Patrick J Drew

List of Publications by Year
in descending order

45	4,572	147566	243296
papers	citations	31 h-index	44 g-index

65	65	65	4681
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Rude mechanicals in brain haemodynamics: non-neural actors that influence blood flow. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20190635.	1.8	39
2	Iliski, a software for robust calculation of transfer functions. PLoS Computational Biology, 2021, 17, e1008614.	1.5	2
3	Origins of 1/f-like tissue oxygenation fluctuations in the murine cortex. PLoS Biology, 2021, 19, e3001298.	2.6	15
4	Ultra-slow Oscillations in fMRI and Resting-State Connectivity: Neuronal and Vascular Contributions and Technical Confounds. Neuron, 2020, 107, 782-804.	3.8	105
5	Functional hyperemia drives fluid exchange in the paravascular space. Fluids and Barriers of the CNS, 2020, 17, 52.	2.4	42
6	Spatial and temporal patterns of nitric oxide diffusion and degradation drive emergent cerebrovascular dynamics. PLoS Computational Biology, 2020, 16, e1008069.	1.5	24
7	Transfer functions linking neural calcium to single voxel functional ultrasound signal. Nature Communications, 2020, 11, 2954.	5.8	55
8	nNOS-expressing interneurons control basal and behaviorally evoked arterial dilation in somatosensory cortex of mice. ELife, 2020, 9, .	2.8	45
9	Neurovascular coupling and bilateral connectivity during NREM and REM sleep. ELife, 2020, 9, .	2.8	66
10	Vascular and neural basis of the BOLD signal. Current Opinion in Neurobiology, 2019, 58, 61-69.	2.0	89
11	Cerebral oxygenation during locomotion is modulated by respiration. Nature Communications, 2019, 10, 5515.	5.8	54
12	Twitches, Blinks, and Fidgets: Important Generators of Ongoing Neural Activity. Neuroscientist, 2019, 25, 298-313.	2.6	46
13	Anatomical basis and physiological role of cerebrospinal fluid transport through the murine cribriform plate. ELife, 2019, 8, .	2.8	85
14	The pial vasculature of the mouse develops according to a sensory-independent program. Scientific Reports, 2018, 8, 9860.	1.6	26
15	Time to wake up: Studying neurovascular coupling and brain-wide circuit function in the un-anesthetized animal. NeuroImage, 2017, 153, 382-398.	2.1	177
16	Weak correlations between hemodynamic signals and ongoing neural activity during the resting state. Nature Neuroscience, 2017, 20, 1761-1769.	7.1	148
17	Effects of Voluntary Locomotion and Calcitonin Gene-Related Peptide on the Dynamics of Single Dural Vessels in Awake Mice. Journal of Neuroscience, 2016, 36, 2503-2516.	1.7	47
18	Brief anesthesia, but not voluntary locomotion, significantly alters cortical temperature. Journal of Neurophysiology, 2015, 114, 309-322.	0.9	38

#	Article	IF	Citations
19	Robust and Fragile Aspects of Cortical Blood Flow in Relation to the Underlying Angioarchitecture. Microcirculation, 2015, 22, 204-218.	1.0	78
20	Mechanical restriction of intracortical vessel dilation by brain tissue sculpts the hemodynamic response. NeuroImage, 2015, 115, 162-176.	2.1	58
21	Quantitative separation of arterial and venous cerebral blood volume increases during voluntary locomotion. NeuroImage, 2015, 105, 369-379.	2.1	56
22	Venous cerebral blood volume increase during voluntary locomotion reflects cardiovascular changes. NeuroImage, 2015, 118, 301-312.	2.1	26
23	Neurovascular Coupling and Decoupling in the Cortex during Voluntary Locomotion. Journal of Neuroscience, 2014, 34, 10975-10981.	1.7	81
24	Determination of Vessel Cross-Sectional Area by Thresholding in Radon Space. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 1180-1187.	2.4	37
25	A method for longitudinal, transcranial imaging of blood flow and remodeling of the cerebral vasculature in postnatal mice. Physiological Reports, 2014, 2, e12238.	0.7	18
26	Two-Photon Imaging of Blood Flow in the Rat Cortex. Cold Spring Harbor Protocols, 2013, 2013, pdb.prot076513.	0.2	18
27	A Polished and Reinforced Thinned-skull Window for Long-term Imaging of the Mouse Brain. Journal of Visualized Experiments, 2012, , .	0.2	104
28	Two-Photon Microscopy as a Tool to Study Blood Flow and Neurovascular Coupling in the Rodent Brain. Journal of Cerebral Blood Flow and Metabolism, 2012, 32, 1277-1309.	2.4	405
29	A Guide to Delineate the Logic of Neurovascular Signaling in the Brain. Frontiers in Neuroenergetics, 2011, 3, 1.	5.3	71
30	Fluctuating and sensory-induced vasodynamics in rodent cortex extend arteriole capacity. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8473-8478.	3.3	257
31	Rapid determination of particle velocity from space-time images using the Radon transform. Journal of Computational Neuroscience, 2010, 29, 5-11.	0.6	129
32	Chronic optical access through a polished and reinforced thinned skull. Nature Methods, 2010, 7, 981-984.	9.0	382
33	Correlations of Neuronal and Microvascular Densities in Murine Cortex Revealed by Direct Counting and Colocalization of Nuclei and Vessels. Journal of Neuroscience, 2009, 29, 14553-14570.	1.7	500
34	Active Dilation of Penetrating Arterioles Restores Red Blood Cell Flux to Penumbral Neocortex after Focal Stroke. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 738-751.	2.4	125
35	Intrinsic Signal Imaging of Deprivation-Induced Contraction of Whisker Representations in Rat Somatosensory Cortex. Cerebral Cortex, 2009, 19, 331-348.	1.6	64
36	Endocannabinoid Signaling Is Required for Development and Critical Period Plasticity of the Whisker Map in Somatosensory Cortex. Neuron, 2009, 64, 537-549.	3.8	57

#	Article	IF	Citations
37	Finding coherence in spontaneous oscillations. Nature Neuroscience, 2008, 11, 991-993.	7.1	59
38	[P1.15]: CB1 receptor signaling is required for whisker map development and plasticity in rat somatosensory cortex. International Journal of Developmental Neuroscience, 2008, 26, 846-846.	0.7	0
39	Texture Coding in the Rat Whisker System: Slip-Stick Versus Differential Resonance. PLoS Biology, 2008, 6, e215.	2.6	202
40	Models and Properties of Power-Law Adaptation in Neural Systems. Journal of Neurophysiology, 2006, 96, 826-833.	0.9	123
41	Extending the effects of spike-timing-dependent plasticity to behavioral timescales. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8876-8881.	3.3	97
42	Cascade Models of Synaptically Stored Memories. Neuron, 2005, 45, 599-611.	3.8	430
43	Model of Song Selectivity and Sequence Generation in Area HVc of the Songbird. Journal of Neurophysiology, 2003, 89, 2697-2706.	0.9	38
44	Modeling temporal combination selective neurons of the songbird. Neurocomputing, 2002, 44-46, 789-794.	3.5	0
45	Pupillary response to chromatic flicker. Experimental Brain Research, 2001, 136, 256-262.	0.7	32