

CITATION DATA

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Approximately 17,000 citations in Science Citation index to January 2008; 3 publications are *Citation Classics*, and 44 have been cited more than 100 times (h-index - 66 publications have been cited more than 66 times):

REFERENCE

- (1) *Amino acid transmitters in the mammalian central nervous system (D.R. Curtis and G.A.R. Johnston, *Rev. Physiol.*, 1974, **69**, 97-188) Times cited: 1278
- (2) *Bicuculline, an antagonist of GABA and synaptic inhibition in the spinal cord (D.R. Curtis, A.W. Duggan, D. Felix and G.A.R. Johnston, *Brain Res.*, 1971, **32**, 69-96) Times cited: 678
- (3) *The structural specificity of the high affinity uptake of L-glutamate and L-aspartate by rat brain slices (V.J. Balcar and G.A.R. Johnston, *J. Neurochem.*, 1972, **19**, 2657-2666) Times cited: 596
- (4) GABA, bicuculline and central inhibition (D.R. Curtis, A.W. Duggan, D. Felix and G.A.R. Johnston, *Nature*, 1970, **226**, 1222-1224) Times cited: 467
- (5) A pharmacological study of the depression of spinal neurones by glycine and related amino acids (D.R. Curtis, L. Hösli and G.A.R. Johnston, *Exp. Brain Res.*, 1968, **6**, 1-18) Times cited: 443
- (6) The hyperpolarization of spinal motoneurones by glycine and related amino acids (D.R. Curtis, L. Hösli and G.A.R. Johnston, *Exp. Brain Res.*, 1968, **5**, 235-258) Times cited: 438
- (7) GABA uptake in rat central nervous system: comparison of uptake in slices and homogenates and the effects of some inhibitors (L.L. Iversen and G.A.R. Johnston, *J. Neurochem.*, 1971, **18**, 1939-1950) Times cited: 395
- (8) The specificity of strychnine as a central glycine antagonist (D.R. Curtis, A.W. Duggan and G.A.R. Johnston, *Exp. Brain Res.*, 1971, **12**, 547-565) Times cited: 342
- (9) Antagonism between bicuculline and GABA in the cat brain (D.R. Curtis, A.W. Duggan, D. Felix, G.A.R. Johnston and H. McLennan, *Brain Res.*, 1971, **33**, 57-73) Times cited: 323
- (10) Uptake and release of D- and L-aspartate by rat brain slices (L.P. Davies and G.A.R. Johnston, *J. Neurochem.*, 1976, **26**, 1007-1015) Times cited: 283
- (11) Spinal interneurone excitation by conformationally restricted analogues of L-glutamic acid (G.A.R. Johnston, D.R. Curtis, J. Davies and R.M. McCulloch, *Nature*, 1974, **248**, 804-805) Times cited: 282
- (12) Inhibition of GABA uptake in rat brain slices by nipecotic acid, various isoxazoles and related compounds (P. Krogsgaard-Larsen and G.A.R. Johnston, *J. Neurochem.*, 1975, **25**, 797-802) Times cited: 281
- (13) A new class of GABA agonist (P. Krogsgaard-Larsen, G.A.R. Johnston, D. Lodge and D.R. Curtis, *Nature*, 1977, **268**, 53-55) Times cited: 279
- (14) Structure and biological activity of a series of conformationally restricted analogues of GABA (P. Krogsgaard-Larsen, G.A.R. Johnston, D.R. Curtis, C.J.A. Game and R.M. McCulloch, *J. Neurochem.*, 1975, **25**, 803-809) Times cited: 247

- (15) Action of the neurotoxin kainic acid on high affinity uptake of L-glutamic acid in rat brain slices (G.A.R. Johnston, S.M.E. Kennedy and B. Twitchin, *J. Neurochem.*, 1979, **32**, 121-127) Times cited: 242
- (16) Excitation of mammalian central neurons by acidic amino-acids (D.R. Curtis, A.W. Duggan, J.C. Watkins, A.K. Tebecis, D. Felix and G.A.R. Johnston, *Brain Res.*, 1972, **41**, 283-301) Times cited: 222
- (17) Glycine uptake in rat central nervous system slices and homogenates: evidence for different uptake systems in spinal cord and cerebral cortex (G.A.R. Johnston and L.L. Iversen, *J. Neurochem.*, 1971, **18**, 1951-1961) Times cited: 220
- (18) High affinity uptake of transmitters: studies on the uptake of L-aspartate, GABA, L-glutamate and glycine in cat spinal cord (V.J. Balcar and G.A.R. Johnston, *J. Neurochem.*, 1973, **20**, 529-539) Times cited: 212
- (19) Neuropharmacology of amino acid inhibitory transmitters (G.A.R. Johnston, *Ann. Rev. Pharmacol. Toxicol.*, 1978, **18**, 269-289) Times cited: 204
- (20) GABA agonists and antagonists (P.R. Andrews and G.A.R. Johnston, *Biochem. Pharmac.*, 1979, **28**, 2697-2702) Times cited: 192
- (21) Central actions of ibotenic acid and muscimol (G.A.R. Johnston, D.R. Curtis, W.C. de Groat and A.W. Duggan, *Biochem. Pharmacol.*, 1968, **17**, 2488-2489) Times cited: 192
- (22) 2-Hydroxy-saclofen: an improved antagonist at central and peripheral GABAB receptors (D.I.B. Kerr, J. Ong, G.A.R. Johnston, J. Abbenante and R.H. Prager, *Neuroscience Letters*, 1988, **92**, 92-96) Times cited: 192
- (23) Diazepam enhancement of low affinity GABA binding to rat brain membranes (J.H. Skerritt, M. Willow and G.A.R. Johnston, *Neurosci. Letters*, 1982, **29**, 63-66) Times cited: 185
- (24) Central effects of beta-(p-chlorophenyl)-gamma-aminobutyric acid (D.R. Curtis, C.J.A. Game, G.A.R. Johnston and R.M. McCulloch., *Brain Res.*, 1974, **70**, 493-499) Times cited: 176
- (25) Physiologic pharmacology of GABA and its antagonists in the vertebrate nervous system (G.A.R. Johnston, in *GABA in Nervous System Function*, edited by E. Roberts, T.N. Chase and D.B. Tower, for Raven Press, New York, pages 394-411, 1976) Times cited: 167
- (26) Dihydromuscimol, thiomuscimol and related heterocyclic compounds as GABA analogues (P. Krogsgaard-Larsen, H. Hjeds, D.R. Curtis, D. Lodge and G.A.R. Johnston, *J. Neurochem.*, 1979, **32**, 1717-1724) Times cited: 163
- (27) Convulsive action of penicillin (D.R. Curtis, G.A.R. Johnston, C.J.A. Game, R.M. Maclachlan and R.M. McCulloch, *Brain Res.*, 1972, **43**, 242-248) Times cited: 160
- (28) GABA-C receptors: relatively simple transmitter-gated ion channels? (GAR Johnston, *Trends in Pharmacological Sciences*, 1996, **17**, 319-323) Times cited: 158
- (29) Structure-activity studies on the inhibition of GABA binding to rat brain membranes by muscimol and related compounds (P. Krogsgaard-Larsen and G.A.R. Johnston, *J. Neurochem.*, 1978, **30**, 1377-1382) Times cited: 146
- (30) Cis and trans-4-aminocrotonic acid as GABA analogues of restricted conformation (G.A.R. Johnston, D.R. Curtis, P.M. Beart, C.J.A. Game, R.M.

- McCulloch and B. Twitchin, *J. Neurochem.*, 1975, **24**, 157-160) Times cited: 142
- (31) Glutamate uptake by brain slices and its relation to depolarisation of neurones by acidic amino acids (V.J. Balcar and G.A.R. Johnston, *J. Neurobiol.*, 1972, **3**, 295-301) Times cited: 136
 - (32) Bicuculline methochloride as a GABA antagonist (G.A.R. Johnston, P.M. Beart, D.R. Curtis, C.J.A. Game, R.M. McCulloch and R.M. Maclachlan, *Nature New Biol.*, 1972, **240**, 219-220) Times cited: 135
 - (33) Inhibition of the uptake of GABA and related amino acids in rat brain slices by the optical isomers of nipecotic acid (G.A.R. Johnston, P. Krogsgaard-Larsen, A.L. Stephanson and B. Twitchin, *J. Neurochem.*, 1976, **26**, 1029-1033) Times cited: 131
 - (34) GABA-A receptor pharmacology (G.A.R. Johnston, *Pharmacology & Therapeutics*, 1996, **69**, 173-198) Times cited: 133
 - (35) Uptake and release of nipecotic acid by rat brain slices (G.A.R. Johnston, A.L. Stephanson, and B. Twitchin, *J. Neurochem.*, 1976, **26**, 83-87) Times cited: 131
 - (36) Baclofen: stereoselective inhibition of excitant amino acid release (G.A.R. Johnston, M.H. Hailstone and C.G. Freeman, *J. Pharm. Pharmac.*, 1980, **32**, 230-231) Times cited: 127
 - (37) Bicuculline-insensitive GABA receptors: studies on the binding of (-)-baclofen to rat cerebellar membranes (C.A. Drew, G.A.R. Johnston and R.P. Weatherby, *Neurosci. Letters*, 1984, **52**, 317-321) Times cited: 123
 - (38) The inactivation of extracellularly administered amino acids in the feline spinal cord (D.R. Curtis, A.W. Duggan and G.A.R. Johnston, *Exp. Brain Res.*, 1970, **10**, 447-462) Times cited: 119
 - (39) Betel nut constituents as inhibitors of γ -aminobutyric acid uptake (G.A.R. Johnston, P. Krogsgaard-Larsen and A. Stephanson, *Nature*, 1975, **258**, 627-628) Times cited: 115
 - (40) GABA-activated ligand gated ion channels: Medicinal chemistry and molecular biology (M. Chebib and G.A.R. Johnston, *Journal of Medicinal Chemistry*, 2000, **43**, 1427-1447) Times cited: 114
 - (41) Systematic study of GABA analogues of restricted conformation (G.A.R. Johnston, R.D. Allan, S.M.E. Kennedy and B. Twitchin, in *GABA-Neurotransmitters*, edited by P. Krogsgaard-Larsen, J. Scheel-Kruger and H. Kofod, Munksgaard, Copenhagen, 1979, pp. 149-164) Times cited: 113
 - (42) The 'ABC' of GABA receptors: A brief review (M. Chebib and G.A.R. Johnston, *Clinical and experimental Pharmacology and Physiology*, 1999, **26**, 937-940) Times cited: 108
 - (43) Central actions of benzodiazepines (D.R. Curtis, D. Lodge, G.A.R. Johnston and S.J. Brand, *Brain Res.*, 1976, **118**, 344-347) Times cited: 103
 - (44) Competitive inhibition of GABA uptake in rat brain slices by some GABA analogues of restricted conformation (P.M. Beart, G.A.R. Johnston and M.L. Uhr, *J. Neurochem.*, 1972, **19**, 1855-1861) Times cited: 102
 - (45) Muscimol uptake, release and binding in rat brain slices (G.A.R. Johnston, S.M.E. Kennedy and D. Lodge, *J. Neurochem.*, 1978, **31**, 1519-1523) Times cited: 95

- (46) Enhancement of GABA binding by pentobarbitone (M. Willow and G.A.R. Johnston, *Neuroscience Lett.*, 1980, **18**, 323-327) Times cited: 90
- (47) The differential sensitivity of spinal interneurons and Renshaw cells to kainate and N-methyl-D-aspartate (R.M. McCulloch, G.A.R. Johnston, C.J.A. Game and D.R. Curtis, *Exp. Brain Res.*, 1974, **21**, 515-518) Times cited: 88
- (48) Glutamate and related amino acids in cat spinal roots, dorsal root ganglia and peripheral nerves (A.W. Duggan and G.A.R. Johnston, *J. Neurochem.*, 1970, **17**, 1205-1208) Times cited: 88
- (49) GABA uptake in rat brain slices: inhibition by GABA analogues and by various drugs (P.M. Beart and G.A.R. Johnston, *J. Neurochem.*, 1973, **20**, 319-324) Times cited: 85
- (50) Pharmacology of barbiturates: electrophysiological and neurochemical studies (M. Willow and G.A.R. Johnston, *Int. Rev. Neurobiol.*, 1983, **24**, 15-49) Times cited: 84
- (51) Bicuculline and central GABA receptors (D.R. Curtis, A.W. Duggan, D. Felix and G.A.R. Johnston, *Nature*, 1970, **228**, 676-677) Times cited: 83
- (52) Multiplicity of GABA receptors (G.A.R. Johnston, in *Benzodiazepine/GABA Receptors and Chloride Channels: Structural and Functional Properties*, ed. R.W. Olsen and J.C. Venter, Alan Liss, New York, 1986, pp. 57-71) Times cited: 81
- (53) Chemical instability of the GABA antagonist bicuculline under physiological conditions (R.W. Olsen, M. Bann, T. Miller and G.A.R. Johnston, *Brain Res.*, 1975, **98**, 383-387) Times cited: 80
- (54) Convulsions induced in 10-day-old rats by intraperitoneal injection of monosodium glutamate and related amino acids (G.A.R. Johnston, *Biochem. Pharmacol.*, 1973, **22**, 137-140) Times cited: 80
- (55) Synthesis and activity of a potent N-methyl-D-aspartic acid agonist, *trans*-1-aminocyclobutane-1,3-dicarboxylic acid, and related phosphonic and carboxylic acids (R.D. Allan, J.R. Hanrahan, T.W. Hambley, G.A.R. Johnston, K.N. Mewett and A.D. Mitrovic, *J. Med. Chem.*, 1990, **33**, 2905-2915) Times cited: 77
- (56) Transport of L-proline by rat brain slices (V.J. Balcar, G.A.R. Johnston and A.L. Stephanson, *Brain Res.*, 1976, **102**, 143-151) Times cited: 76
- (57) Effects of the Areca nut constituents arecaidine and guvacine on the action of GABA in the central nervous system (D. Lodge, G.A.R. Johnston, D.R. Curtis and S.J. Brand, *Brain Res.*, 1977, **136**, 513-522) Times cited: 75
- (58) γ -Aminobutyric acid agonists: an *in vitro* comparison between depression of spinal synaptic activity and depolarization of spinal root fibres in the rat (R.D. Allan, R.H. Evans and G.A.R. Johnston, *Brit. J. Pharmacol.*, 1980, **70**, 609-615) Times cited: 73
- (59) Regional heterogeneity of L-glutamate and L-aspartate high affinity uptake systems in the rat CNS (E.J. Fletcher and G.A.R. Johnston, *J. Neurochem.*, 1991, **57**, 911-914) Times cited: 72
- (60) Plasma GABA, GABA-like activity and the brain GABA-benzodiazepine receptor complex in rats with chronic hepatic encephalopathy (J.E. Maddison, P.R. Dodd, M. Morrison, G.A.R. Johnston and G.C. Farrell, *Hepatology*, 1987, **7**, 621-628) Times cited: 71

- (61) Stereospecificity of the inhibition of L-glutamate and L-aspartate high affinity uptake in rat brain slices by threo-3-hydroxyaspartate (V. Balcar, G.A.R. Johnston and B. Twitchin, *J. Neurochem.*, 1977, **28**, 1145-1146) Times cited: 71
- (62) A purinergic component in the anticonvulsant action of carbamazepine? (J.H. Skerritt, L.P. Davies and G.A.R. Johnston, *Eur. J. Pharmacol.*, 1982, **82**, 195-197) Times cited: 69
- (63) Synthetic analogs for the study of GABA as a neurotransmitter (R.D. Allan and G.A.R. Johnston, *Med. Res. Rev.*, 1983, **3**, 91-118) Times cited: 68
- (64) Glycine, strychnine, picrotoxin and spinal inhibition (D.R. Curtis, A.W. Duggan and G.A.R. Johnston, *Brain Res.*, 1969, **14**, 759-62) Times cited: 68
- (65) Enhancement of GABA binding by benzodiazepines and related anxiolytics (J.H. Skerritt and G.A.R. Johnston, *Eur. J. Pharmacol.*, 1983, **89**, 193-198) Times cited: 67
- (66) GABA receptors and phospholipids (G.A.R. Johnston and S.M.E. Kennedy, in *Amino Acids as Chemical Transmitters*, edited by F. Fonnum, Plenum Press, New York, 1978, pp. 507-516) Times cited: 67
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- (67) Contrasting modes of action of methylglutamate derivatives on the excitatory amino acid transporters, EAAT1 and EAAT2 (RJ Vandenberg, AD Mitrovic, M Chebib, VJ Balcar and GAR Johnston, *Mol. Pharmacol.*, 1997, **51**, 809-815) Times cited: 65
- (68) Interactions of the anticonvulsant, carbamazepine, with adenosine receptors. (1) Neurochemical studies (J.H. Skerritt, L.P. Davies and G.A.R. Johnston, *Epilepsia*, 1983, **24**, 634-641) Times cited: 65
- (69) Postnatal changes in the high affinity uptake of glycine and GABA in the rat central nervous system (G.A.R. Johnston and L.P. Davies, *J. Neurochem.*, 1974, **22**, 101-105) Times cited: 64
- (70) Brain GABA receptor binding is normal in rats with thioacetamide-induced hepatic encephalopathy despite elevated plasma GABA-like activity (J.E. Maddison, P.R. Dodd, G.A.R. Johnston and G.C. Farrell, *Gastroenterology*, 1987, **93**, 1062-1068) Times cited: 62
- (71) Increased GABA binding in mouse brain following acute swim stress (J.H. Skerritt, P. Trisdikoon and G.A.R. Johnston, *Brain Res.*, 1981, **215**, 398-403) Times cited: 62
- (72) The intraspinal distribution of some depressant amino acids (G.A.R. Johnston, *J. Neurochem.*, 1968, **15**, 1013-1017) Times cited: 60

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