Guy C Brown

List of Publications by Year
in descending order

113 papers	20,267 citations	16411 64 h-index	24915 109 g-index
116 all docs	116 docs citations	116 times ranked	24497 citing authors

#	Article	IF	Citations
1	Knockout of the P2Y6 Receptor Prevents Peri-Infarct Neuronal Loss after Transient, Focal Ischemia in Mouse Brain. International Journal of Molecular Sciences, 2022, 23, 2304.	1.8	6
2	Brain Cells Release Calreticulin That Attracts and Activates Microglia, and Inhibits Amyloid Beta Aggregation and Neurotoxicity. Frontiers in Immunology, 2022, 13, 859686.	2.2	9
3	Sialylation acts as a checkpoint for innate immune responses in the central nervous system. Glia, 2021, 69, 1619-1636.	2.5	31
4	Wild-type sTREM2 blocks Aî² aggregation and neurotoxicity, but the Alzheimer's R47H mutant increases Aî² aggregation. Journal of Biological Chemistry, 2021, 296, 100631.	1.6	33
5	Microglial phagocytosis of neurons in neurodegeneration, and its regulation. Journal of Neurochemistry, 2021, 158, 621-639.	2.1	120
6	Iâ€™m Infected, Eat Me! Innate Immunity Mediated by Live, Infected Cells Signaling To Be Phagocytosed. Infection and Immunity, 2021, 89, .	1.0	12
7	CD33M inhibits microglial phagocytosis, migration and proliferation, but the Alzheimerâ€™s diseaseâ€protective variant CD33m stimulates phagocytosis and proliferation, and inhibits adhesion. Journal of Neurochemistry, 2021, 158, 297-310.	2.1	18
8	The Phagocytic Code Regulating Phagocytosis of Mammalian Cells. Frontiers in Immunology, 2021, 12, 629979.	2.2	44
9	Inflammatory neuronal loss in the substantia nigra induced by systemic lipopolysaccharide is prevented by knockout of the P2Y6 receptor in mice. Journal of Neuroinflammation, 2021, 18, 225.	3.1	19
10	Does Soluble TREM2 Protect Against Alzheimer's Disease?. Frontiers in Aging Neuroscience, 2021, 13, 834697.	1.7	12
11	Neuronal Loss after Stroke Due to Microglial Phagocytosis of Stressed Neurons. International Journal of Molecular Sciences, 2021, 22, 13442.	1.8	24
12	The microglial P2Y6 receptor mediates neuronal loss and memory deficits in neurodegeneration. Cell Reports, 2021, 37, 110148.	2.9	31
13	Extracellular tau induces microglial phagocytosis of living neurons in cell cultures. Journal of Neurochemistry, 2020, 154, 316-329.	2.1	35
14	Activated microglia desialylate their surface, stimulating complement receptor 3â€mediated phagocytosis of neurons. Glia, 2020, 68, 989-998.	2.5	48
15	Sialylation and Galectin-3 in Microglia-Mediated Neuroinflammation and Neurodegeneration. Frontiers in Cellular Neuroscience, 2020, 14, 162.	1.8	73
16	Lipopolysaccharide activates microglia via neuraminidase 1 desialylation of Tollâ€like Receptor 4. Journal of Neurochemistry, 2020, 155, 403-416.	2.1	29
17	TET2 Regulates the Neuroinflammatory Response in Microglia. Cell Reports, 2019, 29, 697-713.e8.	2.9	74
18	The endotoxin hypothesis of neurodegeneration. Journal of Neuroinflammation, 2019, 16, 180.	3.1	254

#	Article	IF	Citations
19	Galectin-3, a novel endogenous TREM2 ligand, detrimentally regulates inflammatory response in Alzheimerâ€™s disease. Acta Neuropathologica, 2019, 138, 251-273.	3.9	187
20	Calreticulin and Galectin-3 Opsonise Bacteria for Phagocytosis by Microglia. Frontiers in Immunology, 2019, 10, 2647.	2.2	28
21	Mechanisms of cell death induced by arginase and asparaginase in precursor B-cell lymphoblasts. Apoptosis: an International Journal on Programmed Cell Death, 2019, 24, 145-156.	2.2	21
22	Neurophagy, the phagocytosis of live neurons and synapses by glia, contributes to brain development and disease. FEBS Journal, 2018, 285, 3566-3575.	2.2	133
23	Effective Knockdown of Gene Expression in Primary Microglia With siRNA and Magnetic Nanoparticles Without Cell Death or Inflammation. Frontiers in Cellular Neuroscience, 2018, 12, 313.	1.8	16
24	Neuronal Cell Death. Physiological Reviews, 2018, 98, 813-880.	13.1	737
25	Galectin-3 released in response to traumatic brain injury acts as an alarmin orchestrating brain immune response and promoting neurodegeneration. Scientific Reports, 2017, 7, 41689.	1.6	120
26	Activated Microglia Desialylate and Phagocytose Cells via Neuraminidase, Galectin-3, and Mer Tyrosine Kinase. Journal of Immunology, 2017, 198, 4792-4801.	0.4	83
27	Deciphering microglial diversity in Alzheimer's disease. Science, 2017, 356, 1123-1124.	6.0	15
28	Anti-CD47 antibodies induce phagocytosis of live, malignant B cells by macrophages <i>via</i> the Fc domain, resulting in cell death by phagoptosis. Oncotarget, 2017, 8, 60892-60903.	0.8	30
29	Activated microglia cause reversible apoptosis of pheochromocytoma cells, inducing their cell death by phagocytosis. Journal of Cell Science, 2016, 129, 65-79.	1.2	40
30	Amyloid Î^2 induces microglia to phagocytose neurons via activation of protein kinase Cs and NADPH oxidase. International Journal of Biochemistry and Cell Biology, 2016, 81, 346-355.	1.2	25
31	Living too long. EMBO Reports, 2015, 16, 137-141.	2.0	146
32	Neuroinflammation in Alzheimer's disease. Lancet Neurology, The, 2015, 14, 388-405.	4.9	4,129
33	How microglia kill neurons. Brain Research, 2015, 1628, 288-297.	1.1	233
34	Inhibition of UDP/P2Y₆ purinergic signaling prevents phagocytosis of viable neurons by activated microglia <i>in vitro</i> and <i>in vivo</i>. Glia, 2014, 62, 1463-1475.	2.5	119
35	Microglial phagocytosis of live neurons. Nature Reviews Neuroscience, 2014, 15, 209-216.	4.9	666
36	Inflammation induces multinucleation of Microglia via <scp>PKC</scp> inhibition of cytokinesis, generating highly phagocytic multinucleated giant cells. Journal of Neurochemistry, 2014, 128, 650-661.	2.1	46

#	Article	IF	Citations
37	Deoxyglucose prevents neurodegeneration in culture by eliminating microglia. Journal of Neuroinflammation, 2014, 11, 58.	3.1	38
38	Tumour necrosis factor alphaâ€induced neuronal loss is mediated by microglial phagocytosis. FEBS Letters, 2014, 588, 2952-2956.	1.3	120
39	Rotenone induces neuronal death by microglial phagocytosis of neurons. FEBS Journal, 2013, 280, 5030-5038.	2.2	68
40	In the eye of the storm: mitochondrial damage during heart and brain ischaemia. FEBS Journal, 2013, 280, 4999-5014.	2.2	64
41	Lactadherin/<scp>MFG</scp>â€E8 is essential for microgliaâ€mediated neuronal loss and phagoptosis induced by amyloid Î². Journal of Neurochemistry, 2013, 126, 312-317.	2.1	67
42	Phagocytosis executes delayed neuronal death after focal brain ischemia. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E4098-107.	3.3	288
43	Caspase Inhibitors Protect Neurons by Enabling Selective Necroptosis of Inflamed Microglia. Journal of Biological Chemistry, 2013, 288, 9145-9152.	1.6	81
44	Eaten alive! Cell death by primary phagocytosis: â€˜phagoptosisâ€™. Trends in Biochemical Sciences, 2012, 37, 325-332.	3.7	269
45	MFG-E8 Mediates Primary Phagocytosis of Viable Neurons during Neuroinflammation. Journal of Neuroscience, 2012, 32, 2657-2666.	1.7	189
46	There is no evidence that mitochondria are the main source of reactive oxygen species in mammalian cells. Mitochondrion, 2012, 12, 1-4.	1.6	232
47	Primary phagocytosis of viable neurons by microglia activated with LPS or AÎ² is dependent on calreticulin/LRP phagocytic signalling. Journal of Neuroinflammation, 2012, 9, 196.	3.1	116
48	Neuronal Death Induced by Nanomolar Amyloid Î² Is Mediated by Primary Phagocytosis of Neurons by Microglia. Journal of Biological Chemistry, 2011, 286, 39904-39913.	1.6	185
49	Inhibition of Microglial Phagocytosis Is Sufficient To Prevent Inflammatory Neuronal Death. Journal of Immunology, 2011, 186, 4973-4983.	0.4	331
50	Inflammation and Reactive Oxygen/Nitrogen Species in Glial/Neuronal Cultures. Neuromethods, 2011, , 331-347.	0.2	3
51	The principle of sufficiency and the evolution of control: using control analysis to understand the design principles of biological systems. Biochemical Society Transactions, 2010, 38, 1210-1214.	1.6	2
52	Inflammatory Neurodegeneration and Mechanisms of Microglial Killing of Neurons. Molecular Neurobiology, 2010, 41, 242-247.	1.9	479
53	Nitric oxide and neuronal death. Nitric Oxide - Biology and Chemistry, 2010, 23, 153-165.	1.2	334
54	The inhibition of mitochondrial cytochrome oxidase by the gases carbon monoxide, nitric oxide, hydrogen cyanide and hydrogen sulfide: chemical mechanism and physiological significance. Journal of Bioenergetics and Biomembranes, 2008, 40, 533-9.	1.0	608

#	Article	IF	Citations
55	Regulation of apoptosis by the redox state of cytochrome c. Biochimica Et Biophysica Acta - Bioenergetics, 2008, 1777, 877-881.	0.5	171
56	Nitric oxide and mitochondrial respiration in the heart. Cardiovascular Research, 2007, 75, 283-290.	1.8	177
57	Nitric oxide from neuronal nitric oxide synthase sensitises neurons to hypoxia-induced death via competitive inhibition of cytochrome oxidase. Journal of Neurochemistry, 2007, 103, 070710052154011-???.	2.1	36
58	Nitric oxide and mitochondria. Frontiers in Bioscience - Landmark, 2007, 12, 1024.	3.0	136
59	S-nitrosothiol inhibition of mitochondrial complex I causes a reversible increase in mitochondrial hydrogen peroxide production. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 562-566.	0.5	56
60	Fibrillar beta-amyloid peptide Abeta1-40 activates microglial proliferation via stimulating TNF-alpha release and H2O2 derived from NADPH oxidase: a cell culture study. Journal of Neuroinflammation, 2006, 3, 24.	3.1	112
61	Nitric oxide stimulates PC12 cell proliferation via cGMP and inhibits at higher concentrations mainly via energy depletion. Nitric Oxide - Biology and Chemistry, 2006, 14, 238-246.	1.2	37
62	Highly purified lipoteichoic acid induced pro-inflammatory signalling in primary culture of rat microglia through Toll-like receptor 2: selective potentiation of nitric oxide production by muramyl dipeptide. Journal of Neurochemistry, 2006, 99, 596-607.	2.1	51
63	Microglia Proliferation Is Regulated by Hydrogen Peroxide from NADPH Oxidase. Journal of Immunology, 2006, 176, 1046-1052.	0.4	179
64	NITRIC OXIDE FROM INDUCIBLE NITRIC OXIDE SYNTHASE SENSITIZES THE INFLAMED AORTA TO HYPOXIC DAMAGE VIA RESPIRATORY INHIBITION. Shock, 2005, 23, 319-323.	1.0	28
65	Inflammatory neurodegeneration induced by lipoteichoic acid from Staphylococcus aureus is mediated by glia activation, nitrosative and oxidative stress, and caspase activation. Journal of Neurochemistry, 2005, 95, 1132-1143.	2.1	83
66	Nitric oxide from inflammatory-activated glia synergizes with hypoxia to induce neuronal death. Journal of Neuroscience Research, 2005, 79, 208-215.	1.3	111
67	Activation of microglial NADPH oxidase is synergistic with glial iNOS expression in inducing neuronal death: a dual-key mechanism of inflammatory neurodegeneration. Journal of Neuroinflammation, 2005, 2, 20.	3.1	183
68	Nitric oxide-induced cell death of cerebrocortical murine astrocytes is mediated through p53- and Bax-dependent pathways. Journal of Neurochemistry, 2004, 89, 812-821.	2.1	47
69	Inhibition of mitochondrial respiratory complex I by nitric oxide, peroxynitrite and S-nitrosothiols. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1658, 44-49.	0.5	292
70	Inflammatory Neurodegeneration Mediated by Nitric Oxide, Glutamate, and Mitochondria. Molecular Neurobiology, 2003, 27, 325-355.	1.9	403
71	Nitric oxide induces apoptosis via hydrogen peroxide, but necrosis via energy and thiol depletion. Free Radical Biology and Medicine, 2003, 35, 1457-1468.	1.3	86
72	CELL BIOLOGY: Enhanced: NO Says Yes to Mitochondria. Science, 2003, 299, 838-839.	6.0	73

#	ARTICLE	IF	CITATIONS
73	Nitric oxide inhibition of mitochondrial respiration and its role in cell death. Free Radical Biology and Medicine, 2002, 33, 1440-1450.	1.3	323
74	Nitric oxide induces rapid, calcium-dependent release of vesicular glutamate and ATP from cultured rat astrocytes. Glia, 2002, 40, 312-323.	2.5	182
75	Stimulation of the NADPH oxidase in activated rat microglia removes nitric oxide but induces peroxynitrite production. Journal of Neurochemistry, 2002, 80, 73-80.	2.1	114
76	Nitric-Oxide-Induced Necrosis and Apoptosis in PC12 Cells Mediated by Mitochondria. Journal of Neurochemistry, 2002, 75, 1455-1464.	2.1	156
77	Different pathways for iNOS-mediated toxicity in vitro dependent on neuronal maturation and NMDA receptor expression. Journal of Neurochemistry, 2002, 82, 269-282.	2.1	73
78	Caspases are reversibly inactivated by hydrogen peroxide. FEBS Letters, 2001, 500, 114-118.	1.3	111
79	Regulation of mitochondrial respiration by nitric oxide inhibition of cytochrome c oxidase. Biochimica Et Biophysica Acta - Bioenergetics, 2001, 1504, 46-57.	0.5	526
80	Reversible inhibition of cellular respiration by nitric oxide in vascular inflammation. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H2256-H2260.	1.5	34
81	Inflammatory Neurodegeneration Mediated by Nitric Oxide from Activated Glia-Inhibiting Neuronal Respiration, Causing Glutamate Release and Excitotoxicity. Journal of Neuroscience, 2001, 21, 6480-6491.	1.7	637
82	Nitric Oxide, Mitochondria, and Cell Death. IUBMB Life, 2001, 52, 189-195.	1.5	157
83	Diffusion control of protein phosphorylation in signal transduction pathways. Biochemical Journal, 2000, 350, 901-907.	1.7	72
84	Reversal of nitric oxide-, peroxynitrite- and S-nitrosothiol-induced inhibition of mitochondrial respiration or complex I activity by light and thiols. Biochimica Et Biophysica Acta - Bioenergetics, 2000, 1459, 405-412.	0.5	180
85	Nitric oxide donors, nitrosothiols and mitochondrial respiration inhibitors induce caspase activation by different mechanisms. FEBS Letters, 2000, 467, 155-159.	1.3	63
86	Mitochondria Mediate Nitric Oxide-Induced Cell Death. Annals of the New York Academy of Sciences, 1999, 893, 376-378.	1.8	8
87	Release of cytochrome c from heart mitochondria is induced by high Ca2+ and peroxynitrite and is responsible for Ca2+-induced inhibition of substrate oxidation. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1999, 1453, 41-48.	1.8	112
88	Superoxide dismutase and hydrogen peroxide cause rapid nitric oxide breakdown, peroxynitrite production and subsequent cell death. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1999, 1454, 275-288.	1.8	87
89	Spatial gradients of cellular phospho-proteins. FEBS Letters, 1999, 457, 452-454.	1.3	175
90	Nitric oxide and mitochondrial respiration. Biochimica Et Biophysica Acta - Bioenergetics, 1999, 1411, 351-369.	0.5	586

#	Article	IF	Citations
91	Nitric oxide, cytochrome <i>c</i> and mitochondria. Biochemical Society Symposia, 1999, 66, 17-25.	2.7	169
92	Control of oxidative phosphorylation, gluconeogenesis, ureagenesis and ATP turnover in isolated perfused rat liver analyzed by top-down metabolic control analysis. FEBS Journal, 1998, 254, 194-201.	0.2	26
93	Transcellular regulation of cell respiration by nitric oxide generated by activated macrophages. FEBS Letters, 1998, 439, 321-324.	1.3	49
94	Nitric Oxide Causes Glutamate Release from Brain Synaptosomes. Journal of Neurochemistry, 1998, 70, 1541-1546.	2.1	75
95	Nitric oxide causes release of glutamate from brain synaptosomes. Biochemical Society Transactions, 1997, 25, 411S-411S.	1.6	1
96	NITRIC OXIDE AND MITOCHONDRIAL RESPIRATION. Biochemical Society Transactions, 1997, 25, 383S-383S.	1.6	0
97	Production of peroxynitrite from nitric oxide, hydrogen peroxide and superoxide dismutase: pathological implications. Biochemical Society Transactions, 1997, 25, 409S-409S.	1.6	4
98	Activated human neutrophils rapidly break down nitric oxide. FEBS Letters, 1997, 417, 231-234.	1.3	27
99	Title is missing!. Molecular and Cellular Biochemistry, 1997, 174, 189-192.	1.4	96
100	Nitric oxide inhibition of cytochrome oxidase and mitochondrial respiration: Implications for inflammatory, neurodegenerative and ischaemic pathologies. , 1997, , 189-192.		33
101	Rapid reduction of nitric oxide by mitochondria, and reversible inhibition of mitochondrial respiration by nitric oxide. Biochemical Journal, 1996, 315, 295-299.	1.7	249
102	Ca2+ stimulates both the respiratory and phosphorylation subsystems in rat heart mitochondria. Biochemical Journal, 1996, 320, 329-334.	1.7	52
103	Paradoxical control properties of enzymes within pathways: can activation cause an enzyme to have increased control?. Biochemical Journal, 1996, 314, 753-760.	1.7	16
104	Reversible Binding and Inhibition of Catalase by Nitric Oxide. FEBS Journal, 1995, 232, 188-191.	0.2	252
105	Nitric oxide produced by activated astrocytes rapidly and reversibly inhibits cellular respiration. Neuroscience Letters, 1995, 193, 201-204.	1.0	204
106	Nitric oxide regulates mitochondrial respiration and cell functions by inhibiting cytochrome oxidase. FEBS Letters, 1995, 369, 136-139.	1.3	494
107	Nanomolar concentrations of nitric oxide reversibly inhibit synaptosomal respiration by competing with oxygen at cytochrome oxidase. FEBS Letters, 1994, 356, 295-298.	1.3	921
108	Analysis of the control of respiration rate, phosphorylation rate, proton leak rate and protonmotive force in isolated mitochondria using the 'top-down' approach of metabolic control theory. FEBS Journal, 1990, 188, 313-319.	0.2	253

#	Article	IF	Citations
109	A 'top-down' approach to the determination of control coefficients in metabolic control theory. FEBS Journal, 1990, 188, 321-325.	0.2	189
110	Control of respiration and oxidative phosphorylation in isolated rat liver cells. FEBS Journal, 1990, 192, 355-362.	0.2	157
111	Electrostatic coupling between membrane proteins. FEBS Letters, 1990, 260, 1-5.	1.3	17
112	Respiratory control in the mitochondrial <i>bc</i>1 complex. Biochemical Society Transactions, 1985, 13, 693-693.	1.6	0
113	Neu1 Is Released From Activated Microglia, Stimulating Microglial Phagocytosis and Sensitizing Neurons to Glutamate. Frontiers in Cellular Neuroscience, 0, 16, .	1.8	6