

RÃ¼diger KÃ¶hling

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8774951/publications.pdf>

Version: 2024-02-01

181
papers

5,840
citations

101543

36
h-index

95266

68
g-index

195
all docs

195
docs citations

195
times ranked

6284
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | The Impact of Astrocytic Gap Junctional Coupling on Potassium Buffering in the Hippocampus. <i>Journal of Neuroscience</i> , 2006, 26, 5438-5447. | 3.6 | 511 |
| 2 | Network and pharmacological mechanisms leading to epileptiform synchronization in the limbic system in vitro. <i>Progress in Neurobiology</i> , 2002, 68, 167-207. | 5.7 | 402 |
| 3 | Synchronous GABA-Mediated Potentials and Epileptiform Discharges in the Rat Limbic System <i>In Vitro</i> . <i>Journal of Neuroscience</i> , 1996, 16, 3912-3924. | 3.6 | 272 |
| 4 | Spontaneous sharp waves in human neocortical slices excised from epileptic patients. <i>Brain</i> , 1998, 121, 1073-1087. | 7.6 | 173 |
| 5 | Ictal Epileptiform Activity Is Facilitated by Hippocampal GABA _A Receptor-Mediated Oscillations. <i>Journal of Neuroscience</i> , 2000, 20, 6820-6829. | 3.6 | 168 |
| 6 | Cellular and molecular mechanisms of epilepsy in the human brain. <i>Progress in Neurobiology</i> , 2005, 77, 166-200. | 5.7 | 168 |
| 7 | GABAA receptor-dependent synchronization leads to ictogenesis in the human dysplastic cortex. <i>Brain</i> , 2004, 127, 1626-1640. | 7.6 | 150 |
| 8 | Prolonged epileptiform bursting induced by 0-Mg ²⁺ in rat hippocampal slices depends on gap junctional coupling. <i>Neuroscience</i> , 2001, 105, 579-587. | 2.3 | 147 |
| 9 | Specific imbalance of excitatory/inhibitory signaling establishes seizure onset pattern in temporal lobe epilepsy. <i>Journal of Neurophysiology</i> , 2016, 115, 3229-3237. | 1.8 | 125 |
| 10 | Spreading depression in human neocortical slices. <i>Brain Research</i> , 2001, 906, 74-83. | 2.2 | 116 |
| 11 | What is the Source of the EEG?. <i>Clinical EEG and Neuroscience</i> , 2009, 40, 146-149. | 1.7 | 114 |
| 12 | Voltage-gated Sodium Channels in Epilepsy. <i>Epilepsia</i> , 2002, 43, 1278-1295. | 5.1 | 109 |
| 13 | Potassium Channels in Epilepsy. <i>Cold Spring Harbor Perspectives in Medicine</i> , 2016, 6, a022871. | 6.2 | 94 |
| 14 | Ionotropic glutamate and GABA receptors in human epileptic neocortical tissue: quantitative in vitro receptor autoradiography. <i>Neuroscience</i> , 1999, 94, 1051-1061. | 2.3 | 92 |
| 15 | Positive shifts of the GABAA receptor reversal potential due to altered chloride homeostasis is widespread after status epilepticus. <i>Epilepsia</i> , 2011, 52, 1570-1578. | 5.1 | 87 |
| 16 | Endothelial cell-derived GABA signaling modulates neuronal migration and postnatal behavior. <i>Cell Research</i> , 2018, 28, 221-248. | 12.0 | 78 |
| 17 | Epileptiform activity preferentially arises outside tumor invasion zone in glioma xenotransplants. <i>Neurobiology of Disease</i> , 2006, 22, 64-75. | 4.4 | 76 |
| 18 | Antiepileptic drugs abolish ictal but not interictal epileptiform discharges in vitro. <i>Epilepsia</i> , 2010, 51, 423-431. | 5.1 | 72 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | NEUROSCIENCE: GABA Becomes Exciting. <i>Science</i> , 2002, 298, 1350-1351. | 12.6 | 69 |
| 20 | RNA editing (R/G site) and flip-flop splicing of the AMPA receptor subunit GluR2 in nervous tissue of epilepsy patients. <i>Neurobiology of Disease</i> , 2004, 15, 371-379. | 4.4 | 67 |
| 21 | Basement membrane protein nidogen-1 shapes hippocampal synaptic plasticity and excitability. <i>Hippocampus</i> , 2010, 20, 608-620. | 1.9 | 65 |
| 22 | Enhanced NMDA receptor-dependent LTP in the epileptic CA1 area via upregulation of NR2B. <i>Neurobiology of Disease</i> , 2013, 54, 183-193. | 4.4 | 64 |
| 23 | Establishment and Characterization of a Mouse Embryonic Heart Slice Preparation. <i>Cellular Physiology and Biochemistry</i> , 2005, 16, 127-132. | 1.6 | 61 |
| 24 | Methodological approaches to exploring epileptic disorders in the human brain in vitro. <i>Journal of Neuroscience Methods</i> , 2006, 155, 1-19. | 2.5 | 61 |
| 25 | High-frequency magnetic stimulation induces long-term potentiation in rat hippocampal slices. <i>Neuroscience Letters</i> , 2009, 461, 150-154. | 2.1 | 59 |
| 26 | Functional, metabolic, and synaptic changes after seizures as potential targets for antiepileptic therapy. <i>Epilepsy and Behavior</i> , 2010, 19, 105-113. | 1.7 | 59 |
| 27 | AMPA receptor antagonist perampanel affects glioblastoma cell growth and glutamate release in vitro. <i>PLoS ONE</i> , 2019, 14, e0211644. | 2.5 | 56 |
| 28 | Health and Aging: Unifying Concepts, Scores, Biomarkers and Pathways. , 2019, 10, 883. | | 56 |
| 29 | Does interictal synchronization influence ictogenesis?. <i>Neuropharmacology</i> , 2013, 69, 37-44. | 4.1 | 52 |
| 30 | Muscarinic acetylcholine receptor stimulation induces expression of the activity-regulated cytoskeleton-associated gene (ARC). <i>Molecular Brain Research</i> , 2004, 121, 131-136. | 2.3 | 48 |
| 31 | Voltage-gated calcium channels in the etiopathogenesis and treatment of absence epilepsy. <i>Brain Research Reviews</i> , 2010, 62, 245-271. | 9.0 | 47 |
| 32 | Increased excitability in cortico-striatal synaptic pathway in a model of paroxysmal dystonia. <i>Neurobiology of Disease</i> , 2004, 16, 236-245. | 4.4 | 45 |
| 33 | Seizure frequency in pilocarpine-treated rats is independent of circadian rhythm. <i>Epilepsia</i> , 2011, 52, e118-e122. | 5.1 | 45 |
| 34 | Current-source-density profiles associated with sharp waves in human epileptic neocortical tissue. <i>Neuroscience</i> , 1999, 94, 1039-1050. | 2.3 | 41 |
| 35 | Quinine suppresses extracellular potassium transients and ictal epileptiform activity without decreasing neuronal excitability in vitro. <i>Neuroscience</i> , 2002, 115, 251-261. | 2.3 | 41 |
| 36 | Network mechanisms for fast ripple activity in epileptic tissue. <i>Epilepsy Research</i> , 2011, 97, 318-323. | 1.6 | 41 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | A portable chamber for long-distance transport of surviving human brain slice preparations. <i>Journal of Neuroscience Methods</i> , 1996, 67, 233-236. | 2.5 | 37 |
| 38 | Stereotactic injection of cerebrospinal fluid from anti-NMDA receptor encephalitis into rat dentate gyrus impairs NMDA receptor function. <i>Brain Research</i> , 2016, 1633, 10-18. | 2.2 | 37 |
| 39 | Low-magnesium-induced epileptiform activity in the human neocortex maintained in vitro: Suppression by the organic calcium antagonist verapamil. <i>Journal of Epilepsy</i> , 1992, 5, 166-170. | 0.4 | 36 |
| 40 | Optical Monitoring of Neuronal Activity During Spontaneous Sharp Waves in Chronically Epileptic Human Neocortical Tissue. <i>Journal of Neurophysiology</i> , 2000, 84, 2161-2165. | 1.8 | 36 |
| 41 | Melatonin reduces low-Mg ²⁺ epileptiform activity in human temporal slices. <i>Experimental Brain Research</i> , 1995, 107, 321-5. | 1.5 | 34 |
| 42 | Effects of retigabine on rhythmic synchronous activity of human neocortical slices. <i>Epilepsy Research</i> , 2001, 44, 155-165. | 1.6 | 34 |
| 43 | Picrotoxin-induced epileptic activity in hippocampal and neocortical slices (guinea pig): suppression by organic calcium channel blockers. <i>Brain Research</i> , 1994, 658, 119-126. | 2.2 | 33 |
| 44 | Differential sensitivity to induction of spreading depression by partial disinhibition in chronically epileptic human and rat as compared to native rat neocortical tissue. <i>Brain Research</i> , 2003, 975, 129-134. | 2.2 | 33 |
| 45 | Effect of Levetiracetam on Epileptiform Discharges in Human Neocortical Slices. <i>Epilepsia</i> , 2002, 43, 1480-1487. | 5.1 | 32 |
| 46 | Intrinsic excitability, synaptic potentials, and short-term plasticity in human epileptic neocortex. <i>Journal of Neuroscience Research</i> , 2005, 80, 715-726. | 2.9 | 32 |
| 47 | Contribution of Calcium Ions to the Generation of Epileptic Activity and Antiepileptic Calcium Antagonism. <i>Neuropsychobiology</i> , 1993, 27, 122-126. | 1.9 | 31 |
| 48 | A new neurophysiological/neuropathological ex vivo model localizes the origin of glioma-associated epileptogenesis in the invasion area. <i>Acta Neuropathologica</i> , 2004, 107, 1-7. | 7.7 | 30 |
| 49 | Disruption of the sodium-dependent citrate transporter SLC13A5 in mice causes alterations in brain citrate levels and neuronal network excitability in the hippocampus. <i>Neurobiology of Disease</i> , 2020, 143, 105018. | 4.4 | 30 |
| 50 | OSS-DBS: Open-source simulation platform for deep brain stimulation with a comprehensive automated modeling. <i>PLoS Computational Biology</i> , 2020, 16, e1008023. | 3.2 | 30 |
| 51 | Low-level mitochondrial heteroplasmy modulates DNA replication, glucose metabolism and lifespan in mice. <i>Scientific Reports</i> , 2018, 8, 5872. | 3.3 | 26 |
| 52 | Novel Object Recognition in Rats With NMDAR Dysfunction in CA1 After Stereotactic Injection of Anti-NMDAR Encephalitis Cerebrospinal Fluid. <i>Frontiers in Neurology</i> , 2019, 10, 586. | 2.4 | 26 |
| 53 | Changes of extracellular calcium concentration induced by application of excitatory amino acids in the human neocortex in vitro. <i>Brain Research</i> , 1995, 671, 222-226. | 2.2 | 25 |
| 54 | Decreased expression of myelin gene regulatory factor in Niemann-Pick type C 1 mouse. <i>Metabolic Brain Disease</i> , 2011, 26, 299-306. | 2.9 | 25 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 55 | Network excitability in a model of chronic temporal lobe epilepsy critically depends on SK channel-mediated AHP currents. <i>Neurobiology of Disease</i> , 2012, 45, 337-347. | 4.4 | 25 |
| 56 | Hypersynchronous ictal onset in the perirhinal cortex results from dynamic weakening in inhibition. <i>Neurobiology of Disease</i> , 2016, 87, 1-10. | 4.4 | 25 |
| 57 | Mitochondrial complex IV mutation increases reactive oxygen species production and reduces lifespan in aged mice. <i>Acta Physiologica</i> , 2019, 225, e13214. | 3.8 | 25 |
| 58 | High K ⁺ -induced contraction requires depolarization-induced Ca ²⁺ release from internal stores in rat gut smooth muscle. <i>Acta Pharmacologica Sinica</i> , 2009, 30, 1123-1131. | 6.1 | 24 |
| 59 | Dopamine induces contraction in the proximal, but relaxation in the distal rat isolated small intestine. <i>Neuroscience Letters</i> , 2009, 465, 21-26. | 2.1 | 24 |
| 60 | The effects of verapamil and flunarizine on epileptiform activity induced by bicuculline and low Mg ²⁺ in neocortical tissue of epileptic and primary non-epileptic patients. <i>Brain Research</i> , 1996, 733, 307-311. | 2.2 | 23 |
| 61 | Contribution of L-type calcium channels to epileptiform activity in hippocampal and neocortical slices of guinea-pigs. <i>Neuroscience</i> , 1999, 95, 63-72. | 2.3 | 23 |
| 62 | Vascular Integrity and Signaling Determining Brain Development, Network Excitability, and Epileptogenesis. <i>Frontiers in Physiology</i> , 2019, 10, 1583. | 2.8 | 23 |
| 63 | Synchronous potentials and elevations in [K ⁺] _o in the adult rat entorhinal cortex maintained in vitro. <i>Neuroscience Letters</i> , 1995, 185, 155-158. | 2.1 | 22 |
| 64 | Effects of nifedipine on rhythmic synchronous activity of human neocortical slices. <i>Neuroscience</i> , 2000, 100, 445-452. | 2.3 | 22 |
| 65 | Superfusion of verapamil on the cerebral cortex does not suppress epileptic discharges due to restricted diffusion (rats, in vivo). <i>Brain Research</i> , 1993, 626, 149-155. | 2.2 | 21 |
| 66 | Gabapentin potentiation of the antiepileptic efficacy of vigabatrin in an in vitro model of epilepsy. <i>British Journal of Pharmacology</i> , 1998, 124, 370-376. | 5.4 | 21 |
| 67 | Dimethyl sulfoxide increases latency of anoxic terminal negativity in hippocampal slices of guinea pig in vitro. <i>Neuroscience Letters</i> , 1999, 261, 1-4. | 2.1 | 21 |
| 68 | Acute protective effect of nimodipine and dimethyl sulfoxide against hypoxic and ischemic damage in brain slices. <i>Brain Research</i> , 2000, 887, 316-322. | 2.2 | 21 |
| 69 | Extracellular potassium elevations in the hippocampus of rats with long-term pilocarpine seizures. <i>Neuroscience Letters</i> , 1995, 201, 87-91. | 2.1 | 20 |
| 70 | Phase-locking characteristics of limbic P3 responses in hippocampal sclerosis. <i>NeuroImage</i> , 2005, 24, 980-989. | 4.2 | 20 |
| 71 | In vivo treatment with the casein kinase 2 inhibitor 4,5,6,7-tetrabromotriazole augments the slow afterhyperpolarizing potential and prevents acute epileptiform activity. <i>Epilepsia</i> , 2014, 55, 175-183. | 5.1 | 19 |
| 72 | Hyperpolarization-Activated Cyclic Nucleotide-Gated Non-selective (HCN) Ion Channels Regulate Human and Murine Urinary Bladder Contractility. <i>Frontiers in Physiology</i> , 2018, 9, 753. | 2.8 | 19 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Human Osteoblast Migration in DC Electrical Fields Depends on Store Operated Ca ²⁺ -Release and Is Correlated to Upregulation of Stretch-Activated TRPM7 Channels. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 422. | 4.1 | 19 |
| 74 | Stimulus-induced patterns of bioelectric activity in human neocortical tissue recorded by a voltage sensitive dye. <i>Neuroscience</i> , 2003, 121, 587-604. | 2.3 | 18 |
| 75 | Nidogen and Nidogen-Associated Basement Membrane Proteins and Neuronal Plasticity. <i>Neurodegenerative Diseases</i> , 2006, 3, 56-61. | 1.4 | 18 |
| 76 | Anoxic terminal negative DC-shift in human neocortical slices in vitro. <i>Brain Research</i> , 1996, 741, 174-179. | 2.2 | 17 |
| 77 | Inbred mouse strains reveal biomarkers that are pro-€longevity, antilongevity or role switching. <i>Aging Cell</i> , 2014, 13, 729-738. | 6.7 | 17 |
| 78 | Anti-GAD65 Containing Cerebrospinal Fluid Does not Alter GABAergic Transmission. <i>Frontiers in Cellular Neuroscience</i> , 2016, 10, 130. | 3.7 | 17 |
| 79 | Uncoupling protein 2 protects mice from aging. <i>Mitochondrion</i> , 2016, 30, 42-50. | 3.4 | 17 |
| 80 | Repetitive Peripheral Magnetic Nerve Stimulation (rPMS) as Adjuvant Therapy Reduces Skeletal Muscle Reflex Activity. <i>Frontiers in Neurology</i> , 2019, 10, 930. | 2.4 | 17 |
| 81 | Repetitive hypoxic exposure of brain slices and electrophysiological responses as an experimental model for investigation of cerebroprotective measurements. <i>Neurological Research</i> , 1996, 18, 367-369. | 1.3 | 16 |
| 82 | Strychnine-induced epileptiform activity in hippocampal and neocortical slice preparations: suppression by the organic calcium antagonists verapamil and flunarizine. <i>Brain Research</i> , 1997, 773, 173-180. | 2.2 | 16 |
| 83 | How Thoughts Give Rise to Action - Conscious Motor Intention Increases the Excitability of Target-Specific Motor Circuits. <i>PLoS ONE</i> , 2013, 8, e83845. | 2.5 | 16 |
| 84 | Animal models of tumour-associated epilepsy. <i>Journal of Neuroscience Methods</i> , 2016, 260, 109-117. | 2.5 | 16 |
| 85 | Differentially Altered NMDAR Dependent and Independent Long-Term Potentiation in the CA3 Subfield in a Model of Anti-NMDAR Encephalitis. <i>Frontiers in Synaptic Neuroscience</i> , 2018, 10, 26. | 2.5 | 16 |
| 86 | Differential Involvement of L-Type Calcium Channels in Epileptogenesis of Rat Hippocampal Slices during Ontogenesis. <i>Neurobiology of Disease</i> , 2000, 7, 471-482. | 4.4 | 15 |
| 87 | The 27-kDa heat shock protein (HSP27) is a reliable hippocampal marker of full development of pilocarpine-induced status epilepticus. <i>Epilepsy Research</i> , 2012, 98, 35-43. | 1.6 | 15 |
| 88 | Role of striatal NMDA receptor subunits in a model of paroxysmal dystonia. <i>Experimental Neurology</i> , 2014, 261, 677-684. | 4.1 | 15 |
| 89 | Effects of Glutamate Application on the Rhythm of Low Magnesium-induced Epileptiform Activity in Hippocampal Slices of Guinea-pigs. <i>European Journal of Neuroscience</i> , 1996, 8, 2137-2148. | 2.6 | 14 |
| 90 | Spatio-temporal distribution of epileptiform activity in slices from human neocortex: recordings with voltage-sensitive dyes. <i>Epilepsy Research</i> , 1998, 32, 224-232. | 1.6 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | Alternative splicing of the NMDAR1 glutamate receptor subunit in human temporal lobe epilepsy. <i>Molecular Brain Research</i> , 2000, 76, 377-384. | 2.3 | 14 |
| 92 | Lowering of the potassium concentration induces epileptiform activity in guinea-pig hippocampal slices. <i>Brain Research</i> , 2001, 908, 130-139. | 2.2 | 14 |
| 93 | Optical imaging of epileptiform activity in experimentally induced cortical malformations. <i>Experimental Neurology</i> , 2005, 192, 288-298. | 4.1 | 14 |
| 94 | Persistent changes of corticostriatal plasticity in dtsz mutant hamsters after age-dependent remission of dystonia. <i>Neuroscience</i> , 2013, 250, 60-69. | 2.3 | 14 |
| 95 | Limbic Networks and Epileptiform Synchronization. <i>International Review of Neurobiology</i> , 2014, 114, 63-87. | 2.0 | 14 |
| 96 | Perampanel attenuates epileptiform phenotype in C6 glioma. <i>Neuroscience Letters</i> , 2020, 715, 134629. | 2.1 | 14 |
| 97 | Neuronal Hyperexcitability in APPSWE/PS1dE9 Mouse Models of Alzheimer's Disease. <i>Journal of Alzheimer's Disease</i> , 2021, 81, 855-869. | 2.6 | 14 |
| 98 | Synchronization of rat hippocampal neurons in the absence of excitatory amino acid-mediated transmission. <i>Brain Research</i> , 1996, 735, 188-196. | 2.2 | 13 |
| 99 | Neuroprotection of mild hypothermia: differential effects. <i>Brain Research</i> , 1998, 786, 267-269. | 2.2 | 13 |
| 100 | Age-dependent contribution of Rho kinase in carbachol-induced contraction of human detrusor smooth muscle in vitro. <i>Acta Pharmacologica Sinica</i> , 2014, 35, 74-81. | 6.1 | 13 |
| 101 | Spontaneous and stimulus-triggered epileptic discharges: Delayed antiepileptic effect with triggering. <i>Experimental Brain Research</i> , 1994, 100, 376-384. | 1.5 | 12 |
| 102 | Increasing Extracellular Potassium Results in Subthalamic Neuron Activity Resembling That Seen in a 6-Hydroxydopamine Lesion. <i>Journal of Neurophysiology</i> , 2008, 99, 2902-2915. | 1.8 | 12 |
| 103 | HCN1 channels constrain DHPG-induced LTD at hippocampal Schaffer collateral-CA1 synapses. <i>Learning and Memory</i> , 2009, 16, 769-776. | 1.3 | 12 |
| 104 | Status Epilepticus Enhances Depotentiation after Fully Established LTP in an NMDAR-Dependent but GluN2B-Independent Manner. <i>Neural Plasticity</i> , 2016, 2016, 1-10. | 2.2 | 12 |
| 105 | Bidirectional shift of group III metabotropic glutamate receptor-mediated synaptic depression in the epileptic hippocampus. <i>Epilepsy Research</i> , 2018, 139, 157-163. | 1.6 | 12 |
| 106 | Mortality is associated with inflammation, anemia, specific diseases and treatments, and molecular markers. <i>PLoS ONE</i> , 2017, 12, e0175909. | 2.5 | 12 |
| 107 | Healthspan pathway maps in <i>C. elegans</i> and humans highlight transcription, proliferation/biosynthesis and lipids. <i>Aging</i> , 2020, 12, 12534-12581. | 3.1 | 12 |
| 108 | A mutation in the NADH-dehydrogenase subunit 2 suppresses fibroblast aging. <i>Oncotarget</i> , 2015, 6, 8552-8566. | 1.8 | 12 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 109 | Vigabatrin reduces epileptiform activity in brain slices from pharmacoresistant epilepsy patients. <i>European Journal of Pharmacology</i> , 2000, 401, 167-172. | 3.5 | 11 |
| 110 | Lowering the extracellular potassium concentration elicits epileptic activity in neocortical tissue of epileptic patients. <i>European Journal of Neuroscience</i> , 2001, 13, 639-640. | 2.6 | 11 |
| 111 | Sodium Currents in Striatal Neurons from Dystonic dtsz Hamsters: Altered Response to Lamotrigine. <i>Neurobiology of Disease</i> , 2002, 9, 258-268. | 4.4 | 11 |
| 112 | Living Long and Well: Prospects for a Personalized Approach to the Medicine of Ageing. <i>Gerontology</i> , 2016, 62, 409-416. | 2.8 | 11 |
| 113 | Deciphering hallmark processes of aging from interaction networks. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2016, 1860, 2706-2715. | 2.4 | 11 |
| 114 | Perampanel Add-on to Standard Radiochemotherapy in vivo Promotes Neuroprotection in a Rodent F98 Glioma Model. <i>Frontiers in Neuroscience</i> , 2020, 14, 598266. | 2.8 | 11 |
| 115 | Deep brain stimulation by optimized stimulators in a phenotypic model of dystonia: Effects of different frequencies. <i>Neurobiology of Disease</i> , 2021, 147, 105163. | 4.4 | 11 |
| 116 | Low magnesium induced epileptiform discharges in neocortical slices (guinea pig): Increased antiepileptic efficacy of organic calcium antagonist verapamil with elevation of extracellular K ⁺ concentration. <i>Comparative Biochemistry and Physiology Part C: Comparative Pharmacology</i> , 1992, 103, 57-63. | 0.2 | 10 |
| 117 | Microcutting of living brain slices by a pulsed ultrafine water jet which allows simultaneous electrophysiological recordings (micromingotome). <i>Journal of Neuroscience Methods</i> , 1998, 82, 53-58. | 2.5 | 10 |
| 118 | Spatio-temporal patterns of neuronal activity: analysis of optical imaging data using geometric shape matching. <i>Journal of Neuroscience Methods</i> , 2002, 114, 17-23. | 2.5 | 10 |
| 119 | Characterization of a fast transient outward current in neocortical neurons from epilepsy patients. <i>Journal of Neuroscience Research</i> , 2004, 75, 807-816. | 2.9 | 10 |
| 120 | Upregulation of presynaptic mGluR2, but not mGluR3 in the epileptic medial perforant path. <i>Neuropharmacology</i> , 2012, 62, 1867-1873. | 4.1 | 10 |
| 121 | NMDA Receptor-Dependent Metaplasticity by High-Frequency Magnetic Stimulation. <i>Neural Plasticity</i> , 2014, 2014, 1-8. | 2.2 | 10 |
| 122 | Mycophenolate mofetil prevents the delayed T cell response after pilocarpine-induced status epilepticus in mice. <i>PLoS ONE</i> , 2017, 12, e0187330. | 2.5 | 10 |
| 123 | Polymorphisms of the murine mitochondrial ND4, CYTB and COX3 genes impact hematopoiesis during aging. <i>Oncotarget</i> , 2016, 7, 74460-74472. | 1.8 | 10 |
| 124 | Flunarizine shows increased antiepileptic efficacy with elevated K ⁺ levels in low magnesium induced epileptic activity (neocortical slices, guinea pig). <i>Neuropharmacology</i> , 1994, 33, 613-618. | 4.1 | 9 |
| 125 | Electrophysiology in ischemic neocortical brain slices: species differences vs. influences of anaesthesia and preparation. <i>European Journal of Neuroscience</i> , 2006, 23, 1795-1800. | 2.6 | 9 |
| 126 | Targeting of neural stem cells in the hippocampus of adult rats by custom-made Ad vectors. <i>Brain Structure and Function</i> , 2010, 215, 105-113. | 2.3 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Inverse relationship of Rho kinase and myosin-light chain kinase expression in the aging human detrusor smooth muscle. <i>BMC Urology</i> , 2015, 15, 104. | 1.4 | 8 |
| 128 | Reduced Adolescent-Age Spatial Learning Ability Associated with Elevated Juvenile-Age Superoxide Levels in Complex I Mouse Mutants. <i>PLoS ONE</i> , 2015, 10, e0123863. | 2.5 | 8 |
| 129 | Maternally Inherited Differences within Mitochondrial Complex I Control Murine Healthspan. <i>Genes</i> , 2019, 10, 532. | 2.4 | 8 |
| 130 | The software defined implantable modular platform (STELLA) for preclinical deep brain stimulation research in rodents. <i>Journal of Neural Engineering</i> , 2021, 18, 056032. | 3.5 | 8 |
| 131 | Deep brain stimulation for movement disorder treatment: exploring frequency-dependent efficacy in a computational network model. <i>Biological Cybernetics</i> , 2022, 116, 93-116. | 1.3 | 8 |
| 132 | Correspondence. <i>Neuroscience</i> , 1996, 75, 999-1002. | 2.3 | 7 |
| 133 | Flat and steep terminal negativity in the DC-potential after deprivation of oxygen and glucose in human neocortical slices. <i>Brain Research</i> , 1998, 794, 28-34. | 2.2 | 7 |
| 134 | GABAA receptor inhibition does not affect mGluR-dependent LTD at hippocampal Schaffer collateral-CA1 synapses. <i>Neuroscience Letters</i> , 2009, 467, 20-25. | 2.1 | 7 |
| 135 | The afterhyperpolarizing potential following a train of action potentials is suppressed in an acute epilepsy model in the rat Cornu Ammonis 1 area. <i>Neuroscience</i> , 2012, 201, 288-296. | 2.3 | 7 |
| 136 | Prolonged seizures: what are the mechanisms that predispose or cease to be protective? A review of animal data. <i>Epileptic Disorders</i> , 2014, 16, 23-36. | 1.3 | 7 |
| 137 | Effects of oxygen insufflation during pilocarpine-induced status epilepticus on mortality, tissue damage and seizures. <i>Epilepsy Research</i> , 2014, 108, 90-97. | 1.6 | 7 |
| 138 | Systems Biology Approaches in Aging Research. <i>Interdisciplinary Topics in Gerontology</i> , 2014, 40, 155-176. | 3.6 | 7 |
| 139 | P2Y receptor-mediated transient relaxation of rat longitudinal ileum preparations involves phospholipase C activation, intracellular Ca ²⁺ release and SK channel activation. <i>Acta Pharmacologica Sinica</i> , 2016, 37, 617-628. | 6.1 | 7 |
| 140 | Oral administration of the casein kinase 2 inhibitor TBB leads to persistent KCa _{2.2} channel up-regulation in the epileptic CA1 area and cortex, but lacks anti-seizure efficacy in the pilocarpine epilepsy model. <i>Epilepsy Research</i> , 2018, 147, 42-50. | 1.6 | 7 |
| 141 | Optical monitoring of PO ₂ changes and simultaneous recording of bioelectric activity in human and animal brain slices. <i>Journal of Neuroscience Methods</i> , 1998, 85, 181-186. | 2.5 | 6 |
| 142 | Altered physiology and pharmacology in the corticostriatal system in a model of temporal lobe epilepsy. <i>Epilepsia</i> , 2011, 52, 151-157. | 5.1 | 6 |
| 143 | The problems facing epilepsy therapy. <i>Neuropharmacology</i> , 2013, 69, 1-2. | 4.1 | 6 |
| 144 | Age-related decrease of adenosine-mediated relaxation in rat detrusor is a result of A _{2B} receptor downregulation. <i>International Journal of Urology</i> , 2015, 22, 322-329. | 1.0 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Uncoupling protein 2 deficiency results in higher neutrophil counts and lower B-cell counts during aging in mice. <i>Experimental Hematology</i> , 2016, 44, 1085-1091.e2. | 0.4 | 6 |
| 146 | Interplay between interictal spikes and behavioral seizures in young, but not aged pilocarpine-treated epileptic rats. <i>Epilepsy and Behavior</i> , 2016, 57, 90-94. | 1.7 | 6 |
| 147 | Stereotactically Injected Kv1.2 and CASPR2 Antisera Cause Differential Effects on CA1 Synaptic and Cellular Excitability, but Both Enhance the Vulnerability to Pro-epileptic Conditions. <i>Frontiers in Synaptic Neuroscience</i> , 2020, 12, 13. | 2.5 | 6 |
| 148 | Galvanotactic Migration of Glioblastoma and Brain Metastases Cells. <i>Life</i> , 2022, 12, 580. | 2.4 | 6 |
| 149 | Cutting of living hippocampal slices by a highly pressurised water jet (macromingotome). <i>Journal of Neuroscience Methods</i> , 2000, 102, 1-9. | 2.5 | 5 |
| 150 | Pre- rather than Co-application of Vigabatrin Increases the Efficacy of Tiagabine in Hippocampal Slices. <i>Epilepsia</i> , 2002, 43, 1455-1461. | 5.1 | 5 |
| 151 | CK2 Inhibition Prior to Status Epilepticus Persistently Enhances KCa2 Function in CA1 Which Slows Down Disease Progression. <i>Frontiers in Cellular Neuroscience</i> , 2020, 14, 33. | 3.7 | 5 |
| 152 | Correlation between Kir4.1 expression and barium-sensitive currents in rat and human glioma cell lines. <i>Neuroscience Letters</i> , 2021, 741, 135481. | 2.1 | 5 |
| 153 | Mechanisms of pallidal deep brain stimulation: Alteration of cortico-striatal synaptic communication in a dystonia animal model. <i>Neurobiology of Disease</i> , 2021, 154, 105341. | 4.4 | 5 |
| 154 | Towards biomarkers for outcomes after pancreatic ductal adenocarcinoma and ischaemic stroke, with focus on (co)-morbidity and ageing/cellular senescence (SASKit): protocol for a prospective cohort study. <i>BMJ Open</i> , 2020, 10, e039560. | 1.9 | 5 |
| 155 | Neuroprotection by 21-aminosteroids: insights from latencies of anoxic terminal negativity in hippocampus slices of guinea pig. <i>Neurological Research</i> , 1999, 21, 305-308. | 1.3 | 4 |
| 156 | Increased excitability and compromised long-term potentiation in the neocortex of NPC1 ^{+/+} /Δ ⁺ mice. <i>Brain Research</i> , 2012, 1444, 20-26. | 2.2 | 4 |
| 157 | Acute epileptiform activity induced by gabazine involves proteasomal rather than lysosomal degradation of KCa2.2 channels. <i>Neurobiology of Disease</i> , 2018, 112, 79-84. | 4.4 | 4 |
| 158 | Effects of methohexital on bioelectrical reactions in guinea pig hippocampal slices during hypoxia. <i>Neuroscience Letters</i> , 2002, 329, 227-231. | 2.1 | 3 |
| 159 | Functional Metaplasticity of Hippocampal Schaffer Collateral-CA1 Synapses Is Reversed in Chronically Epileptic Rats. <i>Neural Plasticity</i> , 2017, 2017, 1-8. | 2.2 | 3 |
| 160 | Distinct Effects of Stereotactically Injected Human Cerebrospinal Fluid Containing Glutamic Acid Decarboxylase Antibodies into the Hippocampus of Rats on the Development of Spontaneous Epileptic Activity. <i>Brain Sciences</i> , 2020, 10, 123. | 2.3 | 3 |
| 161 | Reduction of human neocortical and guinea pig CA1-neuron A-type currents by organic calcium channel blockers. <i>Neuroscience Letters</i> , 2004, 368, 57-62. | 2.1 | 2 |
| 162 | ZD7288 Enhances Long-Term Depression at Early Postnatal Medial Perforant Path-Granule Cell Synapses. <i>Neural Plasticity</i> , 2012, 2012, 1-9. | 2.2 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 163 | Numerical Study on Electrode Design for Rodent Deep Brain Stimulation With Implantations Cranial to Targeted Nuclei. <i>Frontiers in Computational Neuroscience</i> , 2021, 15, 631188. | 2.1 | 2 |
| 164 | Kv7 and Kir6 Channels Shape the Slow AHP in Mouse Dentate Gyrus Granule Cells and Control Burst-like Firing Behavior. <i>Neuroscience</i> , 2021, 467, 56-72. | 2.3 | 2 |
| 165 | Polymorphism in Murine mtATP8 Gene Correlates with Decreased Reactive Oxygen Species in Aging Hematopoietic Cells. <i>In Vivo</i> , 2016, 30, 751-760. | 1.3 | 2 |
| 166 | NiCl ₂ and amiloride induce spreading depression in guinea pig hippocampal slices. <i>Cephalalgia</i> , 2000, 20, 740-747. | 3.9 | 2 |
| 167 | Microbeam Irradiation of the Beating Rodent Heart: An Ex Vivo Study of Acute and Subacute Effects on Cardiac Function. <i>International Journal of Radiation Oncology Biology Physics</i> , 2022, 114, 143-152. | 0.8 | 2 |
| 168 | Bioelectrical behaviour of hypoxic human neocortical tissue under the influence of nimodipine and dimethyl sulfoxide. <i>Brain Research</i> , 2003, 959, 199-205. | 2.2 | 1 |
| 169 | Translational perspectives: Interneurons start seizures. <i>Journal of Physiology</i> , 2019, 597, 5525-5526. | 2.9 | 1 |
| 170 | Polymorphism nt7778G/T In Mitochondrial ATP8 Gene Promotes Protective Effect On Reactive Oxygen Species Level In Murine Hematopoietic Cells During Aging. <i>Blood</i> , 2013, 122, 1196-1196. | 1.4 | 1 |
| 171 | Spontane Netzwerkaktivität in chronisch epileptischem Hirngewebe des Menschen. <i>Zeitschrift Fur Epileptologie</i> , 2003, 16, 229-234. | 0.7 | 0 |
| 172 | Studying Epilepsy in the Human Brain In Vitro. , 2006, , 89-101. | | 0 |
| 173 | MICHAEL FORUM REPORT. <i>Epilepsia</i> , 2007, 48, 403-406. | 5.1 | 0 |
| 174 | Brain Tumor-Related Epilepsy. , 2017, , 899-910. | | 0 |
| 175 | Epileptogenesis and Brain Tumors. , 2010, , 359-363. | | 0 |
| 176 | Attribute Exploration with Proper Premises and Incomplete Knowledge Applied to the Free Radical Theory of Ageing. <i>Lecture Notes in Computer Science</i> , 2014, , 268-283. | 1.3 | 0 |
| 177 | Loss of GABAergic control of corticostriatal LTP following status epilepticus. <i>Translational Brain Rhythmicity</i> , 2016, 1, . | 0.3 | 0 |
| 178 | Title is missing!. , 2020, 16, e1008023. | | 0 |
| 179 | Title is missing!. , 2020, 16, e1008023. | | 0 |
| 180 | Title is missing!. , 2020, 16, e1008023. | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|----|-----------|
| 181 | Title is missing!. , 2020, 16, e1008023. | | 0 |