William T O'connor

List of Publications by Year
in descending order

117 papers	7,255 citations	46984 47 h-index	60583 81 g-index
118 all docs	118 docs citations	118 times ranked	4903 citing authors

#	Article	IF	Citations
1	THE CONTRIBUTIONS OF MOTOR CORTEX, NIGROSTRIATAL DOPAMINE AND CAUDATE-PUTAMEN TO SKILLED FORELIMB USE IN THE RAT. Brain, 1986, 109, 805-843.	3.7	441
2	Release of Î³-Aminobutyric Acid in the Dorsal Horn and Suppression of Tactile Allodynia by Spinal Cord Stimulation in Mononeuropathic Rats. Neurosurgery, 1996, 39, 367-375.	0.6	338
3	Spinal cord stimulation attenuates augmented dorsal horn release of excitatory amino acids in mononeuropathy via a GABAergic mechanism. Pain, 1997, 73, 87-95.	2.0	311
4	The striopallidal neuron: a main locus for adenosine-dopamine interactions in the brain. Journal of Neuroscience, 1993, 13, 5402-5406.	1.7	252
5	Disruption of central cholinergic systems in the rat by basal forebrain lesions or atropine: Effects on feeding, sensorimotor behaviour, locomotor activity and spatial navigation. Behavioural Brain Research, 1985, 17, 103-115.	1.2	239
6	Antagonistic interaction between adenosine A2A receptors and dopamine D2 receptors in the ventral striopallidal system. Implications for the treatment of schizophrenia. Neuroscience, 1994, 63, 765-773.	1.1	170
7	Differential effects of single and repeated ketamine administration on dopamine, serotonin and GABA transmission in rat medial prefrontal cortex. Brain Research, 1997, 759, 205-212.	1.1	157
8	N-methyl-d-Aspartic Acid Differentially Regulates Extracellular Dopamine, GABA, and Glutamate Levels in the Dorsolateral Neostriatum of the Halothane-Anesthetized Rat: An In Vivo Microdialysis Study. Journal of Neurochemistry, 1993, 60, 1884-1893.	2.1	151
9	Animal models of traumatic brain injury: A critical evaluation. , 2011, 130, 106-113.		144
10	The Vigilance Promoting Drug Modafinil Increases Extracellular Glutamate Levels in the Medial Preoptic Area and the Posterior Hypothalamus of the Conscious Rat Prevention by Local GABAA Receptor Blockade. Neuropsychopharmacology, 1999, 20, 346-356.	2.8	139
11	Dopamine D1Receptor-mediated Facilitation of GABAergic Neurotransmission in the Rat Strioentopeduncular Pathway and its Modulation by Adenosine A1Receptor-mediated Mechanisms. European Journal of Neuroscience, 1996, 8, 1545-1553.	1.2	134
12	Modafinil: An antinarcoleptic drug with a different neurochemical profile to d-amphetamine and dopamine uptake blockers. Biological Psychiatry, 1997, 42, 1181-1183.	0.7	128
13	The vigilance promoting drug modafinil increases dopamine release in the rat nucleus accumbens via the involvement of a local GABAergic mechanism. European Journal of Pharmacology, 1996, 306, 33-39.	1.7	125
14	Metabotropic glutamate mGlu5 receptor-mediated modulation of the ventral striopallidal GABA pathway in rats. Interactions with adenosine A2A and dopamine D2 receptors. Neuroscience Letters, 2002, 324, 154-158.	1.0	124
15	Bayesian estimation of synaptic physiology from the spectral responses of neural masses. NeuroImage, 2008, 42, 272-284.	2.1	122
16	Gamma-aminobutyric Acid Is Released in the Dorsal Horn by Electrical Spinal Cord Stimulation. Neurosurgery, 1994, 34, 484-489.	0.6	118
17	An in vivo microdialysis characterization of extracellular dopamine and GABA in dorsolateral striatum of awake freely moving and halothane anaesthetised rats. Journal of Neuroscience Methods, 1990, 34, 99-105.	1.3	110
18	The effects of modafinil on striatal, pallidal and nigral GABA and glutamate release in the conscious rat: evidence for a preferential inhibition of striato-pallidal GABA transmission. Neuroscience Letters, 1998, 253, 135-138.	1.0	110

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19	Ambient Lighting: Effect of Illumination on Soft-Copy Viewing of Radiographs of the Wrist. American Journal of Roentgenology, 2007, 188, W177-W180.	1.0	106
20	The antinarcoleptic drug modafinil increases glutamate release in thalamic areas and hippocampus. NeuroReport, 1997, 8, 2883-2887.	0.6	105
21	The vigilance promoting drug modafinil decreases GABA release in the medial preoptic area and in the posterior hypothalamus of the awake rat: possible involvement of the serotonergic 5-HT3 receptor. Neuroscience Letters, 1996, 220, 5-8.	1.0	103
22	Evidence for increased dorsal hippocampal adenosine release and metabolism during pharmacologically induced seizures in rats. Brain Research, 2000, 872, 44-53.	1.1	98
23	Facilitation of gaba release by neurotensin is associated with a reduction of dopamine release in rat nucleus accumbens. Neuroscience, 1994, 60, 649-657.	1.1	96
24	The striatonigral dynorphin pathway of the rat studied with in vivo microdialysisâ€"II. Effects of dopamine D1 and D2 receptor agonists. Neuroscience, 1994, 63, 427-434.	1.1	93
25	NAAG peptidase inhibitor increases dialysate NAAG and reduces glutamate, aspartate and GABA levels in the dorsal hippocampus following fluid percussion injury in the rat. Journal of Neurochemistry, 2006, 97, 1015-1025.	2.1	92
26	Intramembrane Interactions between Neurotensin Receptors and Dopamine D2Receptors as a Major Mechanism for the Neuroleptic-like Action of Neurotensin. Annals of the New York Academy of Sciences, 1992, 668, 186-204.	1.8	90
27	Evidence for Dysfunction of the Nigrostriatal Pathway in the R6/1 Line of Transgenic Huntington's Disease Mice. Neurobiology of Disease, 2002, 11, 134-146.	2.1	86
28	Altered striatal amino acid neurotransmitter release monitored using microdialysis in R6/1 Huntington transgenic mice. European Journal of Neuroscience, 2001, 13, 206-210.	1.2	84
29	The effects of intranigral GABA and dynorphin A injections on striatal dopamine and GABA release: Evidence that dopamine provides inhibitory regulation of striatal GABA neurons via D2 receptors. Brain Research, 1990, 519, 255-260.	1.1	83
30	Evidence for a substrate of neuronal plasticity based on pre- and postsynaptic neurotensin-dopamine receptor interactions in the neostriatum.. Proceedings of the National Academy of Sciences of the United States of America, 1992, 89, 5591-5595.	3.3	78
31	Regional specific effects of clozapine and haloperidol on GABA and dopamine release in rat basal ganglia. European Journal of Pharmacology, 1990, 187, 385-397.	1.7	77
32	Caffeine enhances acetylcholine release in the hippocampus in vivo by a selective interaction with adenosine A1 receptors. Journal of Pharmacology and Experimental Therapeutics, 1995, 273, 637-42.	1.3	76
33	Repeated spinal cord stimulation decreases the extracellular level of Î³-aminobutyric acid in the periaqueductal gray matter of freely moving rats. Brain Research, 1995, 699, 231-241.	1.1	70
34	Characterization of gamma-aminobutyric acid and dopamine overflow following acute implantation of a microdialysis probe. Life Sciences, 1989, 45, 1307-1317.	2.0	68
35	Long-term effects of perinatal asphyxia on basal ganglia neurotransmitter systems studied with microdialysis in rat. Neuroscience Letters, 1994, 175, 9-12.	1.0	67
36	In vivo characterisation of extracellular dopamine, GABA and acetylcholine from the dorsolateral striatum of awake freely moving rats by chronic microdialysis. Journal of Neuroscience Methods, 1991, 37, 93-102.	1.3	65

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37	The Striatal Neurotensin Receptor Modulates Striatal and Pallidal Glutamate and GABA Release: Functional Evidence for a Pallidal Glutamateâ€“GABA Interaction via the Pallidalâ€“Subthalamic Nucleus Loop. Journal of Neuroscience, 1998, 18, 6977-6989.	1.7	65
38	N-methyl-d-aspartic acid biphasically regulates the biochemical and electrophysiological response of A10 dopamine neurons in the ventral tegmental area: in vivo microdialysis and in vitro electrophysiological studies. Brain Research, 1994, 666, 255-262.	1.1	64
39	Dopamine D1 and D2 receptor antagonism differentially modulates stimulation of striatal neurotransmitter levels by acid. European Journal of Pharmacology, 1994, 256, 23-30.	1.7	62
40	Functional neuroanatomy of the nigrostriatal and striatonigral pathways as studied with dual probe microdialysis in the awake ratâ€”II. Evidence for striataln-methyl-d-aspartate receptor regulation of striatonigral gabaergic transmission and motor function. Neuroscience, 1996, 72, 89-97.	1.1	61
41	The effects of neurotensin on GABA and acetylcholine release in the dorsal striatum of the rat: an in vivo mirodialysis study. Brain Research, 1992, 573, 209-216.	1.1	56
42	Neuronal dependence of extracellular dopamine, acetylcholine, glutamate, aspartate and gamma-aminobutyric acid (GABA) measured simultaneously from rat neostriatum using in vivo microdialysis: reciprocal interactions. Amino Acids, 1992, 2, 157-179.	1.2	56
43	Corticosterone, choline acetyltransferase and noradrenaline levels in olfactory bulbectomized rats in relation to changes in passive avoidance acquisition and open field activity. Physiology and Behavior, 1986, 37, 429-434.	1.0	53
44	Acute versus chronic haloperidol: relationship between tolerance to catalepsy and striatal and accumbens dopamine, GABA and acetylcholine release. Brain Research, 1994, 634, 20-30.	1.1	53
45	Effect of Varying the Ionic Concentration of a Microdialysis Perfusate on Basal Striatal Dopamine Levels in Awake Rats. Journal of Neurochemistry, 1991, 56, 452-456.	2.1	52
46	Amphetamine regulation of acetylcholine and Î³-aminobutyric acid in nucleus accumbens. Neuroscience, 1992, 48, 439-448.	1.1	51
47	Capillary electrophoresis with laser-induced fluorescence detection: a sensitive method for monitoring extracellular concentrations of amino acids in the periaqueductal grey matter. Journal of Neuroscience Methods, 1996, 65, 33-42.	1.3	49
48	Release of Neurotransmitters in the CNS by Spinal Cord Stimulation: Survey of Present State of Knowledge and Recent Experimental Studies. Stereotactic and Functional Neurosurgery, 1993, 61, 157-170.	0.8	48
49	Neurotensin peptides antagonistically regulate postsynaptic dopamine D2 receptors in rat nucleus accumbens: a receptor binding and microdialysis study. Journal of Neural Transmission, 1995, 102, 125-137.	1.4	48
50	Nigral neurotensin receptor regulation of nigral glutamate and nigroventral thalamic GABA transmission: a dual-probe microdialysis study in intact conscious rat brain. Neuroscience, 2001, 102, 113-120.	1.1	46
51	Cannabinoid receptor agonist WIN 55,212-2 inhibits rat cortical dialysate ?-aminobutyric acid levels. Journal of Neuroscience Research, 2001, 66, 298-302.	1.3	44
52	Increased Intestinal Permeability in Rats Subjected to Traumatic Frontal Lobe Percussion Brain Injury. Journal of Trauma, 2008, 64, 131-138.	2.3	44
53	Intrastriatally injected c-fos antisense oligonucleotide interferes with striatonigral but not striatopallidal Â-aminobutyric acid transmission in the conscious rat. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 14134-14139.	3.3	43
54	Differential Effects of Intrastriatal Neurotensin(1-13) and Neurotensin(8-13) on Striatal Dopamine and Pallidal GABA Release. A Dual-probe Microdialysis Study in the Awake Rat. European Journal of Neuroscience, 1997, 9, 1838-1846.	1.2	43

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55	Evidence for a selective prefrontal cortical gabab receptor-mediated inhibition of glutamate release in the ventral tegmental area: A dual probe microdialysis study in the awake rat. Neuroscience, 2005, 130, 215-222.	1.1	43
56	Evidence for volume transmission in the dopamine denervated neostriatum of the rat after a unilateral nigral 6-OHDA microinjection. Studies with systemic d-amphetamine treatment. Brain Research, 1994, 662, 11-24.	1.1	42
57	Modulation of Spinal Pain Mechanisms by Spinal Cord Stimulation and the Potential Role of Adjuvant Pharmacotherapy. Stereotactic and Functional Neurosurgery, 1997, 68, 129-140.	0.8	41
58	AAVâ€mediated chronic overâ€expression of SNAPâ€25 in adult rat dorsal hippocampus impairs memoryâ€associated synaptic plasticity. Journal of Neurochemistry, 2010, 112, 991-1004.	2.1	41
59	Effect of chronic administration of the 6-aza analogue of mianserin (Org. 3770) and its enantiomers on behaviour and changes in noradrenaline metabolism of olfactory-bulbectomized rats in the â€œopen fieldâ€•apparatus. Neuropharmacology, 1986, 25, 267-270.	2.0	39
60	Neurotensin increases endogenous glutamate release in the neostriatum of the awake rat. Synapse, 1995, 20, 362-364.	0.6	39
61	Functional neuroanatomy of the nigrostriatal and striatonigral pathways as studied with dual probe microdialysis in the awake ratâ€”I. Effects of perfusion with tetrodotoxin and low-calcium medium. Neuroscience, 1996, 72, 79-87.	1.1	39
62	Functional neuroanatomy of the basal ganglia as studied by dual-probe microdialysis. Nuclear Medicine and Biology, 1998, 25, 743-746.	0.3	39
63	Impaired formalin-evoked changes of spinal amino acid levels in diabetic rats. Brain Research, 2006, 1115, 48-53.	1.1	39
64	Capillary and microchip electrophoresis in microdialysis: Recent applications. Electrophoresis, 2010, 31, 55-64.	1.3	38
65	Clozapine and GABA transmission in schizophrenia disease models. , 2015, 150, 47-80.		38
66	Î³-Hydroxybutyrate modulation of glutamate levels in the hippocampus: an in vivo and in vitro study. Journal of Neurochemistry, 2001, 78, 929-939.	2.1	37
67	Acute Toluene Exposure Increases Extracellular GABA in the Cerebellum of Rat: A Microdialysis Study. Basic and Clinical Pharmacology and Toxicology, 1993, 73, 315-318.	0.0	33
68	Cholecystokinin/dopamine/GABA interactions in the nucleus accumbens: biochemical and functional correlates. Peptides, 2001, 22, 1229-1234.	1.2	32
69	Elevated extracellular levels of glutamate, aspartate and gamma-aminobutyric acid within the intraoperative, spontaneously epileptiform human hippocampus. Epilepsy Research, 2003, 54, 73-79.	0.8	32
70	Current separation and detection methods in microdialysis the drive towards sensitivity and speed. Electrophoresis, 2009, 30, 2062-2075.	1.3	32
71	Primary healing of skin wounds and incisions with a threadless suture. American Journal of Surgery, 1962, 104, 603-612.	0.9	31
72	Differential effects of acute and short-term lithium administration on dialysate glutamate and GABA levels in the frontal cortex of the conscious rat. Synapse, 2000, 38, 355-362.	0.6	31

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73	Short-term dopaminergic regulation of GABA release in dopamine deafferented caudate-putamen is not directly associated with glutamic acid decarboxylase gene expression. Neuroscience Letters, 1991, 128, 66-70.	1.0	30
74	Neurocircuitry of the basal ganglia studied by monitoring neurotransmitter release. Molecular Neurobiology, 1994, 9, 171-182.	1.9	30
75	In vivo effects of local and systemic phencyclidine on the extracellular levels of catecholamines and transmitter amino acids in the dorsolateral striatum of anaesthetized rats. Acta Physiologica Scandinavica, 1994, 150, 109-115.	2.3	30
76	Evidence for a differential medial prefrontal dopamine D1 and D2 receptor regulation of local and ventral tegmental glutamate and GABA release. Brain Research, 2004, 1017, 120-129.	1.1	30
77	Changes in purine levels and adenosine receptors in kindled seizures in the rat. NeuroReport, 2004, 15, 1585-1589.	0.6	30
78	Neuropeptides, excitatory amino acid and adenosine A2 receptors regulate D2 receptors via intramembrane receptor-receptor interactions. Relevance for Parkinson's disease and schizophrenia. Neurochemistry International, 1992, 20, 215-224.	1.9	28
79	Evidence for a differential cholecystokinin-B and -A receptor regulation of gaba release in the rat nucleus accumbens mediated via dopaminergic and cholinergic mechanisms. Neuroscience, 1996, 73, 941-950.	1.1	28
80	Systemic phencyclidine administration is associated with increased dopamine, GABA, and 5-HIAA levels in the dorsolateral striatum of conscious rats: an in vivo microdialysis study. Journal of Neural Transmission, 1994, 95, 145-155.	1.4	27
81	Differences in dopamine release and metabolism in rat striatal subregions following acute clozapine using in vivo microdialysis. Neuroscience Letters, 1989, 98, 211-216.	1.0	26
82	Neurotensin and cholecystokinin octapeptide control synergistically dopamine release and dopamine D2 receptor affinity in rat neostriatum. European Journal of Pharmacology, 1993, 230, 159-166.	1.7	26
83	The striatonigral dynorphin pathway of the rat studied with In vivo microdialysisâ€"I. Effects of K+-depolarization, lesions and peptidase inhibition. Neuroscience, 1994, 63, 415-425.	1.1	26
84	Receptor-Receptor Interactions and Their Relevance for Receptor Diversity. Annals of the New York Academy of Sciences, 1995, 757, 365-376.	1.8	25
85	Functional neuroanatomy of the ventral striopallidal GABA pathway. Journal of Neuroscience Methods, 2001, 109, 31-39.	1.3	25
86	Antidepressant properties of the triazolobenzodiazepines alprazolam and adinazolam: studies on the olfactory bulbectomized rat model of depression.. British Journal of Clinical Pharmacology, 1985, 19, 49S-56S.	1.1	24
87	Hippocampal microdialysis during spontaneous intraoperative epileptiform activity. Acta Neurochirurgica, 2004, 146, 143-151.	0.9	23
88	Schizophrenia: a review of neuropharmacology. Irish Journal of Medical Science, 2004, 173, 155-159.	0.8	22
89	A dual probe characterization of dialysate amino acid levels in the medial prefrontal cortex and ventral tegmental area of the awake freely moving rat. Journal of Neuroscience Methods, 2002, 119, 109-119.	1.3	21
90	Quantitative MRI Analysis of Brain Volume Changes due to Controlled Cortical Impact. Journal of Neurotrauma, 2010, 27, 1265-1274.	1.7	21

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91	Modulation of striatal aspartate and dynorphin B release by cholecystokinin (CCK-8) studied in vivo with microdialysis. NeuroReport, 1994, 5, 2301-2304.	0.6	20
92	Intracerebroventricular Administration of Amyloid Î²-protein Oligomers Selectively Increases Dorsal Hippocampal Dialysate Glutamate Levels in the Awake Rat. Sensors, 2008, 8, 7428-7437.	2.1	20
93	Behavioural and neuropharmacological properties of the dibenzazepines, desipramine and lofepramine: studies on the olfactory bulbectomized rat model of depression. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 1988, 12, 41-51.	2.5	19
94	Microdialysis of the lateral and medial temporal lobe during temporal lobe epilepsy surgery. World Neurosurgery, 2005, 63, 70-79.	1.3	19
95	Striatal NTS₁, dopamine D₂ and NMDA receptor regulation of pallidal GABA and glutamate release â€“ a dualâ€probe microdialysis study in the intranigral 6â€hydroxydopamine unilaterally lesioned rat. European Journal of Neuroscience, 2012, 35, 207-220.	1.2	19
96	Is Aquatic Therapy Optimally Prescribed for Parkinsonâ€™s Disease? A Systematic Review and Meta-Analysis. Journal of Parkinson's Disease, 2020, 10, 59-76.	1.5	19
97	Temporal dysregulation of cortical gene expression in the isolation reared Wistar rat. Journal of Neurochemistry, 2010, 113, 601-614.	2.1	18
98	An in vivo microdialysis characterization of the transient changes in the interstitial dialysate concentration of metabolites and cytokines in human skeletal muscle in response to insertion of a microdialysis probe. Cytokine, 2015, 71, 327-333.	1.4	18
99	Effect of the neurotoxin AF64A on intrinsic and extrinsic neuronal systems of rat neostriatum measured by in vivo microdialysis. Brain Research, 1992, 596, 65-72.	1.1	16
100	Evidence for a striatal NMDA receptor modulation of nigral glutamate release. A dual probe microdialysis study in the awake freely moving rat. European Journal of Neuroscience, 1998, 10, 1716-1722.	1.2	15
101	Acute toluene exposure decreases extracellular Î³-aminobutyric acid in the globus pallidus but not in striatum: a microdialysis study in awake, freely moving rats. European Journal of Pharmacology - Environmental Toxicology and Pharmacology Section, 1994, 292, 43-46.	0.8	14
102	Differential cholinergic regulation of dopamine release in the dorsal and ventral neostriatum of the rat: an in vivo microdialysis study. Journal of Neuroscience, 1995, 15, 8353-8361.	1.7	14
103	Analysis of CSF amino acids in young patients with generalised refractory epilepsy during an add-on study with lamotrigine. Epilepsy Research, 1999, 34, 75-83.	0.8	14
104	GET73 increases rat extracellular hippocampal CA1 GABA levels through a possible involvement of local mGlu5 receptor. Synapse, 2013, 67, 678-691.	0.6	14
105	PEC-60 increases dopamine but not GABA release in the dorsolateral neostriatum of the halothane anaesthetized rat. An in vivo microdialysis study. Neuroscience Letters, 1994, 177, 53-57.	1.0	13
106	Rapid quantification of histamine in human psoriatic plaques using microdialysis and ultra high performance liquid chromatography with fluorescence detection. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2012, 880, 119-124.	1.2	13
107	An Animal Model for the Study of Brain Transmittor Release in Response to Spinal Cord Stimulation in the Awake, Freely Moving Rat: Preliminary Results from the Periaqueductal Grey Matter. , 1993, 58, 156-160.		12
108	Evidence for a nucleus accumbens CCK2 receptor regulation of rat ventral pallidal GABA levels. Life Sciences, 2000, 68, 483-496.	2.0	11

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109	Massive air embolism from the pulmonary artery.. Radiology, 1982, 142, 33-34.	3.6	10
110	GABA release and GAD67 mRNA expression in rat hippocampus following entorhinal cortex activation. Molecular Brain Research, 1997, 48, 413-416.	2.5	10
111	Dynamic measures of skeletal muscle dialysate and plasma amino acid concentration in response to exercise and nutrient ingestion in healthy adult males. Amino Acids, 2017, 49, 151-159.	1.2	7
112	The secretory trypsin inhibitor like-peptide, PEC-60 increases dopamine D2 receptor agonist induced inhibition of GABA release in the dorsolateral neostriatum of the awake freely moving rat. An in vivo microdialysis study. Regulatory Peptides, 1996, 61, 111-117.	1.9	6
113	Tolerance to catalepsy following chronic haloperidol is not associated with changes in GABA release in the globus pallidus. Brain Research, 1998, 787, 299-303.	1.1	5
114	Royal academy of medicine in ireland section of biomedical sciences. Irish Journal of Medical Science, 1998, 167, 197-205.	0.8	1
115	What can the brain science of learning teach us about cybernetics?. , 2012, , .		1
116	A Selective Depolarisation-Induced Increase in Excitatory Amino Acid Neurotransmitter Release in Rat Medial Prefrontal Cortex Using a Microdialysis Model of Traumatic Brain Injury. , 2005, , 393-404.		1
117	Nigral dynorphin release studied with in vivo microdialysis in rat. Regulatory Peptides, 1994, 54, 339-340.	1.9	0