Gordon W Arbuthnott

List of Publications by Year
in descending order

74 papers	6,208 citations	153493 30 h-index	99504 67 g-index
82 all docs	82 docs citations	82 times ranked	5108 citing authors

#	Article	IF	Citations
1	Long-range monosynaptic inputs targeting apical and basal dendrites of primary motor cortex deep output neurons. Cerebral Cortex, 2022, 32, 3975-3989.	3.2	9
2	Striatal bilateral control of skilled forelimb movement. Cell Reports, 2021, 34, 108651.	6.3	19
3	An Introspective Approach: A Lifetime of Parkinsonâ€™s Disease Research and Not Much to Show for It Yet?. Cells, 2021, 10, 513.	4.3	3
4	In Vivo Wireless Optogenetic Control of Skilled Motor Behavior. Journal of Visualized Experiments, 2021, , .	0.3	0
5	Prelimbic cortical targets of ventromedial thalamic projections include inhibitory interneurons and corticostriatal pyramidal neurons in the rat. Brain Structure and Function, 2020, 225, 2057-2076.	2.4	4
6	Cholinergic modulation of striatal microcircuits. European Journal of Neuroscience, 2019, 49, 604-622.	3.5	96
7	Synchronized activation of striatal direct and indirect pathways underlies the behavior in unilateral dopamineâ€depleted mice. European Journal of Neuroscience, 2019, 49, 1512-1528.	3.5	22
8	Thalamic afferents to prefrontal cortices from ventral motor nuclei in decisionâ€making. European Journal of Neuroscience, 2019, 49, 646-657.	3.5	34
9	Sparse Recovery of Under-Sampled Fiber Bundle Images for In-Vivo Endoscopy. , 2019, , .		0
10	Fiber-bundle-basis sparse reconstruction for high resolution wide-field microendoscopy. Biomedical Optics Express, 2018, 9, 1843.	3.0	11
11	A Cortical Substrate for Parkinsonism: A Personal Journey. International Journal of Clinical Research & Trials, 2018, 3, .	1.6	0
12	Cerebellar sub-divisions differ in exercise-induced plasticity of noradrenergic axons and in their association with resilience to activity-based anorexia. Brain Structure and Function, 2017, 222, 317-339.	2.4	14
13	Are the Symptoms of Parkinsonism Cortical in Origin?. Computational and Structural Biotechnology Journal, 2017, 15, 21-25.	4.2	9
14	Refinement of learned skilled movement representation in motor cortex deep output layer. Nature Communications, 2017, 8, 15834.	13.2	55
15	Advances in Fibre Microendoscopy for Neuronal Imaging. Optical Data Processing and Storage, 2016, 2, .	3.3	10
16	Presynaptic D1 heteroreceptors and mGlu autoreceptors act at individual cortical release sites to modify glutamate release. Brain Research, 2016, 1639, 74-87.	2.3	11
17	The neostriatum: two entities, one structure?. Brain Structure and Function, 2016, 221, 1737-1749.	2.4	28
18	Fiber Bundle in-vivo Epifluorescence Microscopy with Image Reconstruction. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
19	Basal gangliaâ€”thalamus and the â€œcrowning enigmaâ€• Frontiers in Neural Circuits, 2015, 9, 71.	3.0	18
20	Extrasynaptic glutamate NMDA receptors: Key players in striatal function. Neuropharmacology, 2015, 89, 54-63.	4.2	23
21	Rebuilding a realistic corticostriatal â€œsocial networkâ€•from dissociated cells. Frontiers in Systems Neuroscience, 2015, 9, 63.	2.7	6
22	Cell Assembly Signatures Defined by Short-Term Synaptic Plasticity in Cortical Networks. International Journal of Neural Systems, 2015, 25, 1550026.	6.0	32
23	Cortical Effects of Deep Brain Stimulation. JAMA Neurology, 2014, 71, 100.	9.3	59
24	Thalamostriatal synapsesâ€”another substrate for dopamine action?. Progress in Brain Research, 2014, 211, 1-11.	3.9	6
25	FRETing over dopamine: single cell cAMP and protein kinase A responses to 100 ms dopamine application. Journal of Physiology, 2013, 591, 3107-3107.	2.9	0
26	Therapeutic Deep Brain Stimulation in Parkinsonian Rats Directly Influences Motor Cortex. Neuron, 2012, 76, 1030-1041.	8.0	277
27	Development of dissociated cryopreserved rat cortical neurons in vitro. Journal of Neuroscience Methods, 2012, 205, 324-333.	2.6	14
28	The Corticostriatal System in Dissociated Cell Culture. Frontiers in Systems Neuroscience, 2011, 5, 52.	2.7	11
29	Power Fluctuations in Beta and Gamma Frequencies in Rat Globus Pallidus: Association with Specific Phases of Slow Oscillations and Differential Modulation by Dopamine D₁and D₂Receptors. Journal of Neuroscience, 2011, 31, 6098-6107.	3.8	37
30	Of Rats and Patients: Some Thoughts About Why Rats Turn in Circles and Parkinsonâ€™s Disease Patients Cannot Move Normally. Neuromethods, 2011, , 317-323.	0.0	0
31	Striatal interneurons in dissociated cell culture. Histochemistry and Cell Biology, 2010, 134, 1-12.	1.7	12
32	Functional Anatomy: Dynamic States in Basal Ganglia Circuits. Frontiers in Neuroanatomy, 2010, 4, 144.	1.7	17
33	Gating of Cortical Input to the Striatum. Handbook of Behavioral Neuroscience, 2010, , 341-351.	0.2	9
34	The rotational model and microdialysis: Significance for dopamine signalling, clinical studies, and beyond. Progress in Neurobiology, 2010, 90, 176-189.	5.8	37
35	Cortical Effects of Subthalamic Stimulation Correlate with Behavioral Recovery from Dopamine Antagonist Induced Akinesia. Cerebral Cortex, 2009, 19, 1055-1063.	3.2	95
36	Dealing with the devil in the detail â€“ some thoughts about the next model of the basal ganglia. Parkinsonism and Related Disorders, 2009, 15, S139-S142.	2.2	5

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37	Slowly Progressive Dopamine Cell Loss - A Model on which to Test Neuroprotective Strategies for Parkinson's Disease?. Reviews in the Neurosciences, 2009, 20, 85-94.	3.2	7
38	Neuromodulation and Neurodynamics of Striatal Inhibitory Networks: Implications for Parkinsonâ€™s Disease. , 2009, , 1-11.		0
39	Microglial activation is not prevented by tacrolimus but dopamine neuron damage is reduced in a rat model of Parkinson's disease progression. Brain Research, 2008, 1216, 78-86.	2.3	12
40	Actions of Adenosine A_{2A} Receptors on Synaptic Connections of Spiny Projection Neurons in the Neostriatal Inhibitory Network. Journal of Neurophysiology, 2008, 99, 1884-1889.	1.9	22
41	Simulation of GABA function in the basal ganglia: computational models of GABAergic mechanisms in basal ganglia function. Progress in Brain Research, 2007, 160, 313-329.	3.9	52
42	Space, time and dopamine. Trends in Neurosciences, 2007, 30, 62-69.	8.8	279
43	Selective elimination of glutamatergic synapses on striatopallidal neurons in Parkinson disease models. Nature Neuroscience, 2006, 9, 251-259.	14.5	688
44	Neurone specific regulation of dendritic spines in vivo by post synaptic density 95 protein (PSD-95). Brain Research, 2006, 1090, 89-98.	2.3	68
45	Delayed synaptic degeneration in the CNS of Wlds mice after cortical lesion. Brain, 2006, 129, 1546-1556.	8.0	57
46	Activation of NOS Interneurones in Striatum after Excitotoxic Lesions of Rat Globus Pallidus. , 2005, , 485-491.		0
47	Functional Interactions within the Subthalamic Nucleus. Advances in Behavioral Biology, 2002, , 359-368.	0.0	4
48	Computational models of the basal ganglia. Movement Disorders, 2000, 15, 762-770.	4.3	59
49	Symposium on neurobiology of the basal ganglia. Journal of Anatomy, 2000, 196, 499-499.	1.7	0
50	Acute in vivo neurotoxicity of peptides from Maedi Visna virus transactivating protein Tat. Brain Research, 1999, 830, 285-291.	2.3	17
51	Inhibition of Neuronal Nitric Oxide Synthase by 7-Nitroindazole: Effects upon Local Cerebral Blood Flow and Glucose Use in the Rat. Journal of Cerebral Blood Flow and Metabolism, 1995, 15, 766-773.	4.6	89
52	The Basic Domain of the Lentiviral Tat Protein Is Responsible for Damages in Mouse Brain: Involvement of Cytokines. Virology, 1994, 205, 519-529.	2.5	144
53	Some Consequences of Local Blockade of Nitric-Oxide Synthase in the Rat Neostriatum. Advances in Behavioral Biology, 1994, , 171-178.	0.0	5
54	Dendritic domains of medium spiny neurons in the primate striatum: Relationships to striosomal borders. Journal of Comparative Neurology, 1993, 337, 614-628.	2.0	44

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55	Astrocytes immunoreactive for glial fibrillary acidic protein (GFAP) are increased in the mediobasal hypothalamus in hypogonadal (hpg) mice. Molecular and Cellular Neurosciences, 1992, 3, 473-481.	2.2	5
56	Chapter 43 Identification of grafted neurons with fluorescent-labelled microbeads. Progress in Brain Research, 1990, 82, 385-390.	3.9	9
57	Effects of Selective Monoamine Oxidase Inhibitors on the In Vivo Release and Metabolism of Dopamine in the Rat Striatum. Journal of Neurochemistry, 1990, 55, 981-988.	4.0	137
58	In Vivo Mechanisms Underlying Dopamine Release from Rat Nigrostriatal Terminals: I. Studies Using Veratrine and Ouabain. Journal of Neurochemistry, 1990, 54, 1834-1843.	4.0	45
59	In Vivo Mechanisms Underlying Dopamine Release from Rat Nigrostriatal Terminals: II. Studies Using Potassium and Tyramine. Journal of Neurochemistry, 1990, 54, 1844-1851.	4.0	77
60	Glial fibrillary acidic protein (GFAP)-immunoreactive astrocytes are increased in the hypothalamus of androgen-insensitive testicular feminized (Tfm) mice. Neuroscience Letters, 1990, 118, 77-81.	2.1	31
61	The influence of the estrous cycle on the activity of striatal neurons recorded from freely moving rats. Neuroscience Letters, 1989, 107, 233-238.	2.1	2
62	Amphetamineâ€Induced Dopamine Release in the Rat Striatum: An In Vivo Microdialysis Study. Journal of Neurochemistry, 1988, 50, 346-355.	4.0	288
63	Spectrin-like protein (fodrin) in nerve cells in culture. Biochemical Society Transactions, 1986, 14, 356-357.	3.4	0
64	Different patterns of molecular forms of somatostatin are released by the rat median eminence and hypothalamus. Neuroscience Letters, 1985, 57, 215-220.	2.1	15
65	Electrophysiological properties of single units in dopamine-rich mesencephalic transplants in rat brain. Neuroscience Letters, 1985, 57, 205-210.	2.1	175
66	Schneider's First-Rank Symptoms of Schizophrenia. Archives of General Psychiatry, 1984, 41, 1040.	13.2	30
67	Some non-fluorescent connections of the nigro-neostriatal dopamine neurones. Brain Research Bulletin, 1982, 9, 367-378.	3.1	16
68	The effect of DSP-4 on some positively reinforced operant behaviors in the rat. Pharmacology Biochemistry and Behavior, 1982, 16, 197-202.	2.8	16
69	Crossed connections of the substantia nigra in the rat. Journal of Comparative Neurology, 1982, 207, 283-303.	2.0	415
70	The dopamine synapse and the notion of â€˜pleasure centresâ€™ in the brain. Trends in Neurosciences, 1980, 3, 199-200.	8.8	3
71	Interactions between serotonergic and dopaminergic systems in rat brain demonstrated by small unilateral lesions of the raphe nuclei. European Journal of Pharmacology, 1979, 57, 295-305.	3.6	95
72	Central catecholamine turnover and self-stimulation behaviour. Brain Research, 1971, 27, 406-413.	2.3	92

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73	Depletion of catecholaminesin vivo induced by electrical stimulation of central monoamine pathways. Brain Research, 1970, 24, 471-483.	2.3	123
74	Quantitative recording of rotational behavior in rats after 6-hydroxy-dopamine lesions of the nigrostriatal dopamine system. Brain Research, 1970, 24, 485-493.	2.3	1,928