

# Helmut Kettenmann

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

171  
papers

22,605  
citations

76  
h-index

150  
g-index

178  
ext. papers

26,224  
ext. citations

8.2  
avg. IF

7.19  
L-index

| #   | Paper   | IF   | Citations |
|-----|---|------|-----------|
| 171 | Microglia/macrophage-derived human CCL18 promotes glioma progression via CCR8-ACP5 axis analyzed in humanized slice model.. <i>Cell Reports</i> , <b>2022</b> , 39, 110670  | 10.6 | 1         |
| 170 | Histamine triggers microglial responses indirectly via astrocytes and purinergic signaling. <i>Glia</i> , <b>2021</b> , 69, 2291-2304   | 9    | 3         |
| 169 | Deletion of muscarinic acetylcholine receptor 3 in microglia impacts brain ischemic injury. <i>Brain, Behavior, and Immunity</i> , <b>2021</b> , 91, 89-104   | 16.6 | 4         |
| 168 | Glial cell line-derived neurotrophic factor increases matrix metalloproteinase 9 and 14 expression in microglia and promotes microglia-mediated glioma progression. <i>Journal of Neuroscience Research</i> , <b>2021</b> , 99, 1048-1063 | 4.4  | 1         |
| 167 | Reactive astrocyte nomenclature, definitions, and future directions. <i>Nature Neuroscience</i> , <b>2021</b> , 24, 312-325   | 35   | 298       |
| 166 | UNC93B1 Is Widely Expressed in the Murine CNS and Is Required for Neuroinflammation and Neuronal Injury Induced by MicroRNA. <i>Frontiers in Immunology</i> , <b>2021</b> , 12, 715774  | 8.4  | 0         |
| 165 | Astrocytes and oligodendrocytes in the thalamus jointly maintain synaptic activity by supplying metabolites. <i>Cell Reports</i> , <b>2021</b> , 34, 108642   | 10.6 | 8         |
| 164 | Microglia sense neuronal activity via GABA in the early postnatal hippocampus.. <i>Cell Reports</i> , <b>2021</b> , 37, 110128  | 10.6 | 3         |
| 163 | Tumour-derived CSF2/granulocyte macrophage colony stimulating factor controls myeloid cell accumulation and progression of gliomas. <i>British Journal of Cancer</i> , <b>2020</b> , 123, 438-448   | 8.7  | 7         |
| 162 | Synergistic Toll-like Receptor 3/9 Signaling Affects Properties and Impairs Glioma-Promoting Activity of Microglia. <i>Journal of Neuroscience</i> , <b>2020</b> , 40, 6428-6443  | 6.6  | 8         |
| 161 | Studying Human Glial Cells: Where Are We Today?. <i>Glia</i> , <b>2020</b> , 68, 683-684  | 9    |           |
| 160 | The VGF-derived Peptide TLQP21 Impairs Purinergic Control of Chemotaxis and Phagocytosis in Mouse Microglia. <i>Journal of Neuroscience</i> , <b>2020</b> , 40, 3320-3331   | 6.6  | 9         |
| 159 | O-Vanillin Attenuates the TLR2 Mediated Tumor-Promoting Phenotype of Microglia. <i>International Journal of Molecular Sciences</i> , <b>2020</b> , 21,  | 6.3  | 4         |
| 158 | Neurofibromatosis 1 - Mutant microglia exhibit sexually-dimorphic cyclic AMP-dependent purinergic defects. <i>Neurobiology of Disease</i> , <b>2020</b> , 144, 105030   | 7.5  | 3         |
| 157 | Neuroinflammatory alterations in trait anxiety: modulatory effects of minocycline. <i>Translational Psychiatry</i> , <b>2020</b> , 10, 256  | 8.6  | 13        |
| 156 | Down-regulation of Aquaporin-1 mediates a microglial phenotype switch affecting glioma growth. <i>Experimental Cell Research</i> , <b>2020</b> , 396, 112323  | 4.2  | 1         |
| 155 | Activation of Toll-like receptor 5 in microglia modulates their function and triggers neuronal injury. <i>Acta Neuropathologica Communications</i> , <b>2020</b> , 8, 159   | 7.3  | 8         |

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|-----|---|------|-----|
| 154 | Human Mesenchymal glioblastomas are characterized by an increased immune cell presence compared to Proneural and Classical tumors. <i>Oncoimmunology</i> , <b>2019</b> , 8, e1655360  | 7.2  | 40  |
| 153 | Comprehensive gene expression meta-analysis identifies signature genes that distinguish microglia from peripheral monocytes/macrophages in health and glioma. <i>Acta Neuropathologica Communications</i> , <b>2019</b> , 7, 20 | 7.3  | 75  |
| 152 | Tenascin C regulates multiple microglial functions involving TLR4 signaling and HDAC1. <i>Brain, Behavior, and Immunity</i> , <b>2019</b> , 81, 470-483   | 16.6 | 19  |
| 151 | Cien Años de Microglía: Milestones in a Century of Microglial Research. <i>Trends in Neurosciences</i> , <b>2019</b> , 42, 778-792  | 13.3 | 61  |
| 150 | Microglia/Brain Macrophages as Central Drivers of Brain Tumor Pathobiology. <i>Neuron</i> , <b>2019</b> , 104, 442-449.   | 13.9 | 96  |
| 149 | let-7 MicroRNAs Regulate Microglial Function and Suppress Glioma Growth through Toll-Like Receptor 7. <i>Cell Reports</i> , <b>2019</b> , 29, 3460-3471.e7  | 10.6 | 36  |
| 148 | Oligodendrocytes in the Mouse Corpus Callosum Maintain Axonal Function by Delivery of Glucose. <i>Cell Reports</i> , <b>2018</b> , 22, 2383-2394  | 10.6 | 64  |
| 147 | Distinguishing features of microglia- and monocyte-derived macrophages after stroke. <i>Acta Neuropathologica</i> , <b>2018</b> , 135, 551-568  | 14.3 | 54  |
| 146 | Loss of host-derived osteopontin creates a glioblastoma-promoting microenvironment. <i>Neuro-Oncology</i> , <b>2018</b> , 20, 355-366   | 1    | 19  |
| 145 | Barreloid Borders and Neuronal Activity Shape Pannal Gap Junction-Coupled Networks in the Mouse Thalamus. <i>Cerebral Cortex</i> , <b>2018</b> , 28, 213-222  | 5.1  | 15  |
| 144 | Transcriptional and Translational Differences of Microglia from Male and Female Brains. <i>Cell Reports</i> , <b>2018</b> , 24, 2773-2783.e6  | 10.6 | 163 |
| 143 | Astrocytic Calcium Waves Signal Brain Injury to Neural Stem and 'Progenitor' Cells. <i>Stem Cell Reports</i> , <b>2017</b> , 8, 701-714   | 8    | 11  |
| 142 | Changes in phagocytosis and potassium channel activity in microglia of 5xFAD mice indicate alterations in purinergic signaling in a mouse model of Alzheimer's disease. <i>Neurobiology of Aging</i> , <b>2017</b> , 58, 41-53  | 5.6  | 32  |
| 141 | Microglia in Physiology and Disease. <i>Annual Review of Physiology</i> , <b>2017</b> , 79, 619-643   | 23.1 | 635 |
| 140 | Building Bridges through Science. <i>Neuron</i> , <b>2017</b> , 96, 730-735   | 13.9 | 2   |
| 139 | The adenosine generating enzymes CD39/CD73 control microglial processes ramification in the mouse brain. <i>PLoS ONE</i> , <b>2017</b> , 12, e0175012   | 3.7  | 37  |
| 138 | The subpopulation of microglia expressing functional muscarinic acetylcholine receptors expands in stroke and Alzheimer's disease. <i>Brain Structure and Function</i> , <b>2016</b> , 221, 1157-72                             | 4    | 39  |
| 137 | FENS Forum 2018 in Berlin. <i>E-Neuroforum</i> , <b>2016</b> , 22, 109-109  |      |     |

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|-----|---|------|-----|
| 136 | TLR2 controls random motility, while TLR7 regulates chemotaxis of microglial cells via distinct pathways. <i>Brain, Behavior, and Immunity</i> , <b>2016</b> , 58, 338-347  | 16.6 | 21  |
| 135 | Decreased demand for olfactory periglomerular cells impacts on neural precursor cell viability in the rostral migratory stream. <i>Scientific Reports</i> , <b>2016</b> , 6, 32203  | 4.9  | 8   |
| 134 | The "Big-Bang" for modern glial biology: Translation and comments on Pñ del Rñ-Hortega 1919 series of papers on microglia. <i>Glia</i> , <b>2016</b> , 64, 1801-40  | 9    | 119 |
| 133 | Glial Cells: <i>Neuroglia</i> <b>2016</b> , 547-578   |      |     |
| 132 | Experimental Cortical Spreading Depression Induces NMDA Receptor Dependent Potassium Currents in Microglia. <i>Journal of Neuroscience</i> , <b>2016</b> , 36, 6165-74  | 6.6  | 27  |
| 131 | ERK1 as a Therapeutic Target for Dendritic Cell Vaccination against High-Grade Gliomas. <i>Molecular Cancer Therapeutics</i> , <b>2016</b> , 15, 1975-87  | 6.1  | 5   |
| 130 | Actin dynamics shape microglia effector functions. <i>Brain Structure and Function</i> , <b>2016</b> , 221, 2717-34   | 4    | 29  |
| 129 | The role of microglia and macrophages in glioma maintenance and progression. <i>Nature Neuroscience</i> , <b>2016</b> , 19, 20-7  | 25.5 | 743 |
| 128 | Satellite microglia show spontaneous electrical activity that is uncorrelated with activity of the attached neuron. <i>European Journal of Neuroscience</i> , <b>2016</b> , 43, 1523-34   | 3.5  | 15  |
| 127 | Human glioblastoma-associated microglia/monocytes express a distinct RNA profile compared to human control and murine samples. <i>Glia</i> , <b>2016</b> , 64, 1416-36  | 9    | 71  |
| 126 | Glioma Stem Cells but Not Bulk Glioma Cells Upregulate IL-6 Secretion in Microglia/Brain Macrophages via Toll-like Receptor 4 Signaling. <i>Journal of Neuropathology and Experimental Neurology</i> , <b>2016</b> , 75, 429-40 | 3.1  | 46  |
| 125 | Spontaneous Ca transients in mouse microglia. <i>Cell Calcium</i> , <b>2016</b> , 60, 396-406   | 4    | 19  |
| 124 | Characterization of Panglial Gap Junction Networks in the Thalamus, Neocortex, and Hippocampus Reveals a Unique Population of Glial Cells. <i>Cerebral Cortex</i> , <b>2015</b> , 25, 3420-33                                   | 5.1  | 84  |
| 123 | Intrathecal heat shock protein 60 mediates neurodegeneration and demyelination in the CNS through a TLR4- and MyD88-dependent pathway. <i>Molecular Neurodegeneration</i> , <b>2015</b> , 10, 5                                 | 19   | 39  |
| 122 | Vascular signal transducer and activator of transcription-3 promotes angiogenesis and neuroplasticity long-term after stroke. <i>Circulation</i> , <b>2015</b> , 131, 1772-82   | 16.7 | 46  |
| 121 | Altered microglial phagocytosis in GPR34-deficient mice. <i>Glia</i> , <b>2015</b> , 63, 206-15   | 9    | 46  |
| 120 | Glioma-associated microglia/macrophages display an expression profile different from M1 and M2 polarization and highly express Gpnmb and Spp1. <i>PLoS ONE</i> , <b>2015</b> , 10, e0116644                                     | 3.7  | 227 |
| 119 | Glioma-derived versican promotes tumor expansion via glioma-associated microglial/macrophages Toll-like receptor 2 signaling. <i>Neuro-Oncology</i> , <b>2015</b> , 17, 200-10  | 1    | 98  |

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|-----|--|------|-----|
| 118 | Loss of CX3CR1 increases accumulation of inflammatory monocytes and promotes gliomagenesis. <i>Oncotarget</i> , <b>2015</b> , 6, 15077-94  | 3.3  | 117 |
| 117 | Minocycline rescues decrease in neurogenesis, increase in microglia cytokines and deficits in sensorimotor gating in an animal model of schizophrenia. <i>Brain, Behavior, and Immunity</i> , <b>2014</b> , 38, 175-84 | 16.6 | 125 |
| 116 | Glioma-associated microglia and macrophages/monocytes display distinct electrophysiological properties and do not communicate via gap junctions. <i>Neuroscience Letters</i> , <b>2014</b> , 583, 130-5                | 3.3  | 19  |
| 115 | Intracellular glycine receptor function facilitates glioma formation in vivo. <i>Journal of Cell Science</i> , <b>2014</b> , 127, 3687-98  | 5.3  | 10  |
| 114 | Glioma-associated microglial MMP9 expression is upregulated by TLR2 signaling and sensitive to minocycline. <i>International Journal of Cancer</i> , <b>2014</b> , 135, 2569-78  | 7.5  | 76  |
| 113 | Membrane-type 1 metalloproteinase is upregulated in microglia/brain macrophages in neurodegenerative and neuroinflammatory diseases. <i>Journal of Neuroscience Research</i> , <b>2014</b> , 92, 275-86                | 4.4  | 24  |
| 112 | The subpopulation of microglia sensitive to neurotransmitters/neurohormones is modulated by stimulation with LPS, interferon- $\gamma$ and IL-4. <i>Glia</i> , <b>2014</b> , 62, 667-79                                | 9    | 50  |
| 111 | NTPDase1 activity attenuates microglial phagocytosis. <i>Purinergic Signalling</i> , <b>2013</b> , 9, 199-205  | 3.8  | 31  |
| 110 | Toll-like receptor 2 mediates microglia/brain macrophage MT1-MMP expression and glioma expansion. <i>Neuro-Oncology</i> , <b>2013</b> , 15, 1457-68  | 1    | 76  |
| 109 | Microglia: new roles for the synaptic stripper. <i>Neuron</i> , <b>2013</b> , 77, 10-8   | 13.9 | 763 |
| 108 | Functional impairment of microglia coincides with Beta-amyloid deposition in mice with Alzheimer-like pathology. <i>PLoS ONE</i> , <b>2013</b> , 8, e60921   | 3.7  | 304 |
| 107 | Glial Cells <b>2013</b> , 475-506  |      | 4   |
| 106 | GDNF mediates glioblastoma-induced microglia attraction but not astrogliosis. <i>Acta Neuropathologica</i> , <b>2013</b> , 125, 609-20   | 14.3 | 71  |
| 105 | The brain tumor microenvironment. <i>Glia</i> , <b>2012</b> , 60, 502-14   | 9    | 261 |
| 104 | Activation of serotonin receptors promotes microglial injury-induced motility but attenuates phagocytic activity. <i>Brain, Behavior, and Immunity</i> , <b>2012</b> , 26, 419-28                                      | 16.6 | 90  |
| 103 | Toll-like receptor activation reveals developmental reorganization and unmask responder subsets of microglia. <i>Glia</i> , <b>2012</b> , 60, 1930-43  | 9    | 79  |
| 102 | Neural precursor cells induce cell death of high-grade astrocytomas through stimulation of TRPV1. <i>Nature Medicine</i> , <b>2012</b> , 18, 1232-8  | 50.5 | 121 |
| 101 | Panglial gap junctional communication is essential for maintenance of myelin in the CNS. <i>Journal of Neuroscience</i> , <b>2012</b> , 32, 7499-518   | 6.6  | 99  |

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|-----|---|------|------|
| 100 | Physiology of microglia. <i>Physiological Reviews</i> , <b>2011</b> , 91, 461-553   | 47.9 | 2342 |
| 99  | Properties of doublecortin-(DCX)-expressing cells in the piriform cortex compared to the neurogenic dentate gyrus of adult mice. <i>PLoS ONE</i> , <b>2011</b> , 6, e25760  | 3.7  | 95   |
| 98  | Functional importance of inositol-1,4,5-triphosphate-induced intracellular Ca <sup>2+</sup> mobilization in galanin-induced microglial migration. <i>Journal of Neurochemistry</i> , <b>2011</b> , 117, 61-70     | 6    | 18   |
| 97  | Transmitter- and hormone-activated Ca(2+) responses in adult microglia/brain macrophages in situ recorded after viral transduction of a recombinant Ca(2+) sensor. <i>Cell Calcium</i> , <b>2011</b> , 49, 365-75 | 4    | 46   |
| 96  | The brain tumor microenvironment. <i>Glia</i> , <b>2011</b> , 59, 1169-80   | 9    | 355  |
| 95  | Pathologic and phenotypic alterations in a mouse expressing a connexin47 missense mutation that causes Pelizaeus-Merzbacher-like disease in humans. <i>PLoS Genetics</i> , <b>2011</b> , 7, e1002146              | 6    | 61   |
| 94  | Bone morphogenetic protein-7 release from endogenous neural precursor cells suppresses the tumorigenicity of stem-like glioblastoma cells. <i>Brain</i> , <b>2010</b> , 133, 1961-72                              | 11.2 | 82   |
| 93  | Impact of actin filament stabilization on adult hippocampal and olfactory bulb neurogenesis. <i>Journal of Neuroscience</i> , <b>2010</b> , 30, 3419-31   | 6.6  | 30   |
| 92  | Modulation of fate determinants Olig2 and Pax6 in resident glia evokes spiking neuroblasts in a model of mild brain ischemia. <i>Stroke</i> , <b>2010</b> , 41, 2944-9  | 6.7  | 40   |
| 91  | Heterogeneity in astrocyte morphology and physiology. <i>Brain Research Reviews</i> , <b>2010</b> , 63, 2-10  |      | 275  |
| 90  | Oligodendrocytes in mouse corpus callosum are coupled via gap junction channels formed by connexin47 and connexin32. <i>Glia</i> , <b>2010</b> , 58, 1104-17  | 9    | 103  |
| 89  | The principal neurons of the medial nucleus of the trapezoid body and NG2(+) glial cells receive coordinated excitatory synaptic input. <i>Journal of General Physiology</i> , <b>2009</b> , 134, 115-27          | 3.4  | 59   |
| 88  | Pharmacological "cross-inhibition" of connexin hemichannels and swelling activated anion channels. <i>Glia</i> , <b>2009</b> , 57, 258-69   | 9    | 90   |
| 87  | C1q, the recognition subcomponent of the classical pathway of complement, drives microglial activation. <i>Journal of Neuroscience Research</i> , <b>2009</b> , 87, 644-52  | 4.4  | 75   |
| 86  | GABAergic activities enhance macrophage inflammatory protein-1alpha release from microglia (brain macrophages) in postnatal mouse brain. <i>Journal of Physiology</i> , <b>2009</b> , 587, 753-68                 | 3.9  | 23   |
| 85  | Astrocyte function is modified by Alzheimer's disease-like pathology in aged mice. <i>Journal of Alzheimers Disease</i> , <b>2009</b> , 18, 177-89  | 4.3  | 60   |
| 84  | Temperature and nitric oxide control spontaneous calcium transients in astrocytes. <i>Cell Calcium</i> , <b>2008</b> , 43, 285-95   | 4    | 33   |
| 83  | Store-operated Ca <sup>2+</sup> entry in astrocytes: different spatial arrangement of endoplasmic reticulum explains functional diversity in vitro and in situ. <i>Cell Calcium</i> , <b>2008</b> , 43, 591-601   | 4    | 44   |

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|----|--|------|------|
| 82 | How does intracellular Ca <sup>2+</sup> oscillate: by chance or by the clock?. <i>Biophysical Journal</i> , <b>2008</b> , 94, 2404-11  | 2.9  | 146  |
| 81 | An alpha5beta1 integrin inhibitor attenuates glioma growth. <i>Molecular and Cellular Neurosciences</i> , <b>2008</b> , 39, 579-85   | 4.8  | 41   |
| 80 | Neuroglia: the 150 years after. <i>Trends in Neurosciences</i> , <b>2008</b> , 31, 653-9   | 13.3 | 204  |
| 79 | Astrocytes discriminate and selectively respond to the activity of a subpopulation of neurons within the barrel cortex. <i>Cerebral Cortex</i> , <b>2008</b> , 18, 2450-9  | 5.1  | 59   |
| 78 | The ectonucleotidase cd39/ENTPDase1 modulates purinergic-mediated microglial migration. <i>Glia</i> , <b>2008</b> , 56, 331-41   | 9    | 84   |
| 77 | Mild brain ischemia induces unique physiological properties in striatal astrocytes. <i>Glia</i> , <b>2008</b> , 56, 925-34   | 9    | 16   |
| 76 | The antitumorigenic response of neural precursors depends on subventricular proliferation and age. <i>Stem Cells</i> , <b>2008</b> , 26, 2945-54   | 5.8  | 43   |
| 75 | Microglia: active sensor and versatile effector cells in the normal and pathologic brain. <i>Nature Neuroscience</i> , <b>2007</b> , 10, 1387-94   | 25.5 | 2624 |
| 74 | Neuroprotective role of bradykinin because of the attenuation of pro-inflammatory cytokine release from activated microglia. <i>Journal of Neurochemistry</i> , <b>2007</b> , 101, 397-410   | 6    | 100  |
| 73 | Membrane currents and cytoplasmic sodium transients generated by glutamate transport in Bergmann glial cells. <i>Pflugers Archiv European Journal of Physiology</i> , <b>2007</b> , 454, 245-52  | 4.6  | 106  |
| 72 | Bradykinin-induced microglial migration mediated by B1-bradykinin receptors depends on Ca <sup>2+</sup> influx via reverse-mode activity of the Na <sup>+</sup> /Ca <sup>2+</sup> exchanger. <i>Journal of Neuroscience</i> , <b>2007</b> , 27, 13065-73 | 6.6  | 107  |
| 71 | A novel glycine receptor beta subunit splice variant predicts an unorthodox transmembrane topology. Assembly into heteromeric receptor complexes. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 2798-807                                   | 5.4  | 26   |
| 70 | The invasion promoting effect of microglia on glioblastoma cells is inhibited by cyclosporin A. <i>Brain</i> , <b>2007</b> , 130, 476-89   | 11.2 | 101  |
| 69 | Neurotransmitter receptors on microglia. <i>Trends in Neurosciences</i> , <b>2007</b> , 30, 527-35   | 13.3 | 474  |
| 68 | Enriched monolayer precursor cell cultures from micro-dissected adult mouse dentate gyrus yield functional granule cell-like neurons. <i>PLoS ONE</i> , <b>2007</b> , 2, e388  | 3.7  | 119  |
| 67 | Type-2 cells as link between glial and neuronal lineage in adult hippocampal neurogenesis. <i>Glia</i> , <b>2006</b> , 54, 805-14  | 9    | 268  |
| 66 | Functional role of calcium signals for microglial function. <i>Glia</i> , <b>2006</b> , 54, 656-65   | 9    | 139  |
| 65 | Activity-dependent ATP-waves in the mouse neocortex are independent from astrocytic calcium waves. <i>Cerebral Cortex</i> , <b>2006</b> , 16, 237-46   | 5.1  | 119  |

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|----|--|------|-----|
| 64 | A1 adenosine receptors in microglia control glioblastoma-host interaction. <i>Cancer Research</i> , <b>2006</b> , 66, 8550-7   | 10.1 | 60  |
| 63 | The potassium channels Kv1.5 and Kv1.3 modulate distinct functions of microglia. <i>Molecular and Cellular Neurosciences</i> , <b>2006</b> , 33, 401-11  | 4.8  | 75  |
| 62 | Graduiertenkolleg 1258 Der Einfluss von Entzündung auf die Funktion des Nervensystems. <i>E-Neuroforum</i> , <b>2006</b> , 12, 243-245   |      |     |
| 61 | Triggering the brain's pathology sensor. <i>Nature Neuroscience</i> , <b>2006</b> , 9, 1463-4  | 25.5 | 24  |
| 60 | Purinergic signaling and microglia. <i>Pflügers Archiv European Journal of Physiology</i> , <b>2006</b> , 452, 615-21  | 4.6  | 128 |
| 59 | Nestin-expressing cells divide and adopt a complex electrophysiologic phenotype after transient brain ischemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2005</b> , 25, 1613-24   | 7.3  | 41  |
| 58 | Dopamine and noradrenaline control distinct functions in rodent microglial cells. <i>Molecular and Cellular Neurosciences</i> , <b>2005</b> , 29, 128-38   | 4.8  | 164 |
| 57 | A subpopulation of precursor cells in the mouse dentate gyrus receives synaptic GABAergic input. <i>Molecular and Cellular Neurosciences</i> , <b>2005</b> , 29, 181-9   | 4.8  | 145 |
| 56 | Physiology of microglial cells. <i>Brain Research Reviews</i> , <b>2005</b> , 48, 133-43   |      | 142 |
| 55 | Microglia stimulate the invasiveness of glioma cells by increasing the activity of metalloprotease-2. <i>Journal of Neuropathology and Experimental Neurology</i> , <b>2005</b> , 64, 754-62   | 3.1  | 204 |
| 54 | Synaptic transmission onto hippocampal glial cells with hGFAP promoter activity. <i>Journal of Cell Science</i> , <b>2005</b> , 118, 3791-803  | 5.3  | 129 |
| 53 | Glioblastoma-induced attraction of endogenous neural precursor cells is associated with improved survival. <i>Journal of Neuroscience</i> , <b>2005</b> , 25, 2637-46  | 6.6  | 182 |
| 52 | Hydrogen peroxide and ADP-ribose induce TRPM2-mediated calcium influx and cation currents in microglia. <i>American Journal of Physiology - Cell Physiology</i> , <b>2004</b> , 286, C129-37   | 5.4  | 221 |
| 51 | CXCR3-dependent microglial recruitment is essential for dendrite loss after brain lesion. <i>Journal of Neuroscience</i> , <b>2004</b> , 24, 8500-9  | 6.6  | 196 |
| 50 | The microglia-activating potential of thrombin: the protease is not involved in the induction of proinflammatory cytokines and chemokines. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 51880-7   | 5.4  | 45  |
| 49 | The tyrosine kinase inhibitor AG126 restores receptor signaling and blocks release functions in activated microglia (brain macrophages) by preventing a chronic rise in the intracellular calcium level. <i>Journal of Neurochemistry</i> , <b>2004</b> , 90, 513-25 | 6    | 16  |
| 48 | Microglia express GABA(B) receptors to modulate interleukin release. <i>Molecular and Cellular Neurosciences</i> , <b>2004</b> , 25, 312-22  | 4.8  | 139 |
| 47 | Elevation of basal intracellular calcium as a central element in the activation of brain macrophages (microglia): suppression of receptor-evoked calcium signaling and control of release function. <i>Journal of Neuroscience</i> , <b>2003</b> , 23, 4410-9        | 6.6  | 201 |



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|----|---|-----|-----|
| 46 | Different mechanisms promote astrocyte Ca <sup>2+</sup> waves and spreading depression in the mouse neocortex. <i>Journal of Neuroscience</i> , <b>2003</b> , 23, 9888-96   | 6.6 | 164 |
| 45 | Segregated expression of AMPA-type glutamate receptors and glutamate transporters defines distinct astrocyte populations in the mouse hippocampus. <i>Journal of Neuroscience</i> , <b>2003</b> , 23, 1750-8  | 6.6 | 383 |
| 44 | GABAA receptor-expressing astrocytes in the supraoptic nucleus lack glutamate uptake and receptor currents. <i>Glia</i> , <b>2003</b> , 44, 102-10  | 9   | 42  |
| 43 | Purinergic receptors on microglial cells: functional expression in acute brain slices and modulation of microglial activation in vitro. <i>European Journal of Neuroscience</i> , <b>2003</b> , 17, 2267-76   | 3.5 | 164 |
| 42 | Subpopulation of nestin-expressing progenitor cells in the adult murine hippocampus shows electrophysiological and morphological characteristics of astrocytes. <i>Molecular and Cellular Neurosciences</i> , <b>2003</b> , 23, 373-82              | 4.8 | 375 |
| 41 | Bergmann glial cells form distinct morphological structures to interact with cerebellar neurons. <i>Journal of Neuroscience Research</i> , <b>2002</b> , 68, 138-49   | 4.4 | 138 |
| 40 | Interferon-gamma differentially modulates the release of cytokines and chemokines in lipopolysaccharide- and pneumococcal cell wall-stimulated mouse microglia and macrophages. <i>European Journal of Neuroscience</i> , <b>2002</b> , 16, 2113-22 | 3.5 | 99  |
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| 34 | The protein tyrosine kinase inhibitor AG126 prevents the massive microglial cytokine induction by pneumococcal cell walls. <i>European Journal of Immunology</i> , <b>2001</b> , 31, 2104-15  | 6.1 | 69  |
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| 29 | GFAP promoter-controlled EGFP-expressing transgenic mice: A tool to visualize astrocytes and astrogliosis in living brain tissue <b>2001</b> , 33, 72   |     | 2   |

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| 27 | Phagocytic clearance of apoptotic neurons by Microglia/Brain macrophages in vitro: involvement of lectin-, integrin-, and phosphatidylserine-mediated recognition. <i>Journal of Neurochemistry</i> , <b>2000</b> , 75, 1060-70                 | 6    | 149 |
| 26 | Biochemical analysis of proteasomes from mouse microglia: Induction of immunoproteasomes by interferon- $\gamma$ and lipopolysaccharide. <i>Glia</i> , <b>2000</b> , 29, 355-365  | 9    | 64  |
| 25 | Electrophysiological properties of microglial cells in normal and pathologic rat brain slices. <i>European Journal of Neuroscience</i> , <b>2000</b> , 12, 2049-58  | 3.5  | 116 |
| 24 | Distinct physiologic properties of microglia and blood-borne cells in rat brain slices after permanent middle cerebral artery occlusion. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2000</b> , 20, 1537-49                       | 7.3  | 57  |
| 23 | Activation of mouse microglial cells affects P2 receptor signaling. <i>Brain Research</i> , <b>2000</b> , 853, 49-59  | 3.7  | 110 |
| 22 | Regionally distinct regulation of astroglial neurotransmitter receptors by fibroblast growth factor-2. <i>Molecular and Cellular Neurosciences</i> , <b>2000</b> , 16, 42-58  | 4.8  | 27  |
| 21 | Microdomains for neuron-glia interaction: parallel fiber signaling to Bergmann glial cells. <i>Nature Neuroscience</i> , <b>1999</b> , 2, 139-43  | 25.5 | 541 |
| 20 | Microglial activation by components of gram-positive and -negative bacteria: distinct and common routes to the induction of ion channels and cytokines. <i>Journal of Neuropathology and Experimental Neurology</i> , <b>1999</b> , 58, 1078-89 | 3.1  | 83  |
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| 17 | Glial calcium: homeostasis and signaling function. <i>Physiological Reviews</i> , <b>1998</b> , 78, 99-141  | 47.9 | 580 |
| 16 | Dye coupling between spinal cord oligodendrocytes: Differences in coupling efficiency between gray and white matter <b>1998</b> , 24, 108   |      | 1   |
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| 8  | Expression of glycine receptor subunits in glial cells of the rat spinal cord. <i>Journal of Neurochemistry</i> , <b>1996</b> , 66, 1383-90   | 6    | 49  |
| 7  | Calcium signalling in glial cells. <i>Trends in Neurosciences</i> , <b>1996</b> , 19, 346-52  | 13.3 | 429 |
| 6  | Electrical coupling among Bergmann glial cells and its modulation by glutamate receptor activation. <i>Glia</i> , <b>1996</b> , 17, 274-84  | 9    | 86  |
| 5  | Glycine- and GABA-activated currents in identified glial cells of the developing rat spinal cord slice. <i>European Journal of Neuroscience</i> , <b>1995</b> , 7, 1188-98                            | 3.5  | 78  |
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| 1  | Electrical coupling between astrocytes and between oligodendrocytes studied in mammalian cell cultures. <i>Glia</i> , <b>1988</b> , 1, 64-73  | 9    | 158 |