8	Phospholipase iPLA2Î² averts ferroptosis by eliminating a redox lipid death signal. Nature Chemical Biology, 2021, 17, 465-476.	8.0	168
9	Mutations in HPCA Cause Autosomal-Recessive Primary Isolated Dystonia. American Journal of Human Genetics, 2015, 96, 657-665.	6.2	151
10	Loss of<i>PLA2G6</i>leads to elevated mitochondrial lipid peroxidation and mitochondrial dysfunction. Brain, 2015, 138, 1801-1816.	7.6	143
11	Monomeric Alpha-Synuclein Exerts a Physiological Role on Brain ATP Synthase. Journal of Neuroscience, 2016, 36, 10510-10521.	3.6	142
12	Alpha synuclein aggregation drives ferroptosis: an interplay of iron, calcium and lipid peroxidation. Cell Death and Differentiation, 2020, 27, 2781-2796.	11.2	142
13	Aggregated Î±-synuclein and complex I deficiency: exploration of their relationship in differentiated neurons. Cell Death and Disease, 2015, 6, e1820-e1820.	6.3	139
14	Calcium is a key factor in Î±-synuclein induced neurotoxicity. Journal of Cell Science, 2016, 129, 1792-801.	2.0	136
15	Mitochondria and lipid peroxidation in the mechanism of neurodegeneration: Finding ways for prevention. Medicinal Research Reviews, 2021, 41, 770-784.	10.5	136
16	Enhancing nucleotide metabolism protects against mitochondrial dysfunction and neurodegeneration in a PINK1 model of Parkinsonâ€™s disease. Nature Cell Biology, 2014, 16, 157-166.	10.3	119
17	Lipid peroxidation is essential for Î±â€synucleinâ€induced cell death. Journal of Neurochemistry, 2015, 133, 582-589.	3.9	105
18	Mitochondrial dysfunction in Parkinsonian mesenchymal stem cells impairs differentiation. Redox Biology, 2018, 14, 474-484.	9.0	104

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19	Loss of PINK1 Increases the Heart's Vulnerability to Ischemia-Reperfusion Injury. PLoS ONE, 2013, 8, e62400.	2.5	99
20	'Mitochondrial energy imbalance and lipid peroxidation cause cell death in Friedreichâ€™s ataxia'. Cell Death and Disease, 2016, 7, e2237-e2237.	6.3	94
21	Alpha-synuclein and beta-amyloid â€“ different targets, same players: calcium, free radicals and mitochondria in the mechanism of neurodegeneration. Biochemical and Biophysical Research Communications, 2017, 483, 1110-1115.	2.1	67
22	Interaction of neurons and astrocytes underlies the mechanism of AÎ²-induced neurotoxicity. Biochemical Society Transactions, 2014, 42, 1286-1290.	3.4	60
23	<i>In Situ</i> Investigation of Mammalian Inorganic Polyphosphate Localization Using Novel Selective Fluorescent Probes JC-D7 and JC-D8. ACS Chemical Biology, 2014, 9, 2101-2110.	3.4	54
24	Role of inorganic polyphosphate in mammalian cells: from signal transduction and mitochondrial metabolism to cell death. Biochemical Society Transactions, 2016, 44, 40-45.	3.4	50
25	A Critical Role for Purinergic Signalling in the Mechanisms Underlying Generation of BOLD fMRI Responses. Journal of Neuroscience, 2015, 35, 5284-5292.	3.6	49
26	Pharmacological Sequestration of Mitochondrial Calcium Uptake Protects Neurons Against Glutamate Excitotoxicity. Molecular Neurobiology, 2019, 56, 2244-2255.	4.0	48
27	Inorganic polyphosphate is produced and hydrolyzed in F0F1-ATP synthase of mammalian mitochondria. Biochemical Journal, 2020, 477, 1515-1524.	3.7	43
28	Oxidative modulation of the transient potassium current IAby intracellular arachidonic acid in rat CA1 pyramidal neurons. European Journal of Neuroscience, 2006, 23, 2375-2384.	2.6	42
29	iPSC-derived neuronal models of PANK2-associated neurodegeneration reveal mitochondrial dysfunction contributing to early disease. PLoS ONE, 2017, 12, e0184104.	2.5	39
30	Signal transduction in astrocytes: Localization and release of inorganic polyphosphate. Glia, 2018, 66, 2126-2136.	4.9	34
31	Cellular mechanisms of complex I-associated pathology. Biochemical Society Transactions, 2019, 47, 1963-1969.	3.4	32
32	Polyhydroxybutyrate Targets Mammalian Mitochondria and Increases Permeability of Plasmalemmal and Mitochondrial Membranes. PLoS ONE, 2013, 8, e75812.	2.5	32
33	ELF fields and photooxidation yielding lethal effects on cancer cells. Bioelectromagnetics, 2003, 24, 148-150.	1.6	30
34	Inorganic Polyphosphate Regulates AMPA and NMDA Receptors and Protects Against Glutamate Excitotoxicity via Activation of P2Y Receptors. Journal of Neuroscience, 2019, 39, 6038-6048.	3.6	30
35	Arachidonic acid potently inhibits both postsynapticâ€type Kv4.2 and presynapticâ€type Kv1.4 I_A potassium channels. European Journal of Neuroscience, 2009, 29, 1943-1950.	2.6	26
36	Sources and triggers of oxidative damage in neurodegeneration. Free Radical Biology and Medicine, 2021, 173, 52-63.	2.9	26

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37	Ca2+-independent muscarinic excitation of rat medial entorhinal cortex layer V neurons. European Journal of Neuroscience, 2003, 18, 3343-3351.	2.6	25
38	Adrenaline induces calcium signal in astrocytes and vasoconstriction via activation of monoamine oxidase. Free Radical Biology and Medicine, 2020, 159, 15-22.	2.9	24
39	Lipid peroxidation is involved in calcium dependent upregulation of mitochondrial metabolism in skeletal muscle. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129487.	2.4	22
40	Singlet oxygen stimulates mitochondrial bioenergetics in brain cells. Free Radical Biology and Medicine, 2021, 163, 306-313.	2.9	20
41	Variability of mitochondrial energy balance across brain regions. Journal of Neurochemistry, 2021, 157, 1234-1243.	3.9	17
42	Metabolically induced intracellular pH changes activate mitophagy, autophagy, and cell protection in familial forms of Parkinson's disease. FEBS Journal, 2022, 289, 699-711.	4.7	17
43	Assessment of ROS Production in the Mitochondria of Live Cells. Methods in Molecular Biology, 2021, 2202, 33-42.	0.9	12
44	Hyperammonaemia induces mitochondrial dysfunction and neuronal cell death. JHEP Reports, 2022, 4, 100510.	4.9	12
45	Mitochondrial dysfunction and energy deprivation in the mechanism of neurodegeneration. Biyokimya Dergisi, 2019, 44, 723-729.	0.5	11
46	Ageâ€related changes in the energy of human mesenchymal stem cells. Journal of Cellular Physiology, 2022, 237, 1753-1767.	4.1	10
47	Surface electric charge of thylakoid membranes from genetically modified tobacco plants under freezing stress. Journal of Photochemistry and Photobiology B: Biology, 2013, 119, 22-30.	3.8	9
48	Activation of RAGE leads to the release of glutamate from astrocytes and stimulates calcium signal in neurons. Journal of Cellular Physiology, 2021, 236, 6496-6506.	4.1	9
49	RT001 in Progressive Supranuclear Palsyâ€"Clinical and In-Vitro Observations. Antioxidants, 2021, 10, 1021.	5.1	9
50	Probing Cell Redox State and Glutathione-Modulating Factors Using a Monochlorobimane-Based Microplate Assay. Antioxidants, 2022, 11, 391.	5.1	9
51	Viper toxins affect membrane characteristics of human erythrocytes. Biophysical Chemistry, 2021, 270, 106532.	2.8	6
52	Assessment of Mitochondrial Membrane Potential and NADH Redox State in Acute Brain Slices. Methods in Molecular Biology, 2021, 2276, 193-202.	0.9	6
53	Ca2+ is a key factor in Î±-synuclein-induced neurotoxicity. Development (Cambridge), 2016, 143, e1.1-e1.1.	2.5	5
54	Deuterated Arachidonic Acid Ameliorates Lipopolysaccharide-Induced Lung Damage in Mice. Antioxidants, 2022, 11, 681.	5.1	5

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55	Role of Inorganic Polyphosphate in the Cells of the Mammalian Brain. , 2016, , 115-121.		2
56	A Physiological Role for Alpha-Synuclein in the Regulation of ATP Synthesis. Biophysical Journal, 2016, 110, 471a.	0.5	2
57	Role of Inorganic Polyphosphate (PolyP) in Physiological and Pathophysiological Response to Glutamate in Mammalian Neurons. Biophysical Journal, 2016, 110, 261a.	0.5	1
58	Delivery of Singlet Oxygen into Neurons Stimulates Mitochondrial Energy Metabolism. Biophysical Journal, 2020, 118, 445a.	0.5	1
59	Verification of NADH content measurements by portable optical diagnostic system in living brain tissue. , 2018, , .		1
60	Alpha-Synuclein Induces Mitochondrial Dysfunction Leading to a Higher Susceptibility of PTP Opening. Biophysical Journal, 2014, 106, 590a.	0.5	0
61	Cellular Mechanisms of Oxygen Sensing in Astrocytes. Biophysical Journal, 2014, 106, 529a.	0.5	0
62	Inorganic Polyphosphate Protects Neurons against Glutamate-Induced Excitotoxicity. Biophysical Journal, 2017, 112, 539a.	0.5	0
63	Direct Modulation of the Mitochondrial Permeability Transition Pore by Oligomeric Alpha-Synuclein Causes Toxicity in PD. Biophysical Journal, 2017, 112, 440a.	0.5	0