

7. Literaturverzeichnis.

- Ackermann, D. (1910).
Über ein neues auf bakteriellem Wege gewinnbares Aporrhegma.
Z. Physiol. Chem. 69, 273-281.
- Aitken, F.E., Breese, G.R., Dudek, F.F., Edwards, F., Espanol, M.T., Larkman, P.M., Lipton, P., Newman, G.C., Nowak, T.S., Panizzon, K.L., Raley-Susman, K.M., Reid, K.H., Rice, M.E., Sarvay, J.M., Schoepp, D.D., Segal, M., Taylor, C.P., Teyler, T.J., Voulalas, P.J. (1995).
Preparative methods for brain slices: a discussion.
J. Neurosci. Meth. 59, 139-149.
- Ajmone-Marsen, C. (1969).
Acute effects of topical epileptogenic agents.
Basic Mechanisms of the Epilepsies, Little Brown and Company, 299-312.
- Akbar, M.T., Rattray, M., Williams, R.T., Chong, N.W., Meldrum, B.S. (1998).
Reduction of GABA and glutamate transporter messenger RNAs in the severe-seizure genetically epilepsy-prone rat.
Neurosci. 85, 1235-1251.
- Alger, B.E., Nicoll, R.A. (1982).
Feed-forward dendritic inhibition in rat hippocampal pyramidal cells studied in vitro.
J. Physiol. (Lond.) 328, 105-123.
- Ali, F.E., Bondinell, W.E., Dandridge, P.A., Frazee, J.S., Garver, E., Girard, G.R. (1985).
Orally active and potent inhibitors of gamma-aminobutyric acid uptake.
J. Med. Chem. 28, 653-660.
- Alkondon, M., Pereira, E.F.R., Eisenberg, H.M., Albuquerque, E.X. (2000).
Nicotinic receptor activation in human cerebral cortical interneurons: a mechanism for inhibition and disinhibition of neuronal networks.
J. Neurosci. 20, 66-75.
- Amaral, D.G. (1993).
Emerging principles of intrinsic hippocampal organization.
Curr. Opin. Neurobiol. 3, 225-229.
- Andersen, P., Bliss, T.V.P., Skrede, K.K. (1971).
Lamellar organization of hippocampal excitatory pathways.
Exp. Brain. Res. 13, 222-238.
- Andre, V., Marescaux, C., Nehlig, A., Fritschy, J.M. (2001).
Alterations of hippocampal GABAergic system contribute to development of spontaneous recurrent seizure in the rat lithium-pilocarpine model of temporal lobe epilepsy.
Hippocampus 11, 452-468.
- Annegers, J.F., Hauser, W.A., Shirts, S.B., Kurland, L.T. (1987).
Factors prognostic of unprovoked seizures after febrile convulsions.
N. Engl. J. Med. 316, 493-498.
- Aradi, I., Santhakumar, V., Chen, K., Soltesz, I. (2002).
Postsynaptic effects of GABAergic synaptic diversity: regulation of neuronal excitability by changes in IPSC variance.
Neuropharmacology 43, 511-522.
- Arida, R.M., Scorza, F.A., Peres, C., Cavalheiro, E.A. (1999).
The course of untreated seizures in the pilocarpine model of epilepsy.
Epilepsy Res. 34, 99-107.

- Atzori, M. (1996).
Pyramidal cells and stratum lacunosum moleculare interneurons in the CA1 hippocampal region share a GABAergic spontaneous input.
Hippocampus 6, 72-78.
- Awapara, J., Landua, A.J., Fuerst, R., Seale, B. (1950).
Free γ -aminobutyric acid in brain.
J. Biol. Chem. 187, 35-39.
- Babb, T.L., Brown, W.J., Pretorius, J., Davenport, C., Lieb, J.P., Crandall, P.H. (1984).
Temporal lobe volumetric cell densities in temporal lobe epilepsy.
Epilepsia 25, 729-740.
- Babb, T.L., Pretorius, J.K., Kupfer, W.R., Crandall, P.H. (1989).
Glutamate decarboxylase-immunoreactive neurons are preserved in human epileptic hippocampus.
J. Neurosci. 9, 2562-2574.
- Babb, T.L., Kupfer, W.R., Pretorius, J.K., Crandall, P.H., Levesque, M.F. (1990).
Synaptic reorganization by mossy fibers in human epileptic fascia dentata.
Neurosci. 42, 351-363.
- Balslev, T., Uldall, P., Buchholt, J. (2000).
Provocations of non-convulsive status epilepticus by tiagabine in three adolescent patients.
Eur. J. Paediatr. Neurol. 4, 169-170.
- Banks, M.I., Pearce, R.A. (2000).
Kinetic differences between synaptic and extrasynaptic GABA(A) receptors in CA1 pyramidal cells.
J. Neurosci. 20, 937-948.
- Bazemore, A.W., Elliot K.A.C., Florey, E. (1957).
Isolation of Factor I.
J. Neurochem. 1, 334-339.
- Becker, A.J., Chen, J., Zien, A., Sochivko, D., Normann, S., Schramm, J., Elger, C.E., Wiestler, O.D., Blumcke, I. (2003).
Correlated stage- and subfield-associated hippocampal gene expression patterns in experimental and human temporal lobe epilepsy.
Eur. J. Neurosci. 18, 2792-2802.
- Ben-Ari, Y. (1985).
Limbic seizure and brain damage produced by kainic acid: mechanisms and relevance to human temporal lobe epilepsy.
Neurosci. 14, 375-403.
- Bendotti, C., Vezzani, A., Tarizzo, G., Samanin, R. (1993).
Increased expression of GAP-43, somatostatin and neuropeptide Y mRNA in the hippocampus during development of hippocampal kindling in rats.
Eur. J. Neurosci. 5, 1312-1320.
- Berg, A.T., Shinnar, S. (1997).
Do seizures beget seizures? Assessment of clinical evidence in humans.
J. Clin. Neurophysiol. 14, 102-110.
- Berlhage, B., Hansen, G.H., Schousboe, A. (1993).
Depolarization by K^+ and glutamate activates different neurotransmitter release mechanisms in GABAergic neurons: vesicular versus non-vesicular release of GABA.
Neurosci. 54, 1019-1034.
- Bernard, C., Hirsch, J.C., Ben-Ari, Y. (1999).
Excitation and inhibition in temporal lobe epilepsy: a close encounter.
Adv Neurol. 79, 821-828.

- Bertram, E.H., Lothmann, E.W., Lenn, N.J. (1990).
The hippocampus in experimental chronic epilepsy: a morphometric analysis.
Ann. Neurol. 27, 43-48.
- Bertrand, S., Lacaille, J.C. (2001).
Unitary synaptic currents between lacunosum-moleculare interneurons and pyramidal cells in rat hippocampus.
J. Physiol. 532, 369-384.
- Best, N., Mitchell, J., Baimbridge, K.G., Wheal, H.V. (1993).
Changes in parvalbumin-immunoreactive neurons in the rat hippocampus following a kainic acid lesion.
Neurosci Lett. 155, 1-6.
- Blumcke, I., Zuschratter, W., Schewe, J.C., Suter, B., Lie, A.A., Riederer, B.M., Meyer, B., Schramm, J., Elger, C.E., Wiestler, O.D. (1999).
Cellular pathology of hilar neurons in Ammon's horn sclerosis.
J. Comp. Neurol. 414, 437-453.
- Borden, L.A., Smith, K.E., Hartig, P.R., Branchek, T.A., Weinshank, R.L. (1992).
Molecular heterogeneity of the γ -aminobutyric acid (GABA) transport system. Cloning of two novel high affinity GABA transporter from rat brain.
J. Biol. Chem. 267, 21098-21104.
- Borden, L.A., Murali Dhar, T.G., Smith, K.E., Weinshank, R.L., Branchek, T.A., Gluchowski, C. (1994).
Tiagabine, SK&F 89976-A, CI-966, and NNC-711 are selective for the cloned GABA transporter GAT-1.
Eur. J. Pharmacol. 269 (2), 219-224.
- Borden, L.A., Smith, K.E., Vaysse, P.J., Gustafson, R.L., Weinshank, R.L., Branchek, T.A. (1995).
Re-evaluation of GABA transport in neuronal and glial cell cultures: correlation of pharmacology and mRNA localisation.
Recept. Channels 2, 129-146.
- Borden, L.A. (1996).
GABA transporter heterogeneity: pharmacology and cellular localisation.
Neurochem. Int. 29, 335-356.
- Bouilleret, V., Loup, F., Kiener, T., Marescaux, C., Fritschy, J.M. (2000).
Early loss of interneurons and delayed subunit-specific changes in GABA(A)-receptor expression in a mouse model of mesial temporal lobe epilepsy.
Hippocampus 10, 305-324.
- Braestrup, C., Nielson, E.B., Sonnewald, U., Knutson, L.J., Andersen, K.E., Jansen, J.A. (1990).
(R)-N-[4,4-bis(3-methyl-2-thienyl)but-3-en-1-yl]nipecotic acid binds with high affinity to the brain gamma-aminobutyric acid uptake carrier.
J. Neurochem. 54, 639-647.
- Bragin, A., Engel, J., Wilson, C.L. (1999).
Hippocampal and entorhinal cortex high-frequency oscillations (100-500 Hz) in human epileptic brain in kainic acid-treated rats with chronic seizures.
Epilepsia 40, 127-137.
- Broca, P. (1878).
Anatomie comparée circonvolutions cérébrales. Le grand lobe limbique et la scissure limbique dans la série des mammifères.
Rev. Anthropol. Ser. 2, 384-498.

- Brooks-Kayal, A.R., Shumate, M.D., Jin, H., Richter, T.Y., Coulter, D.A. (1998).
Selective changes in single cell GABA(A) receptor subunit expression and function in temporal lobe epilepsy.
Nat. Med. 4 (10), 1166-1172.
- Bruhn, T., Cobo, M., Berg, M., Diemer, N.H. (1992).
Limbic seizures-induced changes in amino-acid levels in the hippocampal formation: a microdialysis study of freely moving rats.
Acta Neurol. Scand. 86, 455-459.
- Buckmaster, P.S., Dudek, F.E. (1997).
Neuron loss, granule cell axon reorganization, and functional changes in the dentate gyrus of epileptic kainate-treated rats.
J. Comp. Neurol. 385, 385-404.
- Buckmaster, P.S., Zhang, G.F., Yamawaki, R. (2002).
Axon sprouting in a model of temporal lobe epilepsy creates a predominantly excitatory feedback circuit.
Neurosci. 22, 6650-6658.
- Buckmaster, P.S. (2004).
Prolonged infusion of Tetrodotoxin does not block mossy fiber sprouting in pilocarpine-treated rats.
Epilepsia 45, 452-458.
- Buhl, E.H., Otis, T.S., Mody, I. (1996).
Zinc-induced collapse of augmented inhibition by GABA in a temporal lobe epilepsy model.
Science 271, 369-373.
- Cammack, J.N., Rakhilin, S.V., Schwartz, E.A. (1994).
GABA transporter operates asymmetrically and with variable stoichiometry.
Neuron 13, 949-960.
- Cavalheiro, H.E., Fernandes, M.J., Turski, L., Naffah-Mazzacoratti, M.G. (1994).
Spontaneous recurrent seizures in rats: amino acid and monoamine determination in the hippocampus.
Epilepsia 35, 1-13.
- Cavazos, J.E., Sutula, T.P. (1990).
Progressive neuronal loss induced by kindling: a possible mechanism for mossy fiber synaptic reorganization and hippocampal sclerosis.
Brain Res. 10, 1-6.
- Cavazos, J.E., Jones, S.M., Cross, D.J. (2004).
Sprouting and synaptic reorganization in the subiculum and CA1 region of the hippocampus in acute and chronic models of partial-onset epilepsy.
Neurosci. 126, 677-688.
- Celio, M.R. (1990).
Calbindin D-28k and parvalbumin in the rat nervous system.
Neurosci. 35, 375-475.
- Cendes, F., Andermann, F., Dubeau, F. (1993).
Early childhood prolonged febrile convulsions, atrophy and sclerosis of mesial structures, and temporal lobe epilepsy: an MRI volumetric study.
Neurol. 43, 1083-1087.
- Chapman, C.A., Lacaille, J.C. (1999).
Intrinsic theta-frequency membrane potential oscillations in hippocampal CA1 interneurons of stratum lacunosum-moleculare.
Neurophysiol. 81, 1296-1307.

- Chen, L.S., Wong, J.G., Banerjee, P.K., Snead III, O.C. (1996).
Kainic acid-induced focal cortical seizure is associated with an increase of synaptophysin immunoreactivity in the cortex.
Exp. Neurol. 141, 25-31.
- Chen, K., Baram, T.Z., Soltesz, I. (1999).
Febrile seizures in the developing brain result in persistent modification of neuronal excitability in limbic circuits.
Nat. Med. 5, 888-894.
- Chiu, C.S., Jensen, K., Sokolova, I., Wang, D., Li, M., Deshpande, P., Davidson, N., Mody, I., Quick, M.W., Quake, S.R., Lester, H.A. (2002).
Number, density, and surface/cytoplasmic distribution of GABA transporters at presynaptic structures of knock-in mice carrying GABA transporter subtype 1-green fluorescent protein fusion.
J. Neurosci. 22, 10251-10266.
- Chiu, C.S., Brickley, S., Jensen, K., Southwell, A., Mckinney, S., Cull-Candy, S., Mody, I., Lester, H. (2005).
GABA transporter deficiency causes tremor, ataxia, nervousness, and increased GABA-induced tonic conductance in cerebellum.
J. Neurosci. 25, 3234-3245.
- Choi, D.W. (1988).
Glutamate neurotoxicity and diseases of nervous system.
Neuron 1, 623-631.
- Clark, J.A., Deutch, A.Y., Gallipoli, P.Z., Amara, S.G. (1992).
Functional expression and CNS distribution of a β -alanine-sensitive neuronal GABA transporter.
Neuron 9, 337-348.
- Clayton, G.H., Owens, G.C., Wolf, J.S., Smith, R.L. (1998).
Ontogeny of cation-Cl⁻-cotransporter expression in rat neocortex.
Brain Res. Dev. Brain Res. 109, 281-292.
- Clifford, D.B., Olney, J.W., Collins, R.C., Zorumski, C.F. (1987).
The functional anatomy and pathology of lithium-pilocarpine and high-dose pilocarpine seizures.
Neurosci. 23, 953-966.
- Cobb, S.R., Halasy, K., Vida, I., Nyiri, G., Tamàs, G., Buhl, E.H., Somogyi, P. (1997).
Synaptic effects of identified interneurons innervating both interneurons and pyramidal cells in the rat hippocampus.
Neurosci. 79, 629-648.
- Cock, H.R. (2002).
The role of mitochondria and oxidative stress in neuronal damage after brief and prolonged seizures.
Prog. Brain Res. 135, 187-196.
- Cohen, I., Navarro, V., Clemenceau, S., Baulac, M., Miles, R. (2002).
On the origin of interictal activity in human temporal lobe epilepsy in vitro.
Science 15, 1418-1421.
- Cohen, I., Navarro, V., Le Duigou, C., Miles, R. (2003).
Mesial temporal lobe epilepsy: A pathological replay of developmental mechanisms?
Biol. Cell 95, 329-333.

- Conti, F., Melone, M., DeBiasi, S., Minelli, A., Brecha, N.C., Ducati, A. (1998).
Neuronal and glial localization of GAT-1, a high-affinity gamma-aminobutyric acid plasma membrane transporter, in human cerebral cortex: with a note on its distribution in monkey cortex.
J. Comp. Neurol. 396, 51-63.
- Conti, F., Minelli, A., Melone, M. (2004).
GABA transporters in the mammalian cerebral cortex: localization, development and pathological implications.
Brain Res. Rev. 45, 196-212.
- Cossart, R., Dinocourt, C., Hirsch, J.C., Merchan-Perez, A., De Felipe, J., Ben-Ari, Y., Esclapez, M., Bernhard, C. (2001).
Dendritic but not somatic GABAergic inhibition is decreased in experimental epilepsy.
Nature Neurosci. 4, 52-62.
- Coulter, D.A. (1999).
Chronic epileptogenic cellular alterations in the limbic system after status epilepticus.
Epilepsia. 40, 23-33.
- Covolan, L., Mello, L.E. (2000a).
Temporal profile of neuronal injury following pilocarpine or kainic acid-induced status epilepticus.
Epilepsy Res. 39, 133-152.
- Covolan, L., Ribeiro, L.T., Longo, B.M., Mello, L.E. (2000b).
Cell damage and neurogenesis in the dentate granule cell layer of adult rats after pilocarpine- or kainate-induced status epilepticus.
Hippocampus 10, 169-180.
- Cronin, J., Dudek, F.E. (1988).
Chronic seizures and collateral sprouting of dentate mossy fibers after kainic acid treatment in rats.
Brain Res. 22, 181-184.
- Croning, M.D.R., Haddad, G.G. (1998).
Comparison of brain slice chamber designs for investigations of oxygen deprivation in vitro.
J. Neurosci. Meth. 81, 103-111.
- Cruickshank, J.W., Brudzynski, S.M., Mcachlan, R.S. (1994).
Involvement of M1 muscarinic receptor in the initiation of cholinergically induced epileptic seizures in the rat brain.
Brain Res. 643, 125-134.
- Curtis, D.R., Phllis, J.W., Watkins, J.C. (1959).
The depression of spinal neurons by γ -amino-n-butyric acid and β -alanine.
J. Physiol. 146, 185-203.
- Dalby, N.O., Mody, I. (2001).
The process of epileptogenesis: a pathophysiological approach.
Curr. Opin. Neurol. 14, 187-192.
- Daoyun, J.I., Dani, J.A. (2000).
Inhibition and disinhibition of pyramidal neurons of activation of nicotinic receptors on hippocampal interneurons.
Neurophysiol. 83, 2682-2690.
- De Felipe, J., Garcia Sola, R., Marco, P., Del Rio, M.R., Pulido, P., Ramon, C. (1993).
Selective changes in the microorganization of the human epileptogenic neocortex revealed by parvalbumin immunoreactivity.
Cereb. Cortex 3, 39-48.

- de Lanerolle, N.C., Kim, J.H., Robbins, R.J., Spencer, D.D. (1989).
Hippocampal interneuron loss and plasticity in human temporal lobe epilepsy.
Brain Res. 495, 387-395.
- DeLorenzo, R.J. (1984).
Calmodulin systems in neuronal excitability: a molecular approach to epilepsy.
Ann. Neurol. 16, 104-110.
- Denslow, M.J., Eid, T., Schwarcz, R., Lothman, E.W., Steward, O. (2001).
Disruption of inhibition in area CA1 of the hippocampus in a rat model of temporal lobe epilepsy.
J. Neurophysiol. 86, 2231-2245.
- Depondt, C., Van Paesschen, W., Matthijs, G. (2002).
Familial temporal lobe epilepsy with febrile seizures.
Neurol. 58, 1429-1433.
- Dichter, M.A., Ayala, G.F. (1987).
Cellular mechanisms of epilepsy: a status report.
Science 237, 157.
- Dingledine, R., Korn, S.J. (1985).
Gamma-amminobutyric acid uptake and the termination of inhibitory synaptic potentials in the rat hippocampal slice.
J. Physiol. 366, 387-409.
- Dinocourt, C., Petanjek, Z., Freund, T.F., Ben-Ari, Y., Esclapez, M. (2003).
Loss of interneurons innervating pyramidal cell dendrites and axon initial segments in the CA1 region of the hippocampus following pilocarpine-induced seizures.
J. Comp. Neurol. 459, 407-425.
- Dolleman-Van der Weel, M.J., Lopes da Silva, F.H., Witter, M.P. (1997).
Nucleus reunions thalami modulates activity in hippocampal field CA1 through excitatory and inhibitory mechanisms.
J. Neurosci. 17, 5640-5650.
- Draguhn, A., Heinemann, U. (1996).
Different mechanisms regulate IPSC kinetics in early postnatal and juvenile hippocampal granule cells.
J. Neurophysiol. 76, 3983-3993.
- Dube, C., Chen, K., Eggbal-Ahmadi, M., Brunson, K., Soltesz, I., Baram, T.Z. (2000).
Prolonged febrile seizures in the immature rat model enhanced hippocampal excitability long term.
Ann. Neurol. 47, 336-344.
- Dudek, F.E., Hellier, J.L., Williams, P.A., Ferraro, D.J., Staley, K.J. (2002).
The course of cellular alterations associated with the development of spontaneous seizures after status epilepticus.
Prog. Brain Res. 135, 53-65.
- During, M.J., Spencer, D.D. (1993).
Extracellular hippocampal glutamate and spontaneous seizures in the human brain.
Lancet 341, 1607-1611.
- During, M.J., Ryder, K.M., Spencer, D.D. (1995).
Hippocampal GABA transporter function in temporal-lobe epilepsy.
Nature 376, 174-177.
- Duus, P. (1995).
Neurologisch-topische Diagnostik.
Thieme Verlag Stuttgart, 6. Auflage.

- Dvorak-Carbone, H., Schuman, E.M. (1999).
Patterned activity in stratum lacunosum moleculare inhibits CA1 pyramidal neuron firing.
J. Neurophysiol. 82, 3213-3222.
- Ellerkmann, R.K., Remy, S., Chen, J., Sochivko, D., Elger, C.E., Urban, B.W., Becker, A., Beck, H. (2003).
Molecular and functional changes in voltage-dependent Na(+) channels following pilocarpine-induced status epilepticus in rat dentate granule cells.
Neurosci. 119, 323-333.
- Elliot, R.C., Miles, M.F., Lowenstein, D.H. (2003).
Overlapping microarray profiles of dentate gyrus gene expression during development- and epilepsy-associated neurogenesis and axon outgrowth.
J. Neurosci. 23, 2218-2227.
- Empson, R.M., Heinemann, U. (1995).
The perforant path projection to hippocampal area CA1 in the rat hippocampal-entorhinal cortex combined slice.
J. Physiol. 484, 707-720.
- Engel, D., Schmitz, D., Gloveli, T., Frahm, C., Heinemann, U., Draguhn, A. (1998).
Laminar difference in GABA uptake and GAT-1 expression in rat CA1.
J. Physiol. 512, 643-649.
- Ernfors, P., Bengzon, J., Kokaia, Z., Persson, H., Lindvall, O. (1991).
Increased levels of messenger RNAs for neurotrophic factors in the brain during epileptogenesis.
Neuron 7, 165-176.
- Esclapez, M., Hirsch, J.C., Khazipov, R., Ben-Ari, Y., Bernard, C. (1997).
Operative GABAergic inhibition in hippocampal CA1 pyramidal neurons experimental epilepsy.
Neurobiol. 94, 12151-12156
- Esclapez, M., Hirsch, J.C., Ben-Ari, Y., Bernard, C. (1999).
Newly formed excitatory pathways provide a substrate for hyperexcitability in experimental temporal lobe epilepsy.
J. Comp. Neurol. 1999 408, 449-460.
- Frahm, C., Engel, D., Draguhn, D. (2001a).
Efficacy of background GABA uptake in rat hippocampal slices.
NeuroReport 12, 1593-1596.
- Frahm, C., Draguhn, A. (2001b).
GAD and GABA transporter (GAT-1) mRNA expression in the developing rat hippocampus.
Dev. Brain Res. 132, 1-13.
- Fraser, D.D., Mac Vicar, B.A. (1991).
Low-threshold transient calcium current in rat hippocampal lacunosum-moleculare interneurons: kinetics and modulation by neurotransmitters.
Neurosci. 11, 2812-2820.
- French, E.D., Siggins, G.P. (1980).
An iontophoretic survey of opioid peptide actions in the rat limbic system: in search of opiate epileptogenic mechanisms.
Reg. Pept. 1, 127-134.
- French, J.A. (1993).
Characteristics of medial temporal lobe epilepsy: I. Results of history and physical examination.
Ann. Neurol. 34, 774-780.

- Freund, T.F., Ylinen, A., Miettinen, R., Pitkanen, A., Lahtinen, H., Baimbridge, K.G., Riekkinen, P.J. (1991).
Pattern of neuronal death in the rat hippocampus after status epilepticus. Relationship to calcium binding proteins content and ischemic vulnerability.
Brain Res. Bull. 28, 27-38.
- Freund, T.F., Buzsaki, G. (1996).
Interneurons of the hippocampus.
Hippocampus. 6, 347-470.
- Frotscher, M., Zimmer, J. (1983).
Lesion-induced mossy fibers to the molecular layer of the rat fascia dentata: identification of postsynaptic granule cells by the Golgi-EM-Technique.
Comp. Neurol 215, 299-311.
- Fueta, Y., Vasilets, L.A., Takeda, K., Kawamura, M., Schwarz, W. (2003).
Down-regulation of GABA-transporter function by hippocampal translation product: its possible role in epilepsy.
Neurosci. 118, 371-378.
- Fujikawa, D.G. (1996).
The temporal evolution of neuronal damage from pilocarpine-induced status epilepticus.
Brain Res. 725, 11-22.
- Galareta, M., Hestrin, R.A. (1999).
A network of fast-spiking cells in the neocortex connected by electrical synapses.
Nature 402, 72-75.
- Gale, E.F. (1946).
The bacterial amino acid decarboxylases.
Adv. Enzymol. (6) 1-32.
- Gaspary, H.L., Wang, W., Richerson, G.B. (1998).
Carrier-mediated GABA release activates GABA receptors on hippocampal neurons.
J. Neurophysiol. 80, 270-281.
- Gastaut, H. (1970).
Clinical and electroencephalographical classification of epileptic seizures.
Epilepsia 11, 102-113.
- Gibbs, J.W., Shumate, M.D., Coulter, D.A. (1997).
Differential epilepsy-associated alterations in postsynaptic GABA(A) receptor function in dentate granule and CA1 neurons.
J. Neurophysiol. 77, 1924-1938.
- Gibson, J.R., Beierlein, M., Connors, B.W. (1999).
Two networks of electrically coupled inhibitory neurons in neocortex.
Nature 402, 75-79.
- Gloor, P. (1991).
Mesial temporal sclerosis: historical background and an overview from a modern perspective.
Epilepsy surgery. New York, Raven Press, 689-703.
- Gray, W.P., May, K., Sundstrom, L.E. (2002).
Seizure induced dentate neurogenesis does not diminish with age in rats.
Neurosci. Lett. 330, 235-238.
- Griffiths, T., Evans, M.C., Meldrum, B.S. (1982).
Intracellular sites of early accumulation in the rat hippocampus during status epilepticus.
Neurosci. Lett. 30, 329-334.

- Gu, W., Brodkorb, E., Steinlein, O.K. (2002).
LG/I is mutated in familial temporal lobe epilepsy characterized by aphasic seizures.
Ann. Neurol. 52, 364-367.
- Guastella, J., Nelson, N., Nelson, H., Czyzyk, L., Keynan, S., Miedel, M.C., Davidson, N., Lester, H., Kanner, B. (1990).
Cloning and expression of a rat brain GABA transporter.
Science 249, 1303-1306.
- Gulyàs, A.I., Miettinen, R., Jacobowitz, D.M., Freund, T.F. (1992).
Calretinin is present in non-pyramidal cells of the rat hippocampus. I. A new type of neuron specifically associated with the mossy fibre system.
Neurosci. 48, 1-27.
- Gulyàs, A.I., Håjos, N., Freund, T.F. (1996)
Interneurons containing calretinin are specialized to control other interneurons in the rat hippocampus.
Neurosci 16, 3397-3411.
- Haas, K.Z., Sperber, E.F., Moshè, S.L., Stanton, P.K. (1996).
Kainic acid-induced seizures enhance dentate gyrus inhibition by downregulation of GABAB receptors.
J. Neurosci. 16, 4250-4260.
- Håjos, N., Mody, I. (1997).
Synaptic communication among hippocampal interneurons: properties of spontaneous IPSCs in morphologically identified cells.
Neurosci. 17, 8427-8442.
- Hamani, C., Mello, L.E.A.M. (1997).
Status epilepticus induced by pilocarpine and picrotoxin.
Epilepsy Res. 28, 73-82.
- Hamill, O., Marty, A., Neher, E., Sakmann, B., Singworth, F. (1981).
Improved patch clamp techniques for high-resolution current recordings from cells and cell-free membranes.
Pflüg. Arch. Eur.J.Physiol. 391, 85-100.
- Heinemann, U., Konnerth, A., Pumain, R., Wadman, W.J. (1986).
Extracellular calcium and potassium concentration changes in chronic epilepsie brain tissue.
Adv. Neurol. 44, 641-661.
- Heinemann, U., Lux, H.D., Gutnick, M.J. (1997).
Extracellular free calcium and potassium during paroxysmal activity in the cerebral cortex of the cat.
Exp. Brain Res. 27, 237-245.
- Heinemann, U. (2004).
Basic mechanism of partial epilepsies.
Curr. Opin. Neurol. 17, 155-159.
- Hendriksen, J.T., Datson, N.A., Ghijssen, W.E., van Vliet, E.A., da Silva, F.H., Gorter, J.A., Vreugdenhil, E. (2001).
Altered hippocampal gene expression prior to the onset of spontaneous seizure in the rat post-status epilepticus model.
Eur. J. Neurosci. 14, 1475-1484.
- Henn, F.A., Hamberger, A. (1971).
Glial cell function: uptake of transmitter substances.
Proc. Natl. Acad. Sci. USA, 68, 2686-2690.

- Hirao, T., Morimoto, K., Yamamoto, Y., Watanabe, T., Sato, H., Sato, K., Sato, S., Yamamade, N., Tanaka, K., Suwaki, H. (1998).
Time-dependend and regional expression of GABA transporter mRNAs following amygdala-kindled seizures in rats.
Mol. Brain Res. 54, 49-55.
- Hirsch, J.C., Agassanian, C., Merchà-Pèrez, A., Ben-Ari, Y., DeFelipe, J., Esclapez, M., Bernard, C. (1999).
Deficit of quantal release of GABA in experimental models of temporal lobe epilepsy.
Nature Neurosci. 2, 499-500.
- Hort, J., Brozek, G., Komarek, V., Langmeier, M., Mares, P. (2000).
Interstrain differences in cognitive function in rats in relation to status epilepticus.
Behav. Brain Res. 112, 77-83.
- Hoss, W., Woodruff, J.M., Ellerbrock, B.R., Peryasamy, S., Ghodsi-Hovsepian, S., Stibbe, J., Bohnett, M., Messer, W.S. (1990).
Biochemical and behavioral responses of pilocarpin at muscarinic receptor subtypes in the CNS, comparison with receptor binding and low-energy conformations.
Brain Res. 533, 232.
- Houser, C.R., Miyashiro, J.E., Swartz, B.E., Walsh, G.O., Rich, J.R., Delgado-Escueta, A.V. (1990).
Altered patterns of dynorphin immunoreactivity suggest mossy fiber reorganization in human hippocampal epilepsy.
J. Neurosci. 10, 267-282.
- Houser, C.R., Esclapez, M. (1996).
Vulnerability and plasticity of the GABA system in the pilocarpine model of spontaneous recurrent seizures.
Epilepsy Res. 26, 207-218.
- Hsieh, P.F. (1997).
Dentate hilar cell damage in electric stimulated-induced limbic status epilepticus.
Kaohsiung J. Med. Sci. 13, 671-676.
- Hsieh, P.F. (1999).
Neuropathology of limbic status epilepticus induced by electrical stimulation of naive rats.
Neurol. Res. 21, 399-403.
- Hua, Y.H., Hu, J.H., Zhao, W.J., Fei, J., Yu, Y., Zhou, X.G., Mei, Z.T., Guo, L.H. (2001).
Overexpression of γ -aminobutyric acid transporters subtype I leads to susceptibility to kainic acid-induced seizure in transgenic mice.
Cell Res. 11, 61-67.
- Hymes, J., Wolf, B. (2000).
The use of biotinylated compounds or reagents is much more complicated than originally thought.
J. Neurosci. Meth. 98, 171-173.
- Isaacson, J.S., Solis, J.M., Nicoll, R.A. (1993).
Local and diffuse synaptic actions of GABA in the hippocampus.
Neuron 10, 165-175.
- Iversen, L.L., Bloom, F.E. (1972).
Studies of the uptake of (3 H)-GABA and (3 H)-glycin in slices of homogenates of rat brain and spinal cord by electron microscopic autoradiography.
Brain Res. 41, 131-143.

- Jackson, M.F., Esplin, B., Capek, R. (1999).
Activity-dependend enhancement of hyperpolarizing and depolarizing gamma-aminobutyric acid (GABA) synaptic responses following inhibition of GABA uptake by tiagabine.
Epilepsy Res. 37, 25-36.
- Jacobs, K.M., Kharazia, V.N., Prince, D.A. (1999).
Mechanisms underlying epileptogenesis in cortical malformations.
Epilepsy Res. 36, 165-188.
- Janjua, N.A., Mori, A., Hiramatsu, M. (1991).
Gamma-ammino-butyric acid uptake is decreased in the hippocampus in a genetic model of temporal lobe epilepsy.
Epilepsy Res. 37(1), 25-36.
- Jefferys, J.G.R., Mitchell, P., O'Hara, L., Tiley, C., Hardy, J., Jordan, S.J., Lynch, M., Wadsworth, J. (1991).
Ex vivo release of GABA from tetanus toxin-induced chronic epileptic foci decreased during the active seizure phase.
Neurochem. Int. 18, 373-379.
- Jefferys, J.G., Whittington, M.A. (1996).
Review of the role of inhibitory neurons in chronic epileptic foci induced by intracerebral tetanus toxin.
Epilepsy Res. 26, 59-66.
- Jiang, W., Wan, Q., Zhang, Z.J., Wang, W.D., Huang, Y.G., Rao, Z.R., Zhang R.S. (2003).
Dentate granule cell neurogenesis after seizure induced by pentylenetetrazol in rats.
Brain Res. 977, 141-148.
- Johnston, D., Brown, T.H. (1981).
Giant synaptic potentials hypothesis for epileptiform activity.
Science 211, 294-297.
- Kalviainen, R. (2002).
Clinical efficacy and use in epilepsy.
Tiagabine. Philadelphia: Lippincott Williams & Williams, 699-704.
- Kamphuis, W., de Rijk, T.C., Lopes-da-Silva, F.H. (1995).
Expression of GABA_A receptor subunit mRNA in hippocampal pyramidal and granular neurons in the kindling model of epileptogenesis: an in situ hybridization study.
Brain Res. Mol. Brain. Res. 31, 33-37.
- Kann, O., Kovacs, R., Heinemann, U. (2003).
Metabotropic receptor-mediated CA2+ signaling elevates mitochondrial Ca2+ and stimulates oxidative metabolism in rat hippocampal slice cultures.
J. Neurophysiol. 90, 613-621.
- Karnup, S., Stelzer, A. (1999).
Temporal overlap of excitatory and inhibitory afferent input in guinea-pig CA1 pyramidal cells.
J. Physiol. 516, 485-504.
- Karnup, S., Stelzer, A. (2001).
Seizure-like activity in the disinhibited CA1 minislice of adult guinea-pigs.
J. Physiol. 532, 713-730.
- Katsumara, H., Kosaka, T., Heitmann, C.W., Hama, K. (1988).
Immunocytochemical study of GABAergic neurons containing the calcium-binding protein parvalbumin in the rat hippocampus.
Exp. Brain Res. 72, 347-362.

- Keros, S., Hablitz, J.J. (2005).
Subtyp-specific GABA transporter antagonists synergistically modulate phasic and tonic GABA_A conductance in rat neocortex.
J. Neurophysiol. Article in press.
- Ketelaars, S.O., Gorter, J.A., van Vliet, E.A., Lopes da Silva, F.H., Wadman, W.J. (2001).
Sodium currents in isolated rat CA1 pyramidal and dentate granule neurons in the post-status epilepticus model of epilepsy.
Neurosci. 105, 109-120.
- Killam, K.F., Bain, J.A. (1957a).
Convulsant hydrazides 1: in vitro and in vivo inhibition of vitamin B₆ enzymes by convulsant hydrazides.
J. Pharmacol. Exp. Ther. 119, 255-262.
- Killam, K.F. (1957b).
Convulsant hydrazides 2: comparison of electrical changes and enzyme inhibition induced by the administration of thiosemicarbazide.
J. Pharmacol. Exp. Ther. 119, 263-271
- King, G.L., Dingledine, R., Giacchino, J.L., McNamara, J.O. (1985).
Abnormal neuronal excitability in hippocampal slices from kindled rats.
J. Neurophysiol. 54, 1295-1304.
- Kinney, G.A., Spain, W.J. (2002).
Synaptically evoked GABA transporter currents in neocortical glia.
J. Neurophysiol. 88, 2899-2909.
- Klausberger, T., Magill, P.J., Marton, L.F., Roberts, J.D., Cobden, P.M., Buzsaki, G., Somogyi, P. (2003).
Brain-state- and cell-type-specific firing of hippocampal interneurons in vivo.
Nature 421, 844-848.
- Knowles, W.D., Schwartzkroin, P.A. (1981).
Local circuit interactions in hippocampal brain slice.
J. Neurosci. 1, 318-322.
- Kokaia, Z., Kelly, M.E., Elmer, E., Kokaia, M., McIntyre, D.C., Lindvall, O. (1996).
Seizure-induced differential expression of messenger RNAs for neurotrophins and their receptors in genetically fast and slow kindling rats.
Neurosci. 75, 197-207.
- Kosaka, T., Katsumara, H., Hama, K., Wu, J.Y., eizmann, C.W. (1987).
GABAergic neurons containing the Ca²⁺-binding protein parvalbumin in the rat hippocampus and dentate gyrus.
Brain Res. 419, 119-130.
- Kosaka, T., Wu, J.J., Benoit, R. (1988).
GABAergic neurons containing somatostain-like immunoreactivity in the rat hippocampus and dentate gyrus.
Exp. Brain Res. 71, 388-398.
- Kovacs, R., Schuchmann, S., Gabriel, S. (2001).
Ca²⁺ signalling and changes of mitochondrial functions during low-Mg²⁺-induced epileptiform activity in organotypic hippocampal slice cultures.
Eur. J. Neurosci. 13, 1311-1319.
- Kovacs, R., Schuchmann, S., Gabriel, S. (2002).
Free radical-mediated cell damage after experimental status epilepticus in hippocampal slice cultures.
J. Neurophysiol. 88, 2909-2918.

- Krnjevic, K., Schwartz, S. (1966).
Is γ-aminobutyric acid an inhibitory transmitter?
Nature 211, 1372-1374.
- Krnjevic, K., Morris, M.E., Reiffenstein, R.J. (1982).
Stimulation evoked changes in extracellular K⁺ and Ca²⁺ in pyramidal layers of the rat's hippocampus.
Can. J. Physiol. Pharmacol. 60, 1643-1675.
- Krogsgaard-Larsen, P. (1983).
GABA agonists: structural, pharmacological and clinical aspects.
Alan R. Liss. 537-557.
- Krogsgaard-Larsen, P., Falch, E., Larsson, O.M., Schousboe, A. (1987).
GABA uptake inhibitors: relevance to antiepileptic drug research.
Epilepsy Res. 1, 77-93.
- Kunkel, D.D., Lacaille, J.C., Schwartzkroin, P.A. (1988).
Ultrastructure of stratum lacunosum-moleculare interneurons of hippocampal CA1 region.
Synapse 2, 382-394.
- Lacaille, J-C., Mueller, A.L., Kunkel, D.D., Schwartzkroin, P.A. (1987).
Local circuit interactions between oriens/alveus interneurons and CA1 pyramidal cells in hippocampal slices: electrophysiology and morphology.
J. Neurosci. 7, 1979-1993.
- Lacaille, J-C., Schwartzkroin, P.A. (1988a).
Stratum lacunosum-moleculare interneurons of hippocampal CA1 region. II. intrasomatic and intradendritic recordings of local circuit synaptic interactions.
Neurosci. 8, 1411-1424.
- Lacaille, J-C., Schwartzkroin, P.A. (1988b).
Stratum lacunosum-moleculare interneurons of hippocampal CA1 region. I. intracellular responses characteristics, synaptic responses and morphology.
Neurosci. 8, 1400-1410.
- Lambert, J.D.C., Fueta, Y., Roepstorff, A., Andreasen, M. (1996).
Analysis of the synapitic inhibition points to a reduction in GABA release in area CA1 of the genetically epileptic mouse, EL.
Epilepsy Res. 26, 15-23.
- Lawrence, J.J., McBain, C.J. (2003).
Interneuron diversity series: containing the detonation-feedforward inhibition in the CA3 hippocampus.
Trends Neurosci. 26, 631-640.
- Lehmann, T.N., Gabriel, S., Eilers, A., Njunting, M., Kovacs, R., Schulze, K., Lanksch, W.R., Heinemann, U. (2001).
Fluorescent tracer in pilocarpine-treated rats shows widespread aberrant hippocampal neuronal connectivity.
Europ. Neurosci. 14, 83-95.
- Liang, D., Seyfried, T.N. (2001).
Genes differentially expressed in the kindled mouse brain.
Brain Res. Mol. Brain Res. 96, 94-102.

- Lipton, P., Aitken, P.G., Dudek, F.F., Eskessen, K., Espanol, M.T., Ferchmin, P.A., Kelly, J.B., Kreisman, N.R., Landfield, P.W., Larkman, P.M., Leybaert, L., Newman, G.C., Panizzon, K.L., Payne, R.S., Phillips, P., Raley-Susman, K.M., Rice, M.E., Santamaria, R., Sarvay, J.M., Schurr, A., Segal, M., Taylor, C.P., Teyler, T.J., Vasilenko, V.Y., Veregge, S., Wu, S.H., Wallis, R. (1995).
Making the best brain slices: comparing preparative methods.
J. Neurosci. Meth. 59, 151-156.
- Liu, Q.R., Lopez-Corcuera, B., Mandiyan, S., Nelson, N., Nelson, H. (1993).
Molecular characterization of four pharmacologically distinct γ -aminobutyric acid transporters in mouse brain.
J. Biol. Chem. 268, 2106-2112.
- Longo, B.M., Mello, L.E. (1997).
Blockade of pilocarpine- or kainate-induced mossy fiber sprouting by cycloheximide does not prevent subsequent epileptogenesis in rats.
Neurosci Lett. 226, 163-166.
- Loup, F., Wieser, H.G., Yonekawa, Y., Aguzzi, A., Fritschy, J.M. (2000).
Selective alterations in GABA(A) receptor subtypes in human temporal lobe epilepsy.
J. Neurosci. 20, 5401-5419.
- Lu, J., Karadsheh, M., Delpire, E. (1999).
Developmental regulation of the neuronal-specific isoform of K-Cl cotransporter KCC2 in postnatal rat brain.
J. Neurobiol. 39, 558-568.
- Lukasiuk, K., Kontula, L., Pitkanen, A. (2003).
cDNA profiling of epileptogenesis in the rat brain.
Eur. J. Neurosci. 17, 271-279.
- Ma, Y., Hu, J.H., Zhao, W.J., Fei, J., Yu, Y., Zhou, X.G., Mei, Z.T., Guo, L.H. (2001).
Overexpression of gamma-aminobutyric acid transporter subtype I leads to susceptibility to kainic acid-induced seizure in transgenic mice.
Cell Res. 11, 61-67.
- MacLean, P.D. (1952).
Some psychiatric implications of physiological studies on frontotemporal portion of limbic system (visceral brain).
EEG Clin. Neurophysiol. 4, 407-418.
- MacLean, P.D. (1957).
The limbic system with respect to self-preservation and the preservation of the species.
J. Nerv. Ment. Dis. 127, 1-11.
- Mager, J., Naeve, J., Quick, M., Labaraca, C., Davidson, N., Lester, H. (1993).
Steady state, charge movement, and rates for a cloned GABA transporter expressed in Xenopus oocytes.
Neuron 10, 177-188.
- Maglóczky, Z.S., Freund, T.F. (1993).
Selective neuronal death in the contralateral hippocampus following unilateral kainate injections into CA3 subfield.
Neurosci. 56, 317-335.
- Maglóczky, Z., Halasz, P., Vajda, J., Czirjak, S., Freund, T.F. (1997).
Loss of Calbindin-D28K immunoreactivity from dentate granule cells in human temporal lobe epilepsy.
Neurosci. 76, 377-385.

- Maglòczky, Z.S., Wittner, L., Borhegyi, Z.S., Halász, P., Vajda, J., Czirják, S., Freund, T.F. (2000).
Changes in the distribution and connectivity of interneurons in the epileptic human dentate gyrus.
Neurosci. 96, 7-25.
- Massieu, L., Morales-Villagran, A., Tapia, R. (1995).
Accumulation of extracellular glutamate by inhibition of its uptake is not sufficient for inducing neuronal damage: an in vivo microdialysis study.
J. Neurosci. 15, 2262-2268.
- Mathern, G.W., Babb, T.L., Pretorius, J.K., Leite, J.P. (1995).
Reactive synaptogenesis and neuron densities for neuropeptide Y, somatostatin, and glutamate decarboxylase immunoreactivity in the epileptogenic human fascia dentata.
J. Neurosci. 15, 3990-4004.
- Matskevich, I., Wagner, C.A., Stegen, C., Bröer, S., Noll, B., Risler, T., Moo-Kwon, H., Handler, J.S., Waldegger, S., Busch, A.E., Lang, F. (1999).
Functional characterization of the betaine/aminobutyric acid transporter BGT-1 expression in xenopus oocytes.
J. Biol. Chem. 274, 16709-16716.
- Mathern, G.W., Mendoza, D., Lozada, A., Pretorius, J.K., Dehnes, Y., Danbolt, N.C., Nelson, N., Leite, J.P., Chimeli, L., Born, D.E., Sakamoto, A.C., Assirati, J.A., Fried, I., Peacock, W.J., Ojemann, G.A., Adelson, P.D. (1999).
Hippocampal GABA and glutamate transporter immunoreactivity in patients with temporal lobe epilepsy.
Neurol. 52, 453-472.
- McNamara, J.O. (1999).
Emerging insights into the genesis of epilepsy.
Nature 399, 15-22.
- McMahon, L.L., Kauer, J.A. (1997).
Hippocampal interneurons are excited via serotonin-gated ion channels.
J. Neurophysiol. 78, 2493-2502.
- Megías, M., Emri, Z.S., Freund, T.F., Gulyás, A.I., (2001).
Total number and distribution of inhibitory and excitatory synapses on hippocampal CA1 pyramidal cells.
Neurosci. 102, 527-540.
- Meldrum, B.S. (1981).
Metabolic effects of prolonged epileptic seizures and causation of epileptic brain damage.
Metabolic Disorders of the Nervous System. Pitman, London, 175-187.
- Mello, L.E., Cavalheiro, E.A., Tan, A.M., Kupfer, W.R., Pretorius, J.K., Babb, T.L., Finch, D.M. (1993).
Circuit mechanisms of seizures in the pilocarpine model of chronic epilepsy: cell loss and mossy fiber sprouting.
Epilepsia 34, 985-995.
- Mello, L.E., Covolan, L. (1996).
Spontaneous seizures preferentially injure interneurons in the pilocarpine model of chronic spontaneous seizures.
Epilepsy Res. 26, 123-129.
- Melone, M., Cozzi, A., Pellegini-Giampietro, D.E., Conti, F. (2003).
Transient focal ischemia triggers neuronal expression of GAT-3 in the rat perilesional cortex.
Neurobiol. Dis. 14, 120-132.

- Mikkonen, M., Soininen, H., Kalvianen, R., Tapiola, T., Ylinen, A., Vapalahti, M., Paljarvi, L., Pitkanen, A. (1998).
Remodeling of neuronal circuitries in human temporal lobe epilepsy: increased expression of highly polysialylated neural cell adhesion molecule in the hippocampus and the entorhinale cortex.
Ann. Neurol. 44, 923-934.
- Milan, M.H., Chapman, A.G., Meldrum, B.S. (1993).
Extracellular amino acid levels in hippocampus during pilocarpine-induced seizures.
Epilepsy Res. 14, 139.
- Minelli, A., Brecha, N.C., Karschin, C., DeBiasi, S., Conti, F. (1995).
GAT-1, a high-affinity GABA plasma membran transporter, is located to neurons and astroglia in the cerebral cortex.
J. Neurosci. 15, 7734-7746.
- Minelli, A., Barbaresi, P., Conti, F. (2003).
Postnatal development of high-affinity plasma membrane GABA transporters GAT-2 and GAT-3 in the rat cerebral cortex.
Brain Res. Dev. Brain Res. 145, 167-168.
- Mody, I. (2001).
Distinguishing between GABA_A receptors responsible for tonic and phasic conductances.
Neurochem. Res. 26, 907-913.
- Montpied, P., Winsky, L., Dailey, J.W., Jobe, P.C., Jacobowitz, D.M. (1995).
Alteration in levels of expression of brain calbindin D-28k and calretinin mRNA in genetically epilepsy-prone rats.
Epilepsia. 36, 911-921.
- Morimoto, K., Fahnstock, M., Racine, R.J. (2004).
Kindling and epilepticus models of epilepsy: Rewiring the brain.
Prog. Neurobiol. 73, 1-60.
- Morin, F., Beaulieu, C., Lacaille, J-C. (1999).
Alterations of perisomatic GABA synapses on hippocampal CA1 inhibitory interneurons and pyramidal cells in the kainate model of epilepsy.
Neurosci 93, 457-467.
- Nadler, J.V., Perry, B.W., Cotman, C.W. (1980).
Selective reinnervation of hippocampal area CA1 and the fascia dentata after destruction of CA3-CA4 afferents with kainic acid.
Brain Res. 182, 1-9.
- Nakajima, S., Franck, J.E., Bilkey, D., Schwartzkroin, P.A. (1991).
Local circuit synaptic interactions between CA1 pyramidal cells and interneurons in the kainate-lesioned hyperexcitable hippocampus.
Hippocampus. 1, 67-78.
- Nusser, Z., Hajos, N., Somogyi, P., Mody, I. (1998).
Increased number of synaptic GABA(A) receptors underlies potentiation at hippocampal inhibitory synapses.
Nature 395, 172-177.
- Obenaus, A., Esclapez, M., Houser, C.R. (1993).
Loss of glutamate decarboxylase mRNA-containing neurons in the rat dentate gyrus following pilocarpine-induced seizures.
J. Neurosci. 13, 4470-4485.
- Olsen, R.W., Avoli, M. (1997).
GABA and epileptogenesis.
Epilepsia. 38, 399-407.

- Orozco-Suarez, S., Brunson, K.L., Feria-Velasco, A., Ribak, C.E. (2000).
Increased expression of gamma-aminobutyric acid transporter-1 in the forebrain of infant rats with corticotropin-releasing hormone-induced seizures but not those with hyperthermia-induced seizures.
Epilepsy Res. 42, 141-157.
- Overstreet, L.S., Kinney, G.A., Liu, Y.B., Billups, D., Slater, N.T. (1999).
Glutamate transporters contribute to the time course of synaptic transmission in cerebellar granule cells.
J. Neurosci. 19, 9963-9673.
- Papez, J.W. (1937).
A proposed mechanism of emotion.
Arch. Neurol. Psychiat. 38, 725-743.
- Parent, J.M. (2000a).
The role of seizure-induced neurogenesis in epileogenesis and brain repair.
Epilepsy Res. 50, 179-189.
- Parent, J.M., Lowenstein, D.H. (2002b).
Seizure-induced neurogenesis: are more new neurons good for adult brain.
Prog. Brain Res. 135, 121-131.
- Patrylo, P.R., Spencer, D.D., Williamson, A. (2001).
GABA uptake and heterotransport are impaired in the dentate gyrus of epileptic rats and humans with temporal lobe sclerosis.
J. Neurophysiol. 85, 1533-1542.
- Pencea, V., Bingaman, K.D., Wiegand, S.J., Luskin, M.B. (2001).
Infusion of brain-derived neurotrophic factor into the lateral ventricle of the adult rat leads to new neurons in the parenchyma of the striatum, septum, thalamus, and hypothalamus.
J. Neurosci. 21, 6706-6717.
- Perez, Y., Morin, F., Beaulieu, C., Lacaille, J.C. (1996).
Axonal sprouting of CA1 pyramidal cells in hyperexcitable hippocampal slices of kainate-treated rats.
Eur. Neurosci. 4, 736-748.
- Perkins, K.L., Wong, R.K. (1997).
The depolarizing GABA response.
Can. J. Physiol. Pharmacol. 75, 516-519.
- Perkins, K.L. (2002).
GABA application to hippocampal CA3 or CA1 stratum lacunosum-moleculare excites an interneuron network.
Neurophysiol. 87, 1404-1414.
- Poulter, M.O., Brown, L.A., Tynan, S., Willick, G., William, R., McIntyre, D.C. (1999).
Differential expression of alpha1, alpha2, alpha3, and alpha5 GABAA receptor subunits in seizure-prone and seizure-resistant rat models of temporal lobe epilepsy.
J. Neurosci. 19, 4654-4661.
- Pietrini, G., Suh, Y.J., Edelmann, L., Rudnick, G., Kaplan, M.J. (1994).
The axonal γ -aminobutyric acid transporter GAT-1 is sorted to the apical membranes of polarized epithelial cells.
J. Biol. Chem. 269, 4668-4674.
- Prince, D.A. (1997).
Epilepsy and the too-well-connected brain.
Nat. Med. 3, 957-958.

- Radian, R., Ottersen, O.P., Mathisen-Storm, J., Castel, M., Kanner, B.I. (1990).
Immunocytochemical localization of the GABA transporter in rat brain.
J. Neurosci. 10, 1319-1330.
- Rao, Y.S.H., Budreck, E.C., Brooks-Kayal, A.R. (2003).
Epilepsy after early-life seizures can be independent of hippocampal injury.
Ann. Neurol. 53, 503-511.
- Rausch, R., Babb, T.L. (1993).
Hippocampal neuron loss and memory scores before and after temporal lobe surgery for epilepsy.
Arch. Neurol. 50, 812-817.
- Rekling, J.C., Jahnsen, H., Mosfeldt Laursen, A. (1990).
The effect of two lipophilic gamma-aminobutyric acid uptake blockers in CA1 of the rat hippocampal slice.
Brain J. Pharmacol. 99, 103-106.
- Rempe, D.A., Bertram, E.H., Williamson, J.M., Lothman, E.W. (1997).
Interneurons in area CA1 stratum radiatum and stratum oriens remain functionally connected to excitatory synaptic input in chronically epileptic animals.
Neurophysiol. 78, 1504-1515.
- Ribak, C.E., Bradburn, R.M., Harris, A.B. (1982).
A preferential loss of GABAergic symmetric synapses in epileptic foci: A quantitative ultrastructural analysis of monkey neocortex.
J. Neurosci. 2, 1725-1735.
- Ribak, C.E., Tong, W., Brecha, N.C. (1996).
The GABA plasma membrane transporters GAT-1 and GAT-3 display different distributions in the rat hippocampus.
J. Comp. Neurol. 367, 595-606.
- Richerson, G.B., Messer, C. (1995).
Effect of composition of experimental solution on neuronal survival during rat brain slicing.
Exp. Neurol. 131, 133-143.
- Richerson, G.B., Wu, Y. (2003).
Dynamic equilibrium of neurotransmitter transporter: not just reuptake anymore.
J. Neurophysiol. 90, 1363-1374.
- Rivera, C., Voipio, J., Payne, J.A., Ruusuvuori, E., Lahtinen, H., Lamsa, K., Pirtola, U., Saarma, M., Kaila, K. (1999).
The K⁺ / Cl⁻ co-transporter KCCs renders GABA hyperpolarizing during neuronal maturation.
Nature 397, 251-255.
- Roberts, E., Frankel, S. (1950).
γ-aminobutyric acid in brain: its formation from glutamic acid.
J. Biol. Chem 187, 55-63.
- Roch, C., Leroy, C., Nehlig, A., Namer, I.J. (2000a).
Predictive value of cortical injury for the development of temporal lobe epilepsy in 21-day-old rats: an MRI approach using the lithium-pilocarotine model.
Epilepsia 43, 1129-1136.
- Roch, C., Leroy, C., Nehlig, A., Namer, I.J. (2000b).
Magnetic resonance imaging in the study of lithium-pilocarpine model of temporal lobe epilepsy in adult rats.
Epilepsia 43, 325-335.

- Roepstorff, A., Lambert, J.D. (1994).
Factors contributing to the decay of the stimulus evoked IPSC in rat hippocampal CA1 neurons.
J. Neurophysiol. 72, 2911-2926.
- Rutecki, P.A., Johnston, D. (1987).
The hippocampus and epilepsy.
Curr. Opin. Neurol. 7, 128-157.
- Saber, A., Gram, L. (1992).
Pharmacology of vigabatrin.
Pharmacol. Toxicol. 70, 237-243.
- Sagar, H.J., Oxbury, J.M. (1987).
Hippocampal neuron loss in temporal epilepsy: correlation with early childhood convulsions.
Ann. Neurol. 22, 334-340.
- Sarup, A., Larsson, O.M., Schousboe, A. (2003).
GABA transporters and GABA-transaminase as drug targets.
Curr. Drug. Targ. CNS Neurol. Dis. 2, 269-277.
- Sarup, A., Larsson, O.M., Schousboe, A. (2004).
Characterization of the substrate binding site in GABA transporters.
Molecular Neuropharmacology: strategie and methods. Human Press, New York, 175-190.
- Sayin, U., Osting, S., Hagen, J., Rutecki, P., Sutula, T. (2003).
Spontaneous seizures and loss of axo-axonic and axo-somatic inhibition induced by brief seizures in kindled rats.
J. Neurosci. 23, 2759-2768.
- Schmidt, D., Gram, L., Brodie, M., Kramer, G., Perucca, E., Kalviainen, R., Elger, C.E. (2000).
Tiagabine in the treatment of epilepsy – a clinical review with a guide for the prescribing physician.
Epilepsy Res. 41, 245-251.
- Schousboe, A., Larsson, O.M., Wood, J.D., Krogsgaard-Larsen, P. (1983).
Transport and metabolism of γ -aminobutyric acid in neuron and glia: implications for epilepsy.
Epilepsia 24, 531-538.
- Schousboe, A., Sarup, A., Larsson, O.M., White, H.S. (2004a).
GABA transporter as drug targets for modulation of GABAergic activity.
Biochem. Pharmacol. 68, 1557-1563.
- Schousboe, A., Waagepetersen, H.S. (2004b).
Role of astrocytes in homeostasis of glutamate and GABA during physiological and pathophysiological conditions.
Elsevier Science Publ. 461-475.
- Schwartz, E.A. (1987).
Depolarization without calcium can release gamma-aminobutyric acid from a retinal neuron.
Science 238, 350-355.
- Schwartzkroin, P.A., Wyler, A.R. (1980).
Mechanisms underlying epileptiform burst discharge.
Ann. Neurol. 7, 95-111.
- Schwartzkroin, P.A. (1986).
Hippocampal slices in experimental and human epilepsy.
Adv. Neurol. 44, 991-1010.

- Schwartzkroin, P.A., McIntyre, D.C. (1997).
Limbic anatomie and physiologie.
Epilepsy: A comprehensive textbook, Lippincott-Raven Publishers, Philadelphia.
- Schwarzer, C., Tsunashima, K., Wanzenbock, C., Fuchs, K., Sieghart, W., Sperk, G. (1997).
GABA(A) receptor subunits in the hippocampus II: altered distribution in kainic acid-induced temporal lobe epilepsy.
Neurosci. 80, 1001-1017.
- Scotti, A.L., Kalt, G., Bollag, O., Nitsch, C. (1997).
Parvalbumin disappears from GABAergic CA1 neurons of the gerbil hippocampus with seizure onset while its presence persists in the perforant path.
Brain Res. 760, 109-117.
- Segal, M. (1988).
Synaptic activation of a cholinergic receptor in rat hippocampus.
Brain Res. 452, 79-89.
- Shetty, A.K. (2002).
Entorhinal axon exhibit sprouting in CA1 subfield of the adult hippocampus in a rat model of temporal lobe epilepsy.
Hippocampus 12, 534-542.
- Shinoda, H., Schwartz, J.P., Nadi, N.S. (1989).
Amygdaloid kindling of rats increases preprosomatostatin mRNA and somatostatin without affecting glutamic acid decarboxylase (GAD) mRNA or GAD.
Brain Res. Mol. Brain Res. 5, 243-246.
- Sholl, D.A. (1953).
Dendritic organization in the neurons of the visual and motor cortices of the cat.
J. Anat. (London), 87, 387-406.
- Shumate, M.D., Lin, D.D., Gibbs, J.W., Holloway, K.L., Coulter, D.A. (1998).
GABA(A) receptor function in epileptic human dentate granule cells: comparison to epileptic and control rat.
Epilepsy Res. 32, 114-128.
- Sik, A., Penttonen, M., Ylinen, A., Buzsàki, G. (1995).
Hippocampal CA1 interneurons: an in vivo intracellular labeling study.
J. Neurosci. 15, 6651-6665.
- Skrede, K.K., Westgaard, R.H. (1971).
The transverse hippocampal slice: a well-defined cortical structure maintained in vitro.
Brain Res. 35, 589-593.
- Sloviter, R.S. (1987).
Decreased hippocampal inhibition and a selective loss of interneurons in experimental epilepsy.
Science 235, 73-76.
- Sloviter, R.S. (1989).
Calcium-binding protein (Calbindin-D_{28k}) and parvalbumin immunocytochemistry: localization in the rat hippocampus with specific reference to the selective vulnerability of hippocampal neurons to seizure activity.
J. Comp. Neurol. 280, 183-196.
- Sloviter, R.S. (1991a).
Feedforward and feedback inhibition of hippocampal principal cell activity evoked by perforant path stimulation: GABA-mediated mechanisms that regulate excitability in vivo.
Hippocampus 1, 31-40.

- Sloviter, R.S. (1991b).
Permanently altered hippocampal structure, excitability, and inhibition after experimental status epilepticus in the rat: the "dormant basket cell" hypothesis and its possible relevance to temporal lobe epilepsy.
Hippocampus 1, 41-66.
- Sloviter, R.S. (1992).
Possible functional consequences of synaptic reorganization in the dentate gyrus of kainate-treated rats.
Neurosci. Lett. 137, 91-96.
- Sloviter, R.S. (1994).
The functional organization of the hippocampal dentate gyrus and its relevance to the pathogenesis of temporal lobe epilepsy.
Ann. Neurol. 15, 640-654.
- Sloviter, R.S., Zappone, C.A., Harvey, B.D., Bumanglag, A.V., Bender, R.A., Frotscher, M. (2003).
"Dormant basket cell" hypothesis revisited: relative vulnerabilities of dentate gyrus mossy cells and inhibitory interneurons after hippocampal status epilepticus in the rat.
J. Comp. Neurol. 459, 44-76.
- Smolders, I., Van Belle, K., Ebinger, G., Michotte, Y. (1997).
Hippocampal and cerebellar extracellular amino acids during pilocarpine-induced seizures in freely moving rats.
Eur. J. Pharmacol. 319, 21-29.
- Solis, J.M., Nicoll, R.A. (1992).
Postsynaptic action of endogenous GABA release by nipecotic acid in the hippocampus.
Neurosci. Lett. 147, 16-20.
- Somogyi P., Hodgson, A.J., Smith, A.D., Nunzi, M.G., Gorio, A., Wu, J.J. (1984).
Different populations of GABAergic neurons in the visual cortex and hippocampus of cat contain somatostatin- or cholecystokinin-immunoreactive material.
J. Neurosci. 4, 2590-2603.
- Somjen, G.G. (1984).
Interstitial ion concentration and the role of neuroglia in seizure.
Elektrophys. Epilepsy, Academic Press, London, 303-309.
- Somjen, G.G., Giacchino, J.L. (1985).
Potassium and calcium concentrations in interstitial fluid and hippocampal formation during paroxysmal responses.
J. Neurophysiol. 53, 1098-1108.
- Sperk, G., Schwarzer, C., Tsunashima, K., Kandlhofer, S. (1998).
Expression of GABA(A) receptor subunits in the hippocampus of the rat after kainic acid-induced seizures.
Epilepsy Res. 32, 129-139.
- Sperk, G., Schwarzer, C., Tsunashima, K., Kandlhofer, S. (1997).
Expression of GABA(A) receptor subunits in the hippocampus of the rat after kainic acid-induced seizures.
Epilepsy Res. 32, 129-139.
- Spiller, A.E., Racine, R.J. (1994).
The effect of kindling beyond the 'stage 5' criterion on paired-pulse depression and hillock cell counts in the dentate gyrus.
Brain Res. 635, 139-147.

- Staley, K.J., Soldo, B.L., Proctor, W.R. (1995).
Ionic mechanisms of neuronal excitation by inhibitory GABA(A) receptors.
Science 269, 977-981.
- Stasheff, S.F., Hines, M., Wilson, W.A. (1993).
Axon terminal hyperexcitability associated with epileptogenesis in vitro I: origin of ectopic spikes.
J. Neurophysiol. 70, 961-975.
- Stefan, H. (1998).
Epilepsien. Diagnose und Behandlung.
Thieme Verlag Stuttgart, 1. Auflage 1998.
- Steward, F.C., Thompson, J.F., Dent, C.E. (1949).
 γ -aminobutyric acid a constituent of the potato tuber.
Science 110, 439-440.
- Suckling, J., Roberts, H., Walker, M., Highley, J.R., Fenwick, P., Oxbury, J., Esiri, M.M. (2000).
Temporal lobe epilepsy with and without psychosis exploration of hippocampal pathology including that in subpopulations of neurons defined by their content of immunoreactive calcium binding proteins.
Acta Neuropathol. 99, 547-554.
- Sundstrom, L.E., Brana, C., Gatherer, M., Mephan, J., Rougier, A. (2001).
Somatostatin- and neuropeptide Y-synthesizing neurons in the fascia dentata of humans with temporal lobe epilepsy.
Brain 124, 688-697.
- Sutton, M.A., Wall, N.R., Aakalu, G.N., Schuman, E.M. (2004).
Regulation of dendritic protein synthesis by miniature synaptic events.
Science 304, 1979-1983.
- Sutula, T., He, X.X., Cavazos, J., Scott, G. (1988).
Synaptic reorganization in the hippocampus induced by abnormal functional activity.
Science 239, 1147-1150.
- Sutula, T., Cascino, G., Cavazos, J., Parada, I., Ramirez, L. (1989).
Mossy fiber synaptic reorganization in the epileptic human temporal lobe.
Ann Neurol. 26, 321-330.
- Sutula, T.P., Hagen, J., Pitkanen, A. (2003).
Do epileptic seizures damage the brain?
Curr. Opin. Neurol. 16, 189-195.
- Suzdak, P.D., Jansen, J.A. (1995).
A review of the preclinical pharmacology of tiagabine: a potent and selective anticonvulsant GABA uptake inhibitor.
Epilepsia 36, 612-626.
- Swan, M., Najlerahim, A., Watson, R.E.B., Bennett, J.P. (1994).
Distribution of mRNA for the GABA transporter GAT-1 in the rat brain: evidence that GABA uptake is not limited to presynaptic neurons.
J. Anat. 185, 315-323.
- Swanson et al., T.H., Sperling, M.R., O'Connor, M.J. (1998).
Strong paired pulse depression of dentate granule cells in slice from patients with temporal lobe epilepsy.
J. Neural. Transm. 105, 613-625.
- Taira, T., Lamsa, K., Kaila, K. (1997).
Posttetanic excitation mediated by GABA(A) receptors in rat CA1 pyramidal neurons.
J. Neurophysiol. 77, 2213-2218.

- Tauck, D.L., Nadler, J.V. (1985).
Evidence of functional mossy fiber sprouting in the hippocampal formation of kainic acid treated rats.
J. Neurosci. 5, 1016-1022.
- Taylor, D.C., Ounsted, C. (1971).
Biological mechanism influencing the outcome of seizures in response to fever.
Epilepsia 12, 33-45.
- Thomson, U., Jonnson, G., Ungerstedt, U. (1992).
Effects of the GABA uptake inhibitor tiagabine on inhibitory synaptic potentials in rat hippocampal slice cultures.
J. Neurophysiol. 67, 1698-1701.
- Thomsen, C., Sorensen, P.O., Egebjerg, J. (1997).
1-(3-(9H-carbazol-9-yl)-1-propyl)-4-(2-methoxyphenol)-4-piperidinol, a noval subtype selective inhibitor of the mouse type II GABA-transporter.
Brain J. Pharmacol. 120, 983-985.
- Tooyama, I., Bellier, J-P., Park, M., Minnasch, P., Uemura, S., Hisano, T., Iwami, M., Aimi, Y., Yasuhura, O., Kimura, H. (2002).
Morphologic study of neuronal death, glial activation, and progenitor cell division in the hippocampus of rat models of epilepsy.
Epilepsia 43, 39-43.
- Tóth, K., Freund, T.F. (1992).
Calbindin D28k-containing nonpyramidal cells in the rat hippocampus: their immunoreactivity for GABA and projections to the medial septum.
Neurosci. 49, 793-805.
- Tóth, K., Freund, T.F., Miles, R. (1997).
Disinhibition of rat hippocampal pyramidal cells by GABAergic afferents from the septum.
J. Physiol. 500, 463-474.
- Traub, R.D., Wong, R.K. (1982).
Cellular mechanism of neuronal synchronization in epilepsy.
Science 216, 745-747.
- Traub, R.D., Whittington, M.A., Colling, S.B., Buzsàki, G., Jefferys, J.G.R. (1996).
Analysis of gamma rhythms in the rat hippocampus in vitro and in vivo.
J. Physiol. (Lond.) 493, 471-484.
- Traub, R.D., Schmitz, D., Jefferys, J.G., Draguhn, A. (1999).
High-frequency population oscillation are predicted to occur in hippocampal pyramidal neuronal networks interconnected by axoaxonal gap junctions.
Neurosci. 92, 407-426.
- Trinka, E., Moroder, T., Nagler, M., Staffan, W., Loscher, W., Ladurner, G. (1999).
Clinical and EEG findings in complex partial status epilepticus with tiagabine.
Seizure 8, 41-44.
- Turski, L., Ikonomidou, C., Turski, W.A., Bortolotto, Z.A., Cavalheiro, E.A. (1989).
Review: cholinergic mechanisms and epileptogenesis. The seizures induced by pilocarpine: a novel experimental model of intractable epilepsy.
Synapse 3, 154-171.
- Tuunanen, J., Halonen, T., Pitkanen, A. (1997).
Decrease in somatostatin-immunoreactive neurons in the rat amygdaloid complex in a kindling model of temporal lobe epilepsy.
Epilepsy Res. 26, 315-327.

- Udenfriend S. (1950).
A micro technique for identification of organic compounds using isotopic indicators and paper chromatography.
Fed. Proc. 9, 240.
- Van Vliet, E.A., Aronica, E., Tolner, E.A., Lopes da Silva, F.H., Gorter, J.A. (2004)
Progression of temporal lobe epilepsy in the rat is associated with immunocytochemical changes in inhibitory interneurons in specific regions of the hippocampal formation.
Exp. Neurol. 187, 367-379.
- Verheugen, J.A.H., Fricker, D., Miles, R. (1999).
Noninvasive measurements of the membrane potential and GABAergic action in hippocampal interneurons.
J. Neurosci. 19, 2546-2555.
- Verity, C.M., Golding, J. (1991).
Risk of epilepsy after febrile convulsions: a national cohort study.
BMJ 303, 1373-1376.
- Vezzani, A., Schwarzer, C., Lothman, E.W., Williamson, J., Sperk, G. (1996).
Functional changes in somatostatin and neuropeptide Y containing neurons in the rat hippocampus in chronic models of limbic seizures.
Epilepsy Res. 26, 267-279.
- Vida, I., Halasy, K., Szinyei, C., Somogyi, P., Buhl, E.H. (1998).
Unitary IPSPs evoked by interneurons at the stratum radiatum-stratum lacunosum-moleculare border in the CA1 area of the rat hippocampus in vitro.
Physiol. 506, 755-773.
- Vreugdenhil, M., Faas, G.C., Wadman, W.J. (1998).
Sodium currents in isolated rat CA1 neurons after kindling epileptogenesis.
Neurosci. 86, 99-107.
- Walton, N.Y., Gnawan, S., Treiman, D.M. (1990).
Brain amino acid concentration changes during status epilepticus induced by lithium and pilokarpin.
Exp. Neurol. 108, 61-66.
- Wanscher, B., Kragh, J., Barry, D.I., Bolwig, T., Zimmer, J. (1990).
Increased somatostatin and enkephalin-like immunoreactivity in the rat hippocampus following hippocampal kindling.
Neurosci. Lett. 118, 33-36.
- Wasterlein, R.F., Baxter, C.F., Baldwin, R.A. (1993).
GABA metabolism in the substantia nigra, cortex and hippocampus during status epilepticus.
Neurochem. Res. 18, 527-533.
- Westrum, L.E., White, L.E., Ward, A.A. (1964).
Morphologie of the experimental epileptic focus.
J. Neurosurg. 21, 1033-1045.
- Whittington, M.A., Traub, R.D., Kopell, N., Ermentrout, B., Buhl, E.H. (2000).
Inhibition-based rhythms: experimental and mathematical observations on network dynamics.
Int. J. Psychophysiol. 38, 315-336.
- Whittington, M.A., Traub, R.D. (2003).
Interneuron diversity series: inhibitory interneurons and network oscillations in vitro.
Trends Neurosci. 26, 676-682.

- Wierenga, C.J., Wadman, W.J. (1999).
Miniature inhibitory postsynaptic currents in CA1 pyramidal neurons after kindling epileptogenesis.
Neurophysiol. 82, 1352-1368.
- Williams, S., Vachon, P., Lacaille, J.C. (1993).
Monosynaptic GABA-mediated inhibitory postsynaptic potentials in CA1 pyramidal cells of hyperexcitable hippocampal slices from kainic acid-treated rats.
Neurosci. 52, 541-554.
- Williams, S., Samulack, D.D., Beaulieu, C., Lacaille, J.C. (1994).
Membrane properties and synaptic responses of interneurons located near stratum lacunosum-moleculare / radiatum border of area CA1 in whole-cell recordings from rat hippocampal slices.
J. Neurophysiol. 71, 2217-2221.
- Williamson, A., Telfeian, A.E., Spencer, D.D. (1995).
Prolonged GABA responses in dentate granule cells in slices isolated from patients with temporal lobe sclerosis.
J. Neurophysiol. 74, 378-387.
- Williamson, A., Patrylo, P.R., Spencer, D.D. (1999).
Decrease in inhibition in dentate granule cells from patients with medial temporal lobe epilepsy.
Ann. Neurol. 45, 92-99.
- Wilson, C.L., Khan, S.U., Engel, J., Isokawa, M., Babb, T.L., Behnke, E.J. (1998).
Paired pulse suppression and facilitation in human epileptogenic hippocampal formation.
Epilepsy Res. 31, 211-230.
- Wittner, L., Eross, L., Szabo, Z., Toth, S., Czirjak, S., Halasz, P., Freund, T.F., Magloczky, Z.S. (2002).
Synaptic reorganization of calbindin-positive neurons in the human hippocampal CA1 region in temporal lobe epilepsy.
Neurosci. 115, 961-978.
- Wolf, H.N., Spanale, M., Muller, M.B., Elger, C.E., Schramm, J., Wiestler, O.D. (1994).
Hippocampal loss of the GABA_A receptor alpha 1 subunit in patients with chronic pharmacoresistant epilepsies.
Acta Neuropathol. 88, 313-319.
- Wouterlood, F.G., Saldana, E., Witter, M.P. (1990).
Projections from the nucleus reunions thalamie to the hippocampal region: light and electron microscopie tracing study in the rat with the anterograde tracer phaseolus vulgaris leucoagglutinin.
J. Comp. Neurol. 296, 179-203.
- Xu, B., Michalski, B., Racin, R.J., Fahnenstock, M. (2004).
The effects of brain-derived neurotrophic factor (BDNF) administration on kindling induction, Trk expression and seizure-related morphological changes.
Neurosci. in press.
- Yasumi, M., Sato, K., Shimada, S., Nishimura, M., Tohyama, M. (1997).
Regional distribution of GABA transporter 1 (GAT-1) mRNA in the rat brain: Comparison with glutamic acid decarboxylase₆₇ (GAD₆₇) mRNA localization.
Brain Res. 44, 205-218.
- Yunger, L.M., Fowler, P.J., Zarevics, P., Setler, P.E. (1984).
Novel inhibitors of gamma-aminobutyric acid (GABA) uptake: anticonvulsant actions in rats and mice.
J. Pharmacol. Exp. Ther. 228, 109-115.

- Zhu, Z.Q., Armstrong, D.L., Hamilton, W.J., Grossman, R.G. (1997).
Disproportionate loss of CA4 parvalbumin-immunoreactive interneurons in patients with Ammons's Horn sclerosis.
J. Neuropathol. Exp. Neurol. 56, 988-998.
- Zurabashvili, A.D., Naneishvili, B.R. (1965).
On the reactivity of dendritic and synaptic outgrowth of the central nervous system. A contribution to patho-dendritology and patho-synaptology.
Neurol. Science 2, 451-458.