Etienne Audinat

List of Publications by Citations

79 papers	7,567 citations	42 h-index	83 g-index
83 ext. papers	8,382 ext. citations	6.5 avg, IF	5.57 L-index

#	Paper	IF	Citations
79	Molecular and physiological diversity of cortical nonpyramidal cells. *Journal of Neuroscience*, **1997**, 17, 3894-906	6.6	565
78	AMPA receptor subunits expressed by single Purkinje cells. *Neuron*, **1992**, 9, 247-58	13.9	540
77	Myoblasts transplanted into rat infarcted myocardium are functionally isolated from their host. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 7808-11	11.5	402
76	Identification of sleep-promoting neurons in vitro. *Nature*, **2000**, 404, 992-5	50.4	397
75	Glutamate released from glial cells synchronizes neuronal activity in the hippocampus. *Journal of Neuroscience*, **2004**, 24, 6920-7	6.6	396
74	Afferent connections of the medial frontal cortex of the rat. II. Cortical and subcortical afferents. *Journal of Comparative Neurology*, **1995**, 352, 567-93	3.4	382
73	Subunit composition at the single-cell level explains functional properties of a glutamate-gated channel. *Neuron*, **1994**, 12, 383-8	13.9	304
72	Classification of fusiform neocortical interneurons based on unsupervised clustering. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 6144-9	11.5	257
71	Two-photon imaging of capillary blood flow in olfactory bulb glomeruli. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 13081-6	11.5	239
70	Deficiency of the microglial receptor CX3CR1 impairs postnatal functional development of thalamocortical synapses in the barrel cortex. *Journal of Neuroscience*, **2012**, 32, 15106-11	6.6	238
69	Selective excitation of subtypes of neocortical interneurons by nicotinic receptors. *Journal of Neuroscience*, **1999**, 19, 5228-35	6.6	224
68	Status epilepticus induces a particular microglial activation state characterized by enhanced purinergic signaling. *Journal of Neuroscience*, **2008**, 28, 9133-44	6.6	192
67	Excitation of rat prefrontal cortical neurons by dopamine: an in vitro electrophysiological study. *Brain Research*, **1987**, 425, 263-74	3.7	178
66	Target cell-specific modulation of neuronal activity by astrocytes. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 10058-63	11.5	173
65	Tonic activation of NMDA receptors by ambient glutamate of non-synaptic origin in the rat hippocampus. *Journal of Physiology*, **2007**, 580, 373-83	3.9	162
64	Microglia in CNS development: Shaping the brain for the future. *Progress in Neurobiology*, **2017**, 149-150, 1-20	10.9	146
63	Neuronal activity differentially regulates NMDA receptor subunit expression in cerebellar granule cells. *Journal of Neuroscience*, **1996**, 16, 631-9	6.6	131

62	Properties of bipolar VIPergic interneurons and their excitation by pyramidal neurons in the rat neocortex. *European Journal of Neuroscience*, **1998**, 10, 3617-28	3.5	124
61	Cellular locus of the nitric oxide-synthase involved in cerebellar long-term depression induced by high external potassium concentration. *Neuropharmacology*, **1994**, 33, 1399-405	5.5	120
60	Subunit composition, kinetic, and permeation properties of AMPA receptors in single neocortical nonpyramidal cells. *Journal of Neuroscience*, **1997**, 17, 6685-96	6.6	117
59	Two types of nicotinic receptors mediate an excitation of neocortical layer I interneurons. *Journal of Neurophysiology*, **2002**, 88, 1318-27	3.2	117
58	Excitatory synaptic potentials in neurons of the deep nuclei in olivo-cerebellar slice cultures. *Neuroscience*, **1992**, 49, 903-11	3.9	113
57	Afferent connections of the medial frontal cortex of the rat. A study using retrograde transport of fluorescent dyes. I. Thalamic afferents. *Brain Research Bulletin*, **1990**, 24, 341-54	3.9	113
56	Postsynaptic glutamate receptors and integrative properties of fast-spiking interneurons in the rat neocortex. *Journal of Neurophysiology*, **1999**, 82, 1295-302	3.2	103
55	Activity-dependent regulation of N-methyl-D-aspartate receptor subunit expression in rat cerebellar granule cells. *European Journal of Neuroscience*, **1994**, 6, 1792-800	3.5	95
54	Er81 is expressed in a subpopulation of layer 5 neurons in rodent and primate neocortices. *Neuroscience*, **2006**, 137, 401-12	3.9	91
53	GABA, a forgotten gliotransmitter. *Progress in Neurobiology*, **2008**, 86, 297-303	10.9	82
52	Postnatal switch from synaptic to extrasynaptic transmission between interneurons and NG2 cells. *Journal of Neuroscience*, **2010**, 30, 6921-9	6.6	79
51	Responses to excitatory amino acids of Purkinje cells and neurones of the deep nuclei in cerebellar slice cultures. *Journal of Physiology*, **1990**, 430, 297-313	3.9	75
50	Involvement of P2X4 receptors in hippocampal microglial activation after status epilepticus. *Glia*, **2013**, 61, 1306-19	9	74
49	Two populations of layer v pyramidal cells of the mouse neocortex: development and sensitivity to anesthetics. *Journal of Neurophysiology*, **2005**, 94, 3357-67	3.2	68
48	Central role of GABA in neuron-glia interactions. *Neuroscientist*, **2012**, 18, 237-50	7.6	67
47	Kainate receptors regulate unitary IPSCs elicited in pyramidal cells by fast-spiking interneurons in the neocortex. *Journal of Neuroscience*, **2001**, 21, 2992-9	6.6	65
46	Potent and multiple regulatory actions of microglial glucocorticoid receptors during CNS inflammation. *Cell Death and Differentiation*, **2013**, 20, 1546-57	12.7	63
45	Fractalkine Signaling and Microglia Functions in the Developing Brain. *Neural Plasticity*, **2015**, 2015, 689404	3.9	60

44	Developmental synaptic changes increase the range of integrative capabilities of an identified excitatory neocortical connection. *Journal of Neuroscience*, **1999**, 19, 1566-76	6.6	60
43	Excitatory amino acid receptors of cerebellar Purkinje cells: development and plasticity. *Progress in Biophysics and Molecular Biology*, **1991**, 55, 31-46	4.7	58
42	Adaptive phenotype of microglial cells during the normal postnatal development of the somatosensory "Barrel" cortex. *Glia*, **2013**, 61, 1582-94	9	57
41	GABA release by hippocampal astrocytes. *Frontiers in Computational Neuroscience*, **2012**, 6, 59	3.5	56
40	Functional alpha 7-containing nicotinic receptors of NG2-expressing cells in the hippocampus. *Glia*, **2009**, 57, 1104-14	9	54
39	Neurotensin-induced excitation of neurons of the rat frontal cortex studied intracellularly in vitro. *Experimental Brain Research*, **1989**, 78, 358-68	2.3	54
38	Predominant functional expression of Kv1.3 by activated microglia of the hippocampus after Status epilepticus. *PLoS ONE*, **2009**, 4, e6770	3.7	40
37	Postnatal down-regulation of the GABAA receptor δ subunit in neocortical NG2 cells accompanies synaptic-to-extrasynaptic switch in the GABAergic transmission mode. *Cerebral Cortex*, **2015**, 25, 1114-23	5.1	36
36	Functional and molecular analysis of glutamate-gated channels by patch-clamp and RT-PCR at the single cell level. *Neurochemistry International*, **1996**, 28, 119-36	4.4	36
35	Climbing Fibre Responses in Olivo-cerebellar Slice Cultures. I. Microelectrode Recordings from Purkinje Cells. *European Journal of Neuroscience*, **1990**, 2, 726-732	3.5	35
34	Evidence for two types of non-NMDA receptors in rat cerebellar Purkinje cells maintained in slice cultures. *Neuropharmacology*, **1995**, 34, 335-46	5.5	34
33	Blocking TNF-driven astrocyte purinergic signaling restores normal synaptic activity during epileptogenesis. *Glia*, **2018**, 66, 2673-2683	9	34
32	Paradoxical effects of minocycline in the developing mouse somatosensory cortex. *Glia*, **2014**, 62, 399-410	9	32
31	An autocrine purinergic signaling controls astrocyte-induced neuronal excitation. *Scientific Reports*, **2017**, 7, 11280	4.9	31
30	Distinct local circuits between neocortical pyramidal cells and fast-spiking interneurons in young adult rats. *Journal of Neurophysiology*, **2003**, 89, 943-53	3.2	30
29	Purinergic signaling in epilepsy. *Journal of Neuroscience Research*, **2016**, 94, 781-93	4.4	27
28	Single cell RT-PCR proceeds without the risk of genomic DNA amplification. *Neurochemistry International*, **1995**, 26, 239-43	4.4	26
27	A pericyte-glia scarring develops at the leaky capillaries in the hippocampus during seizure activity. *Epilepsia*, **2019**, 60, 1399-1411	6.4	25

26	Cortico-cortical connections of the limbic cortex of the rat. *Experimental Brain Research*, **1988**, 69, 439-43	2.3	23
25	Biphasic Impact of Prenatal Inflammation and Macrophage Depletion on the Wiring of Neocortical Inhibitory Circuits. *Cell Reports*, **2019**, 28, 1119-1126.e4	10.6	19
24	Role of astrocyte purinergic signaling in epilepsy. *Glia*, **2020**, 68, 1677-1691	9	19
23	Synaptic organization of inhibitory circuits in the pigeon optic tectum. *Brain Research*, **1986**, 365, 383-7	3.7	17
22	Postprandial Hyperglycemia Stimulates Neuroglial Plasticity in Hypothalamic POMC Neurons after a Balanced Meal. *Cell Reports*, **2020**, 30, 3067-3078.e5	10.6	16
21	Cardiac arrest in rodents: maximal duration compatible with a recovery of neuronal activity. *Proceedings of the National Academy of Sciences of the United States of America*, **1998**, 95, 4748-53	11.5	16
20	Electrophysiological properties of neurons recorded intracellularly in slices of the pigeon optic tectum. *Neuroscience*, **1987**, 23, 305-18	3.9	16
19	The GR-ANXA1 pathway is a pathological player and a candidate target in epilepsy. *FASEB Journal*, **2019**, 33, 13998-14009	0.9	14
18	Dietary fat exacerbates postprandial hypothalamic inflammation involving glial fibrillary acidic protein-positive cells and microglia in male mice. *Glia*, **2021**, 69, 42-60	9	11
17	Patch-Clamp Recording and RT-PCR on Single Cells **1995**, 193-232		7
16	Synaptic transmission of excitation from the retina to cells in the pigeon optic tectum. *Brain Research*, **1986**, 365, 138-44	3.7	7
15	Microglia Reactivity: Heterogeneous Pathological Phenotypes. *Methods in Molecular Biology*, **2019**, 2034, 41-55	1.4	7
14	Differential impact of dose-range glyphosate on locomotor behavior, neuronal activity, glio-cerebrovascular structures, and transcript regulations in zebrafish larvae. *Chemosphere*, **2021**, 267, 128986	8.4	7
13	Homocysteic acid as transmitter candidate in the mammalian brain and excitatory amino acids in epilepsy. *Advances in Experimental Medicine and Biology*, **1990**, 268, 57-63	3.6	7
12	PEGylated Red-Emitting Calcium Probe with Improved Sensing Properties for Neuroscience. *ACS Sensors*, **2017**, 2, 1706-1712	9.2	6
11	Analysis of AMPA receptor subunits expressed by single Purkinje cells using RNA polymerase chain reaction. *Biochemical Society Transactions*, **1993**, 21, 93-7	5.1	6
10	Life-long Dietary Pesticide Cocktail Induces Astrogliosis Along with Behavioral Adaptations and Activates p450 Metabolic Pathways. *Neuroscience*, **2020**, 446, 225-237	3.9	4
9	Microglia proliferation plays distinct roles in acquired epilepsy depending on disease stages. *Epilepsia*, **2021**, 62, 1931-1945	6.4	3

8	Diversity of glutamate receptors in neocortical neurons: implications for synaptic plasticity. *Journal of Physiology (Paris)*, **1996**, 90, 331-2		2
7	Seizure activity triggers tau hyperphosphorylation and amyloidogenic pathways.. *Epilepsia*, **2022**,	6.4	2
6	Glial Mechanisms of Inflammation During Seizures. *Agents and Actions Supplements*, **2021**, 45-70	0.2	1
5	Varying modalities of perinatal exposure to a pesticide cocktail elicit neurological adaptations in mice and zebrafish. *Environmental Pollution*, **2021**, 278, 116755	9.3	0
4	Therapeutic Potential of Astrocyte Purinergic Signalling in Epilepsy and Multiple Sclerosis.. *Frontiers in Pharmacology*, **2022**, 13, 900337	5.6	0
3	Electrophysiological Investigation of Microglia. *Methods in Molecular Biology*, **2019**, 2034, 111-125	1.4	
2	Diversity and specificity of glial cell responses in the thalamus (commentary on Parri et al.). *European Journal of Neuroscience*, **2010**, 32, 27-8	3.5	
1	Calcium-dependent, slowly inactivating potassium currents in cultured neurons of rat neocortex. *Experimental Brain Research*, **1995**, 107, 197-204	2.3	