Andrey Y Abramov

List of Publications by Year
in descending order

183	18,934	9756	13338
papers	citations	73 h-index	130 g-index

197	197	197	23727
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Direct Observation of the Interconversion of Normal and Toxic Forms of Î±-Synuclein. Cell, 2012, 149, 1048-1059.	13.5	755
2	The emerging role of Nrf2 in mitochondrial function. Free Radical Biology and Medicine, 2015, 88, 179-188.	1.3	696
3	Mechanism of Oxidative Stress in Neurodegeneration. Oxidative Medicine and Cellular Longevity, 2012, 2012, 1-11.	1.9	680
4	PINK1-Associated Parkinson's Disease Is Caused by Neuronal Vulnerability to Calcium-Induced Cell Death. Molecular Cell, 2009, 33, 627-638.	4.5	584
5	Three Distinct Mechanisms Generate Oxygen Free Radicals in Neurons and Contribute to Cell Death during Anoxia and Reoxygenation. Journal of Neuroscience, 2007, 27, 1129-1138.	1.7	563
6	Â-Amyloid Peptides Induce Mitochondrial Dysfunction and Oxidative Stress in Astrocytes and Death of Neurons through Activation of NADPH Oxidase. Journal of Neuroscience, 2004, 24, 565-575.	1.7	525
7	Role of mitochondrial <scp>ROS</scp> in the brain: from physiology to neurodegeneration. FEBS Letters, 2018, 592, 692-702.	1.3	515
8	Nrf2 regulates ROS production by mitochondria and NADPH oxidase. Biochimica Et Biophysica Acta - General Subjects, 2015, 1850, 794-801.	1.1	444
9	Maternal Diet-Induced Obesity Alters Mitochondrial Activity and Redox Status in Mouse Oocytes and Zygotes. PLoS ONE, 2010, 5, e10074.	1.1	401
10	PINK1 cleavage at position A103 by the mitochondrial protease PARL. Human Molecular Genetics, 2011, 20, 867-879.	1.4	385
11	Structural characterization of toxic oligomers that are kinetically trapped during Î±-synuclein fibril formation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1994-2003.	3.3	384
12	Î±-synuclein oligomers interact with ATP synthase and open the permeability transition pore in Parkinsonâ€™s disease. Nature Communications, 2018, 9, 2293.	5.8	351
13	Nrf2 impacts cellular bioenergetics by controlling substrate availability for mitochondrial respiration. Biology Open, 2013, 2, 761-770.	0.6	346
14	Changes in Intracellular Calcium and Glutathione in Astrocytes as the Primary Mechanism of Amyloid Neurotoxicity. Journal of Neuroscience, 2003, 23, 5088-5095.	1.7	303
15	The Parkinson's diseaseâ€“linked proteins Fbxo7 and Parkin interact to mediate mitophagy. Nature Neuroscience, 2013, 16, 1257-1265.	7.1	292
16	PINK1 Is Necessary for Long Term Survival and Mitochondrial Function in Human Dopaminergic Neurons. PLoS ONE, 2008, 3, e2455.	1.1	273
17	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.	2.5	266
18	Ambroxol improves lysosomal biochemistry in glucocerebrosidase mutation-linked Parkinson disease cells. Brain, 2014, 137, 1481-1495.	3.7	258

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19	Regulation of Mitochondrial Structure and Function by the F1Fo-ATPase Inhibitor Protein, IF1. Cell Metabolism, 2008, 8, 13-25.	7.2	246
20	Mutations in ANO3 Cause Dominant Craniocervical Dystonia: Ion Channel Implicated in Pathogenesis. American Journal of Human Genetics, 2012, 91, 1041-1050.	2.6	224
21	Functional Oxygen Sensitivity of Astrocytes. Journal of Neuroscience, 2015, 35, 10460-10473.	1.7	219
22	Expression and Modulation of an NADPH Oxidase in Mammalian Astrocytes. Journal of Neuroscience, 2005, 25, 9176-9184.	1.7	213
23	High Sensitivity, Quantitative Measurements of Polyphosphate Using a New DAPI-Based Approach. Journal of Fluorescence, 2008, 18, 859-866.	1.3	202
24	Targeted polyphosphatase expression alters mitochondrial metabolism and inhibits calcium-dependent cell death. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18091-18096.	3.3	196
25	Calcium signals induced by amyloid Î² peptide and their consequences in neurons and astrocytes in culture. Biochimica Et Biophysica Acta - Molecular Cell Research, 2004, 1742, 81-87.	1.9	192
26	Nrf2 affects the efficiency of mitochondrial fatty acid oxidation. Biochemical Journal, 2014, 457, 415-424.	1.7	192
27	Functional role of mitochondrial reactive oxygen species in physiology. Free Radical Biology and Medicine, 2016, 100, 81-85.	1.3	191
28	Toxicity of Amyloid Î² Peptide: Tales of Calcium, Mitochondria, and Oxidative Stress. Neurochemical Research, 2004, 29, 637-650.	1.6	189
29	The large-conductance Ca2+-activated K+ channel is essential for innate immunity. Nature, 2004, 427, 853-858.	13.7	185
30	Kinetic model of the aggregation of alpha-synuclein provides insights into prion-like spreading. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E1206-15.	3.3	181
31	Mechanisms underlying the loss of mitochondrial membrane potential in glutamate excitotoxicity. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 953-964.	0.5	173
32	Phospholipase iPLA2Î² averts ferroptosis by eliminating a redox lipid death signal. Nature Chemical Biology, 2021, 17, 465-476.	3.9	168
33	Role of DJ-1 in the mechanism of pathogenesis of Parkinson's disease. Journal of Bioenergetics and Biomembranes, 2019, 51, 175-188.	1.0	167
34	Inorganic Polyphosphate and Energy Metabolism in Mammalian Cells. Journal of Biological Chemistry, 2010, 285, 9420-9428.	1.6	161
35	Mutations in HPCA Cause Autosomal-Recessive Primary Isolated Dystonia. American Journal of Human Genetics, 2015, 96, 657-665.	2.6	151
36	Î²-amyloid activates PARP causing astrocytic metabolic failure and neuronal death. Brain, 2011, 134, 1658-1672.	3.7	148

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37	Progressive Motor Neuron Pathology and the Role of Astrocytes in a Human Stem Cell Model of VCP-Related ALS. Cell Reports, 2017, 19, 1739-1749.	2.9	146
38	Loss ofPLA2G6leads to elevated mitochondrial lipid peroxidation and mitochondrial dysfunction. Brain, 2015, 138, 1801-1816.	3.7	143
39	Monomeric Alpha-Synuclein Exerts a Physiological Role on Brain ATP Synthase. Journal of Neuroscience, 2016, 36, 10510-10521.	1.7	142
40	Alpha synuclein aggregation drives ferroptosis: an interplay of iron, calcium and lipid peroxidation. Cell Death and Differentiation, 2020, 27, 2781-2796.	5.0	142
41	Aggregated Î±-synuclein and complex I deficiency: exploration of their relationship in differentiated neurons. Cell Death and Disease, 2015, 6, e1820-e1820.	2.7	139
42	The role of an astrocytic NADPH oxidase in the neurotoxicity of amyloid beta peptides. Philosophical Transactions of the Royal Society B: Biological Sciences, 2005, 360, 2309-2314.	1.8	138
43	PKA Phosphorylation of NCLX Reverses Mitochondrial Calcium Overload and Depolarization, Promoting Survival of PINK1-Deficient Dopaminergic Neurons. Cell Reports, 2015, 13, 376-386.	2.9	136
44	Calcium is a key factor in Î±-synuclein induced neurotoxicity. Journal of Cell Science, 2016, 129, 1792-801.	1.2	136
45	Mitochondria and lipid peroxidation in the mechanism of neurodegeneration: Finding ways for prevention. Medicinal Research Reviews, 2021, 41, 770-784.	5.0	136
46	Signalling properties of inorganic polyphosphate in the mammalian brain. Nature Communications, 2013, 4, 1362.	5.8	132
47	Nrf2 activation in the treatment of neurodegenerative diseases: a focus on its role in mitochondrial bioenergetics and function. Biological Chemistry, 2016, 397, 383-400.	1.2	128
48	Pathogenic VCP Mutations Induce Mitochondrial Uncoupling and Reduced ATP Levels. Neuron, 2013, 78, 57-64.	3.8	127
49	Enhancing nucleotide metabolism protects against mitochondrial dysfunction and neurodegeneration in a PINK1 model of Parkinsonâ€™s disease. Nature Cell Biology, 2014, 16, 157-166.	4.6	119
50	Lack of Oxygen Deactivates Mitochondrial Complex I. Journal of Biological Chemistry, 2009, 284, 36055-36061.	1.6	114
51	Seizure activity results in calcium- and mitochondria-independent ROS production via NADPH and xanthine oxidase activation. Cell Death and Disease, 2014, 5, e1442-e1442.	2.7	110
52	A Missense Mutation in KCTD17 Causes Autosomal Dominant Myoclonus-Dystonia. American Journal of Human Genetics, 2015, 96, 938-947.	2.6	109
53	Mechanism of neurodegeneration of neurons with mitochondrial DNA mutations. Brain, 2010, 133, 797-807.	3.7	108
54	Deletion of the von Hippelâ€“Lindau gene in pancreatic Î² cells impairs glucose homeostasis in mice. Journal of Clinical Investigation, 2009, 119, 125-35.	3.9	108

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55	Dopamine Induces Ca2+ Signaling in Astrocytes through Reactive Oxygen Species Generated by Monoamine Oxidase. Journal of Biological Chemistry, 2010, 285, 25018-25023.	1.6	105
56	Lipid peroxidation is essential for Î±â€synucleinâ€induced cell death. Journal of Neurochemistry, 2015, 133, 582-589.	2.1	105
57	Mitochondrial dysfunction in Parkinsonian mesenchymal stem cells impairs differentiation. Redox Biology, 2018, 14, 474-484.	3.9	104
58	Fumonisin B1 inhibits mitochondrial respiration and deregulates calcium homeostasisâ€"Implication to mechanism of cell toxicity. International Journal of Biochemistry and Cell Biology, 2011, 43, 897-904.	1.2	103
59	Mitochondrial calcium imbalance in Parkinsonâ€™s disease. Neuroscience Letters, 2018, 663, 86-90.	1.0	101
60	KEAP1 inhibition is neuroprotective and suppresses the development of epilepsy. Brain, 2018, 141, 1390-1403.	3.7	99
61	Measurement of Mitochondrial NADH and FAD Autofluorescence in Live Cells. Methods in Molecular Biology, 2015, 1264, 263-270.	0.4	94
62	'Mitochondrial energy imbalance and lipid peroxidation cause cell death in Friedreichâ€™s ataxia'. Cell Death and Disease, 2016, 7, e2237-e2237.	2.7	94
63	Mitochondrial Ca2+ in neurodegenerative disorders. Pharmacological Research, 2015, 99, 377-381.	3.1	89
64	Intracellular pH Modulates Autophagy and Mitophagy. Journal of Biological Chemistry, 2016, 291, 8701-8708.	1.6	89
65	Bioenergetic Consequences of PINK1 Mutations in Parkinson Disease. PLoS ONE, 2011, 6, e25622.	1.1	88
66	Mitochondrial hyperpolarization in iPSC-derived neurons from patients of FTDP-17 with 10+16 MAPT mutation leads to oxidative stress and neurodegeneration. Redox Biology, 2017, 12, 410-422.	3.9	87
67	Actions of ionomycin, 4-BrA23187 and a novel electrogenic Ca2+ ionophore on mitochondria in intact cells. Cell Calcium, 2003, 33, 101-112.	1.1	84
68	Rare Individual Amyloid-Î² Oligomers Act on Astrocytes to Initiate Neuronal Damage. Biochemistry, 2014, 53, 2442-2453.	1.2	83
69	Hypoxia signaling controls postnatal changes in cardiac mitochondrial morphology and function. Journal of Molecular and Cellular Cardiology, 2014, 74, 340-352.	0.9	82
70	Membrane cholesterol content plays a key role in the neurotoxicity of Î²â€amyloid: implications for Alzheimerâ€™s disease. Aging Cell, 2011, 10, 595-603.	3.0	81
71	Dopamine protects neurons against glutamate-induced excitotoxicity. Cell Death and Disease, 2013, 4, e455-e455.	2.7	81
72	Prolonged seizure activity impairs mitochondrial bioenergetics and induces cell death. Journal of Cell Science, 2012, 125, 1796-806.	1.2	80

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73	Deletions at 22q11.2 in idiopathic Parkinson's disease: a combined analysis of genome-wide association data. Lancet Neurology, The, 2016, 15, 585-596.	4.9	77
74	Impaired mitochondrial bioenergetics determines glutamate-induced delayed calcium deregulation in neurons. Biochimica Et Biophysica Acta - General Subjects, 2010, 1800, 297-304.	1.1	74
75	The spatiotemporal regulation of the Keap1â€“Nrf2 pathway and its importance in cellular bioenergetics. Biochemical Society Transactions, 2015, 43, 602-610.	1.6	69
76	Measurement of Tau Filament Fragmentation Provides Insights into Prion-like Spreading. ACS Chemical Neuroscience, 2018, 9, 1276-1282.	1.7	68
77	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.	1.0	67
78	Dopamine Induced Neurodegeneration in a PINK1 Model of Parkinson's Disease. PLoS ONE, 2012, 7, e37564.	1.1	66
79	Interaction of misfolded proteins and mitochondria in neurodegenerative disorders. Biochemical Society Transactions, 2017, 45, 1025-1033.	1.6	66
80	Mitochondrial Calcium Deregulation in the Mechanism of Beta-Amyloid and Tau Pathology. Cells, 2020, 9, 2135.	1.8	65
81	Clinical, pathological and functional characterization of riboflavin-responsive neuropathy. Brain, 2017, 140, 2820-2837.	3.7	64
82	Tau inhibits mitochondrial calcium efflux and makes neurons vulnerable to calcium-induced cell death. Cell Calcium, 2020, 86, 102150.	1.1	64
83	Energy depletion in seizures: Anaplerosis as a strategy for future therapies. Neuropharmacology, 2013, 69, 96-104.	2.0	62
84	Melatonin prevents cytosolic calcium overload, mitochondrial damage and cell death due to toxically high doses of dexamethasone-induced oxidative stress in human neuroblastoma SH-SY5Y cells. Neurochemistry International, 2016, 97, 34-41.	1.9	61
85	Interaction of neurons and astrocytes underlies the mechanism of AÎ²-induced neurotoxicity. Biochemical Society Transactions, 2014, 42, 1286-1290.	1.6	60
86	Targeting mitochondrial dysfunction in neurodegenerative disease: Part II. Expert Opinion on Therapeutic Targets, 2010, 14, 497-511.	1.5	58
87	Cell metabolism affects selective vulnerability in PINK1-associated Parkinson's disease. Journal of Cell Science, 2011, 124, 4194-4202.	1.2	58
88	Effect of Coenzyme Q10 supplementation on mitochondrial electron transport chain activity and mitochondrial oxidative stress in Coenzyme Q10 deficient human neuronal cells. International Journal of Biochemistry and Cell Biology, 2014, 50, 60-63.	1.2	57
89	Combination antioxidant therapy prevents epileptogenesis and modifies chronic epilepsy. Redox Biology, 2019, 26, 101278.	3.9	57
90	Targeting mitochondrial dysfunction in neurodegenerative disease: Part I. Expert Opinion on Therapeutic Targets, 2010, 14, 369-385.	1.5	56

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91	In Situ Investigation of Mammalian Inorganic Polyphosphate Localization Using Novel Selective Fluorescent Probes JC-D7 and JC-D8. ACS Chemical Biology, 2014, 9, 2101-2110.	1.6	54
92	Interaction of Mitochondrial Calcium and ROS in Neurodegeneration. Cells, 2022, 11, 706.	1.8	54
93	Hypoxic Regulation of Hand1 Controls the Fetal-Neonatal Switch in Cardiac Metabolism. PLoS Biology, 2013, 11, e1001666.	2.6	53
94	Interaction of Oxidative Stress and Misfolded Proteins in the Mechanism of Neurodegeneration. Life, 2020, 10, 101.	1.1	53
95	Insoluble tau aggregates induce neuronal death through modification of membrane ion conductance, activation of voltageâ€gated calcium channels and NADPH oxidase. FEBS Journal, 2021, 288, 127-141.	2.2	52
96	Pathogenic p62/SQSTM1 mutations impair energy metabolism through limitation of mitochondrial substrates. Scientific Reports, 2017, 7, 1666.	1.6	51
97	Nrf2 activation reprograms macrophage intermediary metabolism and suppresses the type I interferon response. IScience, 2022, 25, 103827.	1.9	51
98	Status epilepticus results in persistent overproduction of reactive oxygen species, inhibition of which is neuroprotective. Neuroscience, 2015, 303, 160-165.	1.1	50
99	Role of inorganic polyphosphate in mammalian cells: from signal transduction and mitochondrial metabolism to cell death. Biochemical Society Transactions, 2016, 44, 40-45.	1.6	50
100	A single cell high content assay detects mitochondrial dysfunction in iPSC-derived neurons with mutations in SNCA. Scientific Reports, 2018, 8, 9033.	1.6	50
101	LRRK2 deficiency induced mitochondrial Ca2+ efflux inhibition can be rescued by Na+/Ca2+/Li+ exchanger upregulation. Cell Death and Disease, 2019, 10, 265.	2.7	50
102	Mechanism of neuroprotection of melatonin against beta-amyloid neurotoxicity. Neuroscience, 2011, 180, 229-237.	1.1	49
103	Human neuronal coenzyme Q₁₀ deficiency results in global loss of mitochondrial respiratory chain activity, increased mitochondrial oxidative stress and reversal of ATP synthase activity: implications for pathogenesis and treatment. Journal of Inherited Metabolic Disease, 2013, 36, 63-73.	1.7	49
104	A Critical Role for Purinergic Signalling in the Mechanisms Underlying Generation of BOLD fMRI Responses. Journal of Neuroscience, 2015, 35, 5284-5292.	1.7	49
105	Pharmacological Sequestration of Mitochondrial Calcium Uptake Protects Neurons Against Glutamate Excitotoxicity. Molecular Neurobiology, 2019, 56, 2244-2255.	1.9	48
106	Deficiency of Parkinsonâ€™s disease-related gene Fbxo7 is associated with impaired mitochondrial metabolism by PARP activation. Cell Death and Differentiation, 2017, 24, 120-131.	5.0	44
107	Mitochondrial deficits and abnormal mitochondrial retrograde axonal transport play a role in the pathogenesis of mutant Hsp27-induced Charcot Marie Tooth Disease. Human Molecular Genetics, 2017, 26, 3313-3326.	1.4	43
108	Inorganic polyphosphate is produced and hydrolyzed in F0F1-ATP synthase of mammalian mitochondria. Biochemical Journal, 2020, 477, 1515-1524.	1.7	43

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109	Glucocorticoids reduce intracellular calcium concentration and protects neurons against glutamate toxicity. Cell Calcium, 2013, 53, 256-263.	1.1	42
110	Lipid peroxidation is essential for phospholipase C activity and IP3 related calcium signal. Journal of Cell Science, 2014, 127, 21-6.	1.2	42
111	PINK1 deficiency in Î²-cells increases basal insulin secretion and improves glucose tolerance in mice. Open Biology, 2014, 4, 140051.	1.5	40
112	iPSC-derived neuronal models of PANK2-associated neurodegeneration reveal mitochondrial dysfunction contributing to early disease. PLoS ONE, 2017, 12, e0184104.	1.1	39
113	Ionophoretic properties of ferutinin. Cell Calcium, 1997, 22, 235-241.	1.1	37
114	Influence of plant terpenoids on the permeability of mitochondria and lipid bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2001, 1512, 98-110.	1.4	37
115	Melatonin attenuates dexamethasone toxicity-induced oxidative stress, calpain and caspase activation in human neuroblastoma SH-SY5Y cells. Journal of Steroid Biochemistry and Molecular Biology, 2013, 138, 116-122.	1.2	37
116	Hereditary sensory neuropathy type 1-associated deoxysphingolipids cause neurotoxicity, acute calcium handling abnormalities and mitochondrial dysfunction in vitro. Neurobiology of Disease, 2018, 117, 1-14.	2.1	36
117	Novel C12orf65 mutations in patients with axonal neuropathy and optic atrophy. Journal of Neurology, Neurosurgery and Psychiatry, 2014, 85, 486-492.	0.9	35
118	Signal transduction in astrocytes: Localization and release of inorganic polyphosphate. Glia, 2018, 66, 2126-2136.	2.5	34
119	Monoamine oxidaseâ€A knockdown in human neuroblastoma cells reveals protection against mitochondrial toxins. FASEB Journal, 2014, 28, 218-229.	0.2	33
120	HtrA2 deficiency causes mitochondrial uncoupling through the F1F0-ATP synthase and consequent ATP depletion. Cell Death and Disease, 2012, 3, e335-e335.	2.7	32
121	Cellular mechanisms of complex I-associated pathology. Biochemical Society Transactions, 2019, 47, 1963-1969.	1.6	32
122	Polyhydroxybutyrate Targets Mammalian Mitochondria and Increases Permeability of Plasmalemmal and Mitochondrial Membranes. PLoS ONE, 2013, 8, e75812.	1.1	32
123	Carbon monoxide shifts energetic metabolism from glycolysis to oxidative phosphorylation in endothelial cells. FEBS Letters, 2016, 590, 3469-3480.	1.3	30
124	Inorganic Polyphosphate Regulates AMPA and NMDA Receptors and Protects Against Glutamate Excitotoxicity via Activation of P2Y Receptors. Journal of Neuroscience, 2019, 39, 6038-6048.	1.7	30
125	Role of polyhydroxybutyrate in mitochondrial calcium uptake. Cell Calcium, 2013, 54, 86-94.	1.1	28
126	Mutations in valosin-containing protein (VCP) decrease ADP/ATP translocation across the mitochondrial membrane and impair energy metabolism in human neurons. Journal of Biological Chemistry, 2017, 292, 8907-8917.	1.6	27

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127	Mitochondrial Function Is Compromised in Cortical Bone Osteocytes of Long-Lived Growth Hormone Receptor Null Mice. Journal of Bone and Mineral Research, 2019, 34, 106-122.	3.1	27
128	Neurodegenerative disordersâ€"Searching for targets and new ways of diseases treatment. Medicinal Research Reviews, 2021, 41, 2603-2605.	5.0	27
129	Mitochondrial ROS control neuronal excitability and cell fate in frontotemporal dementia. Alzheimer's and Dementia, 2022, 18, 318-338.	0.4	27
130	Novel pathway for an old neurotransmitter: Dopamine-induced neuronal calcium signalling via receptor-independent mechanisms. Cell Calcium, 2010, 48, 176-182.	1.1	25
131	The Role of the Mitochondrial NCX in the Mechanism of Neurodegeneration in Parkinsonâ€™s Disease. Advances in Experimental Medicine and Biology, 2013, 961, 241-249.	0.8	25
132	Modulation of mitochondrial ion transport by inorganic polyphosphate - essential role in mitochondrial permeability transition pore. Journal of Bioenergetics and Biomembranes, 2017, 49, 49-55.	1.0	25
133	Adrenaline induces calcium signal in astrocytes and vasoconstriction via activation of monoamine oxidase. Free Radical Biology and Medicine, 2020, 159, 15-22.	1.3	24
134	Impact of fumonisin B1 on glutamate toxicity and low magnesium-induced seizure activity in neuronal primary culture. Neuroscience, 2012, 202, 10-16.	1.1	23
135	Neuroprotective coordination of cell mitophagy by the ATPase Inhibitory Factor 1. Pharmacological Research, 2016, 103, 56-68.	3.1	23
136	Lipid peroxidation is involved in calcium dependent upregulation of mitochondrial metabolism in skeletal muscle. Biochimica Et Biophysica Acta - General Subjects, 2020, 1864, 129487.	1.1	22
137	Brain region specificity in reactive oxygen species production and maintenance of redox balance. Free Radical Biology and Medicine, 2021, 174, 195-201.	1.3	22
138	Singlet oxygen stimulates mitochondrial bioenergetics in brain cells. Free Radical Biology and Medicine, 2021, 163, 306-313.	1.3	20
139	Deficiency of the zinc finger protein ZFP106 causes motor and sensory neurodegeneration. Human Molecular Genetics, 2016, 25, 291-307.	1.4	19
140	CORM â€401 induces calcium signalling, NO increase and activation of pentose phosphate pathway in endothelial cells. FEBS Journal, 2018, 285, 1346-1358.	2.2	19
141	Synthetic Fragments of Receptor for Advanced Glycation End Products Bind Beta-Amyloid 1â€“40 and Protect Primary Brain Cells From Beta-Amyloid Toxicity. Frontiers in Neuroscience, 2018, 12, 681.	1.4	19
142	Acetylcholine and antibodies against the acetylcholine receptor protect neurons and astrocytes against beta-amyloid toxicity. International Journal of Biochemistry and Cell Biology, 2013, 45, 899-907.	1.2	18
143	Annexin A5 prevents amyloid-Î²-induced toxicity in choroid plexus: implication for Alzheimerâ€™s disease. Scientific Reports, 2020, 10, 9391.	1.6	18
144	Visualization of mitochondrial membrane potential in mammalian cells. Methods in Cell Biology, 2020, 155, 221-245.	0.5	18

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145	Expression of mutant exon 1 huntingtin fragments in human neural stem cells and neurons causes inclusion formation and mitochondrial dysfunction. FASEB Journal, 2020, 34, 8139-8154.	0.2	18
146	Reactive Oxygen Species Produced by a Photodynamic Effect Induced Calcium Signal in Neurons and Astrocytes. Molecular Neurobiology, 2018, 55, 96-102.	1.9	17
147	Maturation and phenotype of pathophysiological neuronal excitability of human cells in tau-related dementia. Journal of Cell Science, 2020, 133, .	1.2	17
148	Variability of mitochondrial energy balance across brain regions. Journal of Neurochemistry, 2021, 157, 1234-1243.	2.1	17
149	Metabolically induced intracellular pH changes activate mitophagy, autophagy, and cell protection in familial forms of Parkinson's disease. FEBS Journal, 2022, 289, 699-711.	2.2	17
150	Immunization with either prion protein fragment 95â€“123 or the fragment-specific antibodies rescue memory loss and neurodegenerative phenotype of neurons in olfactory bulbectomized mice. Neurobiology of Learning and Memory, 2014, 107, 50-64.	1.0	16
151	The Role of Reactive Oxygen Species in Epilepsy. Reactive Oxygen Species (Apex, N C), 2016, 1, .	5.4	16
152	Lactate and Pyruvate Activate Autophagy and Mitophagy that Protect Cells in Toxic Model of Parkinsonâ€™s Disease. Molecular Neurobiology, 2022, 59, 177-190.	1.9	15
153	Measurements of Threshold of Mitochondrial Permeability Transition Pore Opening in Intact and Permeabilized Cells by Flash Photolysis of Caged Calcium. Methods in Molecular Biology, 2011, 793, 299-309.	0.4	13
154	Assessment of ROS Production in the Mitochondria of Live Cells. Methods in Molecular Biology, 2021, 2202, 33-42.	0.4	12
155	Hyperammonaemia induces mitochondrial dysfunction and neuronal cell death. JHEP Reports, 2022, 4, 100510.	2.6	12
156	Laser-induced singlet oxygen selectively triggers oscillatory mitochondrial permeability transition and apoptosis in melanoma cell lines. Life Sciences, 2022, 304, 120720.	2.0	12
157	Mild stress of caffeine increased mtDNA content in skeletal muscle cells: the interplay between Ca2+ transients and nitric oxide. Journal of Muscle Research and Cell Motility, 2012, 33, 327-337.	0.9	11
158	Mitochondrial dysfunction and energy deprivation in the mechanism of neurodegeneration. Biyokimya Dergisi, 2019, 44, 723-729.	0.1	11
159	Genetically engineered MAPT 10+16 mutation causes pathophysiological excitability of human iPSC-derived neurons related to 4R tau-induced dementia. Cell Death and Disease, 2021, 12, 716.	2.7	11
160	Ageâ€related changes in the energy of human mesenchymal stem cells. Journal of Cellular Physiology, 2022, 237, 1753-1767.	2.0	10
161	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.	2.0	9
162	Proteomic Analysis of Cardiac Adaptation to Exercise by High Resolution Mass Spectrometry. Frontiers in Molecular Biosciences, 2021, 8, 723858.	1.6	9

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163	Photo-Induced Oxidative Stress Impairs Mitochondrial Metabolism in Neurons and Astrocytes. Molecular Neurobiology, 2018, 55, 90-95.	1.9	8
164	Impaired Bioenergetics in Mutant Mitochondrial DNA Determines Cell Fate During Seizure-Like Activity. Molecular Neurobiology, 2019, 56, 321-334.	1.9	8
165	An integrated genomic approach to dissect the genetic landscape regulating the cell-to-cell transfer of Î±-synuclein. Cell Reports, 2021, 35, 109189.	2.9	8
166	Fluorescence lifetime needle optical biopsy discriminates hepatocellular carcinoma. Biomedical Optics Express, 2022, 13, 633.	1.5	8
167	Dopamine controls neuronal spontaneous calcium oscillations via astrocytic signal. Cell Calcium, 2021, 94, 102359.	1.1	7
168	Modulation of Intracellular Ca2+ Concentration by Vitamin B12 in Rat Thymocytes. Blood Cells, Molecules, and Diseases, 2001, 27, 812-824.	0.6	6
169	Assessment of Mitochondrial Membrane Potential and NADH Redox State in Acute Brain Slices. Methods in Molecular Biology, 2021, 2276, 193-202.	0.4	6
170	Elevated 4Râ€tau in astrocytes from asymptomatic carriers of the MAPT 10+16 intronic mutation. Journal of Cellular and Molecular Medicine, 2022, 26, 1327-1331.	1.6	6
171	Ca2+ is a key factor in Î±-synuclein-induced neurotoxicity. Development (Cambridge), 2016, 143, e1.1-e1.1.	1.2	5
172	Redox biology in neurodegenerative disorders. Free Radical Biology and Medicine, 2022, 188, 24-25.	1.3	5
173	The brainâ€”from neurodevelopment to neurodegeneration. FEBS Journal, 2022, 289, 2010-2012.	2.2	4
174	Inorganic Polyphosphate and F0F1-ATP Synthase of Mammalian Mitochondria. Progress in Molecular and Subcellular Biology, 2022, , 1-13.	0.9	4
175	Different faces of neurodegeneration. FEBS Journal, 2018, 285, 3544-3546.	2.2	3
176	Role of Inorganic Polyphosphate in the Cells of the Mammalian Brain. , 2016, , 115-121.		2
177	The Role of p53 Protein in the Realization of the Exogenous Heat Shock Protein 70 Anti-Apoptotic Effect during Axotomy. Cells, 2022, 11, 93.	1.8	2
178	Protein Misfolding and Aggregation: Implications for Mitochondrial Dysfunction and Neurodegeneration. , 2016, , 241-253.		1
179	Verification of NADH content measurements by portable optical diagnostic system in living brain tissue. , 2018, , .		1
180	B27â€…Abnormal bioenergetics in inclusion-containing mutant HTT exon 1 primary human neurons. Journal of Neurology, Neurosurgery and Psychiatry, 2016, 87, A18.2-A19.	0.9	0

#	Article	IF	Citations
181	Reply: Glial mitochondropathy in infantile neuroaxonal dystrophy: pathophysiological and therapeutic implications. Brain, 2016, 139, e68-e68.	3.7	0
182	[P1â€“175]: ANNEXIN V PREVENTS Î²â€AMYLOIDâ€INDUCED TOXITY IN CHOROID PLEXUS: IMPLICATIONS FOR ALZHEIMER's and ACUTE DISEASE. Alzheimer's and Dementia, 2017, 13, P310.	0.4	0
183	Ischemia-Reperfusion Induces ROS Production from Three Distinct Sources. , 2009, , 97-108.		0