Alain Buisson

List of Publications by Year
in descending order

78 papers	5,556 citations	76326 40 h-index	76900 74 g-index
84 all docs	84 docs citations	84 times ranked	6567 citing authors

#	ARTICLE	IF	CITATIONS
1	The proteolytic activity of tissue-plasminogen activator enhances NMDA receptor-mediated signaling. Nature Medicine, 2001, 7, 59-64.	30.7	678
2	Neuronal viability is controlled by a functional relation between synaptic and extrasynaptic NMDA receptors. FASEB Journal, 2008, 22, 4258-4271.	0.5	224
3	The neuroprotective effect of a nitric oxide inhibitor in a rat model of focal cerebral ischaemia. British Journal of Pharmacology, 1992, 106, 766-767.	5.4	221
4	Activity-Dependent Tau Protein Translocation to Excitatory Synapse Is Disrupted by Exposure to Amyloid-Beta Oligomers. Journal of Neuroscience, 2014, 34, 6084-6097.	3.6	207
5	Neuroprotection Mediated by Glial Cell Line-Derived Neurotrophic Factor: Involvement of a Reduction of NMDA-Induced Calcium Influx by the Mitogen-Activated Protein Kinase Pathway. Journal of Neuroscience, 2001, 21, 3024-3033.	3.6	182
6	NMDA Receptor Activation Inhibits Î±-Secretase and Promotes Neuronal Amyloid-Î² Production. Journal of Neuroscience, 2005, 25, 9367-9377.	3.6	178
7	Ischemia-Induced Interleukin-6 as a Potential Endogenous Neuroprotective Cytokine against NMDA Receptor-Mediated Excitoxicity in the Brain. Journal of Cerebral Blood Flow and Metabolism, 2000, 20, 956-966.	4.3	176
8	The inhibitory mGluR agonist, s-4-carboxy-3-hydroxy-phenylglycine selectively attenuates NMDA neurotoxicity and oxygen-glucose deprivation-induced neuronal death. Neuropharmacology, 1995, 34, 1081-1087.	4.1	157
9	Mechanisms Involved in the Neuroprotective Activity of a Nitric Oxide Synthase Inhibitor During Focal Cerebral Ischemia. Journal of Neurochemistry, 1993, 61, 690-696.	3.9	156
10	Activation of Extrasynaptic, But Not Synaptic, NMDA Receptors Modifies Amyloid Precursor Protein Expression Pattern and Increases Amyloid-Î² Production. Journal of Neuroscience, 2010, 30, 15927-15942.	3.6	156
11	Autophagy Is Required for Memory Formation and Reverses Age-Related Memory Decline. Current Biology, 2019, 29, 435-448.e8.	3.9	150
12	Reduction of Ischemic Brain Damage by Nitrous Oxide and Xenon. Journal of Cerebral Blood Flow and Metabolism, 2003, 23, 1168-1173.	4.3	127
13	Transforming Growth Factor-Î²1 Potentiates Amyloid-Î² Generation in Astrocytes and in Transgenic Mice. Journal of Biological Chemistry, 2003, 278, 18408-18418.	3.4	127
14	A Transforming Growth Factor-Î² Antagonist Unmasks the Neuroprotective Role of This Endogenous Cytokine in Excitotoxic and Ischemic Brain Injury. Journal of Cerebral Blood Flow and Metabolism, 1999, 19, 1345-1353.	4.3	121
15	Upâ€regulation of a serine protease inhibitor in astrocytes mediates the neuroprotective activity of transforming growth factor Î²1. FASEB Journal, 1998, 12, 1683-1691.	0.5	115
16	Iron overload accelerates neuronal amyloid-Î² production and cognitive impairment in transgenic mice model of Alzheimer's disease. Neurobiology of Aging, 2014, 35, 2288-2301.	3.1	106
17	Complement anaphylatoxin C3a is selectively protective against NMDA-induced neuronal cell death. NeuroReport, 2001, 12, 289-293.	1.2	103
18	Transforming growth factorâ€Î²l as a regulator of the serpins/tâ€PA axis in cerebral ischemia. FASEB Journal, 1999, 13, 1315-1324.	0.5	96

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19	Serine Protease Inhibitors: Novel Therapeutic Targets for Stroke?. Journal of Cerebral Blood Flow and Metabolism, 2000, 20, 755-764.	4.3	91
20	Striatal Protection Induced by Lesioning the Substantia Nigra of Rats Subjected to Focal Ischemia. Journal of Neurochemistry, 1992, 59, 1153-1157.	3.9	90
21	Transforming growth factor-beta and ischemic brain injury. Cellular and Molecular Neurobiology, 2003, 23, 539-550.	3.3	90
22	The amyloid-Î² oligomer AÎ²*56 induces specific alterations in neuronal signaling that lead to tau phosphorylation and aggregation. Science Signaling, 2017, 10, .	3.6	90
23	Synaptotoxicity in Alzheimer's Disease Involved a Dysregulation of Actin Cytoskeleton Dynamics through Cofilin 1 Phosphorylation. Journal of Neuroscience, 2018, 38, 10349-10361.	3.6	80
24	Tissue plasminogen activator and NMDA receptor cleavage. Nature Medicine, 2003, 9, 371-372.	30.7	79
25	Smad3-Dependent Induction of Plasminogen Activator Inhibitor-1 in Astrocytes Mediates Neuroprotective Activity of Transforming Growth Factor-Î²1 against NMDA-Induced Necrosis. Molecular and Cellular Neurosciences, 2002, 21, 634-644.	2.2	77
26	Membraneâ€delimited modulation of NMDA currents by metabotropic glutamate receptor subtypes 1/5 in cultured mouse cortical neurons.. Journal of Physiology, 1997, 499, 721-732.	2.9	76
27	DCG-IV Selectively Attenuates Rapidly Triggered NMDA-induced Neurotoxicity in Cortical Neurons. European Journal of Neuroscience, 1996, 8, 138-143.	2.6	69
28	Reverse glial glutamate uptake triggers neuronal cell death through extrasynaptic NMDA receptor activation. Molecular and Cellular Neurosciences, 2009, 40, 463-473.	2.2	69
29	Is tissue-type plasminogen activator a neuromodulator?. Molecular and Cellular Neurosciences, 2004, 25, 594-601.	2.2	65
30	Ultra-sensitive molecular MRI of cerebrovascular cell activation enables early detection of chronic central nervous system disorders. NeuroImage, 2012, 63, 760-770.	4.2	64
31	NMDA receptor dysfunction contributes to impaired brainâ€derived neurotrophic factorâ€induced facilitation of hippocampal synaptic transmission in a <scp>T</scp>au transgenic model. Aging Cell, 2013, 12, 11-23.	6.7	64
32	Synapses, NMDA receptor activity and neuronal AÎ² production in Alzheimerâ€™s disease. Reviews in the Neurosciences, 2011, 22, 285-294.	2.9	63
33	TRPA1 channels promote astrocytic Ca2+ hyperactivity and synaptic dysfunction mediated by oligomeric forms of amyloid-Î² peptide. Molecular Neurodegeneration, 2017, 12, 53.	10.8	62
34	Evidence of Type I and Type II Transforming Growth Factorâ€Î² Receptors in Central Nervous Tissues: Changes Induced by Focal Cerebral Ischemia. Journal of Neurochemistry, 1998, 70, 2296-2304.	3.9	61
35	Interaction Between ÂCaMKII and GluN2B Controls ERK-Dependent Plasticity. Journal of Neuroscience, 2012, 32, 10767-10779.	3.6	60
36	Akt-dependent Expression of NAIP-1 Protects Neurons against Amyloid-Î² Toxicity. Journal of Biological Chemistry, 2005, 280, 24941-24947.	3.4	51

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37	Neurotrophin-3-induced PI-3 kinase/Akt signaling rescues cortical neurons from apoptosis. Experimental Neurology, 2004, 187, 38-46.	4.1	50
38	Transforming growth factor Î±â€•induced expression of typeâ€•1 plasminogen activator inhibitor in astrocytes rescues neurons from excitotoxicity. FASEB Journal, 2003, 17, 277-279.	0.5	48
39	Copper-catalyzed amination of (bromophenyl)ethanolamine for a concise synthesis of aniline-containing analogues of NMDA NR2B antagonist ifenprodil. Organic and Biomolecular Chemistry, 2010, 8, 1111.	2.8	48
40	Astrocyteâ€"neuron interplay is critical for Alzheimer's disease pathogenesis and is rescued by TRPA1 channel blockade. Brain, 2022, 145, 388-405.	7.6	41
41	p3 peptide, a truncated form of AÎ² devoid of synaptotoxic effect, does not assemble into soluble oligomers. FEBS Letters, 2008, 582, 1865-1870.	2.8	40
42	Reciprocal disruption of neuronal signaling and AÎ² production mediated by extrasynaptic NMDA receptors: a downward spiral. Cell and Tissue Research, 2014, 356, 279-286.	2.9	40
43	Disruption of dopaminergic transmission remodels tripartite synapse morphology and astrocytic calcium activity within substantia nigra pars reticulata. Glia, 2015, 63, 673-683.	4.9	40
44	Increased Expression of Transforming Growth Factor-Î² after Cerebral Ischemia in the Baboon: An Endogenous Marker of Neuronal Stress?. Journal of Cerebral Blood Flow and Metabolism, 2001, 21, 820-827.	4.3	37
45	Selective Impairment of Some Forms of Synaptic Plasticity by Oligomeric Amyloid-Î² Peptide in the Mouse Hippocampus: Implication of Extrasynaptic NMDA Receptors. Journal of Alzheimer's Disease, 2012, 32, 183-196.	2.6	37
46	Oxygen glucose deprivation-induced astrocyte dysfunction provokes neuronal death through oxidative stress. Pharmacological Research, 2014, 87, 8-17.	7.1	36
47	Nigrostriatal pathway modulates striatum vulnerability to quinolinic acid. Neuroscience Letters, 1991, 131, 257-259.	2.1	33
48	A key function for microtubule-associated-protein 6 in activity-dependent stabilisation of actin filaments in dendritic spines. Nature Communications, 2018, 9, 3775.	12.8	30
49	Synthesis, evaluation and metabolic studies of radiotracers containing a 4-(4-[18F]-fluorobenzyl)piperidin-1-yl moiety for the PET imaging of NR2B NMDA receptors. European Journal of Medicinal Chemistry, 2011, 46, 2295-2309.	5.5	29
50	Transforming Growth Factor-Î²1â€"Modulated Cerebral Gene Expression. Journal of Cerebral Blood Flow and Metabolism, 2002, 22, 1114-1123.	4.3	24
51	Reduction in the neuronal surface of post and presynaptic GABA_B receptors in the hippocampus in a mouse model of Alzheimer's disease. Brain Pathology, 2020, 30, 554-575.	4.1	22
52	Density of GABAB Receptors Is Reduced in Granule Cells of the Hippocampus in a Mouse Model of Alzheimerâ€™s Disease. International Journal of Molecular Sciences, 2020, 21, 2459.	4.1	21
53	2,7-Bis-(4-Amidinobenzylidene)-Cycloheptan-1-One Dihydrochloride, tPA Stop, Prevents tPA-Enhanced Excitotoxicity Both In Vitro and In Vivo. Journal of Cerebral Blood Flow and Metabolism, 2004, 24, 1153-1159.	4.3	20
54	VEGF counteracts amyloid-Î²-induced synaptic dysfunction. Cell Reports, 2021, 35, 109121.	6.4	19

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55	Reply to "Tissue plasminogen activator and NMDA receptor cleavage". Nature Medicine, 2003, 9, 372-373.	30.7	18
56	Confocal Microscopy Imaging of NR2B-Containing NMDA Receptors Based on Fluorescent Ifenprodil-Like Conjugates. Bioconjugate Chemistry, 2012, 23, 21-26.	3.6	18
57	Tubulin tyrosination regulates synaptic function and is disrupted in Alzheimerâ€™s disease. Brain, 2022, 145, 2486-2506.	7.6	17
58	Neuroprotection by Nitrous Oxide and Xenon and Its Relation to Minimum Alveolar Concentration. Anesthesiology, 2004, 101, 260-261.	2.5	14
59	Involvement of CRF2 signaling in enterocyte differentiation. World Journal of Gastroenterology, 2017, 23, 5127.	3.3	14
60	Assembly of The Mitochondrial Complexâ€…I Assembly Complex Suggests a Regulatory Role for Deflavination. Angewandte Chemie - International Edition, 2021, 60, 4689-4697.	13.8	14
61	A Soluble Transforming Growth Factor-Î² (TGF-Î²) Type I Receptor Mimics TGF-Î² Responses. Journal of Biological Chemistry, 2001, 276, 46243-46250.	3.4	13
62	Effect of AÎ² Oligomers on Neuronal APP Triggers a Vicious Cycle Leading to the Propagation of Synaptic Plasticity Alterations to Healthy Neurons. Journal of Neuroscience, 2020, 40, 5161-5176.	3.6	13
63	Comparison of the pharmacological properties of GK11 and MK801, two NMDA receptor antagonists: towards an explanation for the lack of intrinsic neurotoxicity of GK11. Journal of Neurochemistry, 2007, 103, 1682-1696.	3.9	10
64	Nitric Oxide and Cerebral Ischemia. Annals of the New York Academy of Sciences, 1994, 738, 341-347.	3.8	8
65	Pyr1-Mediated Pharmacological Inhibition of LIM Kinase Restores Synaptic Plasticity and Normal Behavior in a Mouse Model of Schizophrenia. Frontiers in Pharmacology, 2021, 12, 627995.	3.5	8
66	Matching Gene Expression with Hypometabolism after Cerebral Ischemia in the Nonhuman Primate. Journal of Cerebral Blood Flow and Metabolism, 2002, 22, 1165-1169.	4.3	7
67	Improved optical slicing by stimulated emission depletion light sheet microscopy. Biomedical Optics Express, 2020, 11, 660.	2.9	7
68	Synthesis and in Vitro Characterisation of Ifenprodilâ€Based Fluorescein Conjugates as GluN1/GluN2B <i>N</i>â€Methylâ€‹<scp>D</scp>â€aspartate Receptor Antagonists. ChemBioChem, 2013, 14, 759-769.	2.6	6
69	Lesioning the substantia nigra reduces striatal infarct volume following focal ischemia in rats. Fundamental and Clinical Pharmacology, 1991, 5, 645-647.	1.9	5
70	Combination of horseradish peroxidase and lucifer yellow staining for selective labeling of neurons at the electron microscopic level.. Journal of Histochemistry and Cytochemistry, 1991, 39, 1579-1583.	2.5	3
71	Le tranforming growth factor-Î² (TGF-p) a t-il un rÃ´le neuroprotecteur dans lâ€™ischÃ©mie cÃ©rÃ©brale ?. SociÃ©tÃ© De Biologie Journal, 2003, 197, 145-150.	0.3	3
72	Matching Gene Expression With Hypometabolism After Cerebral Ischemia in the Nonhuman Primate. Journal of Cerebral Blood Flow and Metabolism, 2002, , 1165-1169.	4.3	2

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73	GluN2B Subunit Labeling with Fluorescent Probes and High-Resolution Live Imaging. Methods in Molecular Biology, 2017, 1677, 171-183.	0.9	1
74	P22 REDUCTION OF ISCHEMIC BRAIN DAMAGE BY NITROUS OXIDE AND XENON.. Behavioural Pharmacology, 2006, 17, 547.	1.7	0
75	O3-04-01: Amyloid-Beta oligomers accumulate in the postsynaptic density fraction and reveal cognitive impairment in transgenic mice model of Alzheimer's disease. , 2011, 7, S505-S505.		0
76	Specific alterations of tau phosphorylation and neuronal signaling induced by the amyloid-Î² oligomer AÎ²*56. Neurobiology of Aging, 2016, 39, S27.	3.1	0
77	Amyloid Fibers Reveal Themselves With Nearâ€Infrared. Movement Disorders, 2019, 34, 1643-1643.	3.9	0
78	Differential role of synaptic an extrasynaptic NMDA receptors in glutamate mediated neuronal injury. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S445-S445.	4.3	0