Fiona E N Lebeau

List of Publications by Year
in descending order

50 papers	5,839 citations	117625 34 h-index	197818 49 g-index
51 all docs	51 docs citations	51 times ranked	5460 citing authors

#	Article	IF	Citations
1	Impaired Electrical Signaling Disrupts Gamma Frequency Oscillations in Connexin 36-Deficient Mice. Neuron, 2001, 31, 487-495.	8.1	479
2	Recruitment of Parvalbumin-Positive Interneurons Determines Hippocampal Function and Associated Behavior. Neuron, 2007, 53, 591-604.	8.1	462
3	Single-Column Thalamocortical Network Model Exhibiting Gamma Oscillations, Sleep Spindles, and Epileptogenic Bursts. Journal of Neurophysiology, 2005, 93, 2194-2232.	1.8	428
4	CELLULAR MECHANISMS OF NEURONAL POPULATION OSCILLATIONS IN THE HIPPOCAMPUS IN VITRO. Annual Review of Neuroscience, 2004, 27, 247-278.	10.7	314
5	Gap Junctions between Interneuron Dendrites Can Enhance Synchrony of Gamma Oscillations in Distributed Networks. Journal of Neuroscience, 2001, 21, 9478-9486.	3.6	310
6	A Possible Role for Gap Junctions in Generation of Very Fast EEG Oscillations Preceding the Onset of, and Perhaps Initiating,â€ƒSeizures. Epilepsia, 2008, 42, 153-170.	5.1	308
7	A beta2-frequency (20-30 Hz) oscillation in nonsynaptic networks of somatosensory cortex. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15646-15650.	7.1	291
8	A model of gamma-frequency network oscillations induced in the rat CA3 region by carbachol in vitro. European Journal of Neuroscience, 2000, 12, 4093-4106.	2.6	256
9	Multiple origins of the cortical gamma rhythm. Developmental Neurobiology, 2011, 71, 92-106.	3.0	224
10	GABA-enhanced collective behavior in neuronal axons underlies persistent gamma-frequency oscillations. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 11047-11052.	7.1	215
11	Microcircuits in action â€“ from CPGs to neocortex. Trends in Neurosciences, 2005, 28, 525-533.	8.6	189
12	A role for fast rhythmic bursting neurons in cortical gamma oscillations in vitro. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7152-7157.	7.1	185
13	IontophoresisIn VivoDemonstrates a Key Role for GABA_Aand Glycinergic Inhibition in Shaping Frequency Response Areas in the Inferior Colliculus of Guinea Pig. Journal of Neuroscience, 2001, 21, 7303-7312.	3.6	181
14	A Model of Atropineâ€Resistant Theta Oscillations in Rat Hippocampal Area CA1. Journal of Physiology, 2002, 543, 779-793.	2.9	180
15	Region-Specific Reduction in Entorhinal Gamma Oscillations and Parvalbumin-Immunoreactive Neurons in Animal Models of Psychiatric Illness. Journal of Neuroscience, 2006, 26, 2767-2776.	3.6	173
16	What electrophysiology tells us about Alzheimer's disease: a window into the synchronization and connectivity of brain neurons. Neurobiology of Aging, 2020, 85, 58-73.	3.1	150
17	Contrasting roles of axonal (pyramidal cell) and dendritic (interneuron) electrical coupling in the generation of neuronal network oscillations. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1370-1374.	7.1	139
18	Synaptic pathways in neural microcircuits. Trends in Neurosciences, 2005, 28, 541-551.	8.6	113

#	Article	IF	Citations
19	Sharp Wave-Like Activity in the Hippocampus In Vitro in Mice Lacking the Gap Junction Protein Connexin 36. Journal of Neurophysiology, 2003, 89, 2046-2054.	1.8	110
20	NMDA receptor-dependent switching between different gamma rhythm-generating microcircuits in entorhinal cortex. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18572-18577.	7.1	102
21	Fast network oscillations induced by potassium transients in the rat hippocampus in vitro. Journal of Physiology, 2002, 542, 167-179.	2.9	89
22	The role of electrical signaling via gap junctions in the generation of fast network oscillations. Brain Research Bulletin, 2003, 62, 3-13.	3.0	79
23	Impairment of hippocampal gamma (Î³)â€frequency oscillations in vitro in mice overexpressing human amyloid precursor protein (APP). European Journal of Neuroscience, 2007, 26, 1280-1288.	2.6	77
24	Transient Depression of Excitatory Synapses on Interneurons Contributes to Epileptiform Bursts During Gamma Oscillations in the Mouse Hippocampal Slice. Journal of Neurophysiology, 2005, 94, 1225-1235.	1.8	70
25	Cholinergic neuromodulation controls directed temporal communication in neocortex in vitro. Frontiers in Neural Circuits, 2010, 4, 8.	2.8	66
26	Persistent gamma oscillations in superficial layers of rat auditory neocortex: experiment and model. Journal of Physiology, 2005, 562, 3-8.	2.9	55
27	Fast Network Oscillations in the Rat Dentate Gyrus In Vitro. Journal of Neurophysiology, 2002, 87, 1165-1168.	1.8	53
28	Beta Rhythms (15â€“20 Hz) Generated by Nonreciprocal Communication in Hippocampus. Journal of Neurophysiology, 2007, 97, 2812-2823.	1.8	51
29	Minimal Size of Cell Assemblies Coordinated by Gamma Oscillations. PLoS Computational Biology, 2012, 8, e1002362.	3.2	48
30	Tuning the network: modulation of neuronal microcircuits in the spinal cord and hippocampus. Trends in Neurosciences, 2005, 28, 552-561.	8.6	47
31	Î²â€adrenergic receptors are differentially expressed in distinct interneuron subtypes in the rat hippocampus. Journal of Comparative Neurology, 2008, 509, 551-565.	1.6	47
32	Quantitative electroencephalography as a marker of cognitive fluctuations in dementia with Lewy bodies and an aid to differential diagnosis. Clinical Neurophysiology, 2018, 129, 1209-1220.	1.5	43
33	A comparison of the effects of Propofol with other anaesthetic agents on the centripetal transmission of sensory information. General Pharmacology, 1992, 23, 945-963.	0.7	41
34	Bidirectional modulation of hippocampal gamma (20â€“80 Hz) frequency activity in vitro via alpha(Î±)- and beta(Î²)-adrenergic receptors (AR). Neuroscience, 2013, 253, 142-154.	2.3	39
35	Antiâ€inflammatory treatment rescues memory deficits during aging in nfkb1^{â^'/â^'} mice. Aging Cell, 2020, 19, e13188.	6.7	38
36	A Possible Role for Gap Junctions in Generation of Very Fast EEG Oscillations Preceding the Onset of, and Perhaps Initiating, Seizures. Epilepsia, 2003, 42, 153-170.	5.1	28

#	Article	IF	Citations
37	Oscillatory activity within rat substantia gelatinosain vitro: a role for chemical and electrical neurotransmission. Journal of Physiology, 2005, 562, 183-198.	2.9	26
38	The Role of EEG in the Diagnosis, Prognosis and Clinical Correlations of Dementia with Lewy Bodiesâ€"A Systematic Review. Diagnostics, 2020, 10, 616.	2.6	24
39	Partial loss of parvalbumin-containing hippocampal interneurons in dementia with Lewy bodies. Neuropathology, 2011, 31, 1-10.	1.2	20
40	Hetereogeneity in Neuronal Intrinsic Properties: A Possible Mechanism for Hub-Like Properties of the Rat Anterior Cingulate Cortex during Network Activity. ENeuro, 2017, 4, ENEURO.0313-16.2017.	1.9	17
41	Impaired Fast Network Oscillations and Mitochondrial Dysfunction in a Mouse Model of Alpha-synucleinopathy (A30P). Neuroscience, 2018, 377, 161-173.	2.3	12
42	Electrical stimulation of the ventral tegmental area evokes sleepâ€like state transitions under urethane anaesthesia in the rat medial prefrontal cortex via dopamine D₁â€like receptors. European Journal of Neuroscience, 2020, 52, 2915-2930.	2.6	11
43	Subregional differences in the generation of fast network oscillations in the rat medial prefrontal cortex (mPFC) in vitro. Journal of Physiology, 2015, 593, 3597-3615.	2.9	10
44	Hippocampal network hyperexcitability in young transgenic mice expressing human mutant alpha-synuclein. Neurobiology of Disease, 2021, 149, 105226.	4.4	10
45	Dorsal vs. ventral differences in fast Up-state-associated oscillations in the medial prefrontal cortex of the urethane-anesthetized rat. Journal of Neurophysiology, 2017, 117, 1126-1142.	1.8	9
46	Early Disruption of Cortical Sleep-Related Oscillations in a Mouse Model of Dementia With Lewy Bodies (DLB) Expressing Human Mutant (A30P) Alpha-Synuclein. Frontiers in Neuroscience, 2020, 14, 579867.	2.8	9
47	A Closed-Loop Optogenetic Platform. Frontiers in Neuroscience, 2021, 15, 718311.	2.8	4
48	Structure/function correlates of neuronal and network activity - an overview. Journal of Physiology, 2005, 562, 1-2.	2.9	2
49	Structure/function correlates of neuronal and network activity - an overview. Journal of Physiology, 2005, 562, 1-2.	2.9	2
50	Cortical network oscillations in Alzheimer's disease: insights from rodent models. Drug Discovery Today: Therapeutic Strategies, 2013, 10, e79-e83.	0.5	0