Markus Morawski

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4223691/publications.pdf

Version: 2024-02-01

96 papers	4,379 citations	109321 35 h-index	123424 61 g-index
100 all docs	100 docs citations	100 times ranked	5955 citing authors

#	Article	IF	Citations
1	Myelin and iron concentration in the human brain: A quantitative study of MRI contrast. NeuroImage, 2014, 93, 95-106.	4.2	528
2	Aneuploidy and DNA Replication in the Normal Human Brain and Alzheimer's Disease. Journal of Neuroscience, 2007, 27, 6859-6867.	3.6	236
3	Locus coeruleus imaging as a biomarker for noradrenergic dysfunction in neurodegenerative diseases. Brain, 2019, 142, 2558-2571.	7.6	219
4	Perineuronal nets potentially protect against oxidative stress. Experimental Neurology, 2004, 188, 309-315.	4.1	199
5	Perineuronal net formation and structure in aggrecan knockout mice. Neuroscience, 2010, 170, 1314-1327.	2.3	175
6	Early neurone loss in Alzheimerâ€™s disease: cortical or subcortical?. Acta Neuropathologica Communications, 2015, 3, 10.	5.2	150
7	Neurons associated with aggrecan-based perineuronal nets are protected against tau pathology in subcortical regions in Alzheimer's disease. Neuroscience, 2010, 169, 1347-1363.	2.3	132
8	Aggrecan, link protein and tenascin-R are essential components of the perineuronal net to protect neurons against iron-induced oxidative stress. Cell Death and Disease, 2014, 5, e1119-e1119.	6.3	129
9	Involvement of Perineuronal and Perisynaptic Extracellular Matrix in Alzheimer's Disease Neuropathology. Brain Pathology, 2012, 22, 547-561.	4.1	124
10	Aggrecan: Beyond cartilage and into the brain. International Journal of Biochemistry and Cell Biology, 2012, 44, 690-693.	2.8	113
11	Iron concentrations in neurons and glial cells with estimates on ferritin concentrations. BMC Neuroscience, 2019, 20, 25.	1.9	108
12	Glutaminyl Cyclase in Human Cortex: Correlation with (pGlu)-Amyloid-Î² Load and Cognitive Decline in Alzheimer's Disease. Journal of Alzheimer's Disease, 2014, 39, 385-400.	2.6	90
13	Ion exchanger in the brain: Quantitative analysis of perineuronally fixed anionic binding sites suggests diffusion barriers with ion sorting properties. Scientific Reports, 2015, 5, 16471.	3.3	85
14	Aggrecan-based extracellular matrix is an integral part of the human basal ganglia circuit. Neuroscience, 2008, 151, 489-504.	2.3	83
15	Protective Properties of Neural Extracellular Matrix. Molecular Neurobiology, 2016, 53, 73-82.	4.0	82
16	Developing 3D microscopy with CLARITY on human brain tissue: Towards a tool for informing and validating MRI-based histology. NeuroImage, 2018, 182, 417-428.	4.2	81
17	Tenascin-R promotes assembly of the extracellular matrix of perineuronal nets via clustering of aggrecan. Philosophical Transactions of the Royal Society B: Biological Sciences, 2014, 369, 20140046.	4.0	80
18	Neurochemical mapping of the human hippocampus reveals perisynaptic matrix around functional synapses in Alzheimerâ€™s disease. Acta Neuropathologica, 2013, 125, 215-229.	7.7	76

#	Article	IF	Citations
19	Early pathologic amyloid induces hypersynchrony of BOLD restingâ€state networks in transgenic mice and provides an early therapeutic window before amyloid plaque deposition. Alzheimer's and Dementia, 2016, 12, 964-976.	0.8	76
20	ECM in brain aging and dementia. Progress in Brain Research, 2014, 214, 207-227.	1.4	69
21	Superficial white matter imaging: Contrast mechanisms and whole-brain in vivo mapping. Science Advances, 2020, 6, .	10.3	65
22	Changes in neuronal DNA content variation in the human brain during aging. Aging Cell, 2012, 11, 628-633.	6.7	62
23	The extracellular matrix molecule brevican is an integral component of the machinery mediating fast synaptic transmission at the calyx of Held. Journal of Physiology, 2015, 593, 4341-4360.	2.9	60
24	Amyloid-Beta Peptides Trigger Aggregation of Alpha-Synuclein In Vitro. Molecules, 2020, 25, 580.	3.8	53
25	Glutaminyl cyclase contributes to the formation of focal and diffuse pyroglutamate (pGlu)-AÎ² deposits in hippocampus via distinct cellular mechanisms. Acta Neuropathologica, 2011, 121, 705-719.	7.7	52
26	Unique features of extracellular matrix in the mouse medial nucleus of trapezoid body â€“ Implications for physiological functions. Neuroscience, 2013, 228, 215-234.	2.3	51
27	Neuroprotection against iron-induced cell death by perineuronal nets - an in vivo analysis of oxidative stress. American Journal of Neurodegenerative Disease, 2012, 1, 122-9.	0.1	51
28	Tissue transglutaminase in Alzheimer's disease â€“ facts and fiction: a reply to â€œTissue transglutaminase is a biochemical marker for Alzheimer's diseaseâ€• Neurobiology of Aging, 2014, 35, e5-e9.	3.1	50
29	Perineuronal nets in the auditory system. Hearing Research, 2015, 329, 21-32.	2.0	44
30	Neuronal Aneuploidy in Health and Disease:A Cytomic Approach to Understand the Molecular Individuality of Neurons. International Journal of Molecular Sciences, 2009, 10, 1609-1627.	4.1	41
31	Perineuronal and perisynaptic extracellular matrix in the human spinal cord. Neuroscience, 2013, 238, 168-184.	2.3	40
32	Intracellular iron concentration of neurons with and without perineuronal nets. Nuclear Instruments & Methods in Physics Research B, 2007, 260, 153-158.	1.4	38
33	Perineuronal nets are largely unaffected in Alzheimer model Tg2576 mice. Neurobiology of Aging, 2010, 31, 1254-1256.	3.1	38
34	Prolyl Oligopeptidase: A Rising Star on the Stage of Neuroinflammation Research. CNS and Neurological Disorders - Drug Targets, 2011, 10, 340-348.	1.4	38
35	Isoglutaminyl cyclase contributes to CCL2-driven neuroinflammation in Alzheimerâ€™s disease. Acta Neuropathologica, 2015, 129, 565-583.	7.7	38
36	The neuronal extracellular matrix restricts distribution and internalization of aggregated Tau-protein. Neuroscience, 2016, 313, 225-235.	2.3	33

#	Article	IF	Citations
37	Quantitative microanalysis of perineuronal nets in brain tissue. Nuclear Instruments & Methods in Physics Research B, 2003, 210, 395-400.	1.4	31
38	Determination of trace elements in the human substantia nigra. Nuclear Instruments & Methods in Physics Research B, 2005, 231, 224-228.	1.4	31
39	Subthalamic nucleus volumes are highly consistent but decrease age-dependently-a combined magnetic resonance imaging and stereology approach in humans. Human Brain Mapping, 2017, 38, 909-922.	3.6	31
40	Distinct glutaminyl cyclase expression in Edingerâ€“Westphal nucleus, locus coeruleus and nucleus basalis Meynert contributes to pGlu-AÎ² pathology in Alzheimerâ€™s disease. Acta Neuropathologica, 2010, 120, 195-207.	7.7	29
41	Measuring the iron content of dopaminergic neurons in substantia nigra with MRI relaxometry. NeuroImage, 2021, 239, 118255.	4.2	28
42	Cell specific quantitative iron mapping on brain slices by immuno-ÂµPIXE in healthy elderly and Parkinsonâ€™s disease. Acta Neuropathologica Communications, 2021, 9, 47.	5.2	26
43	Chondroitin sulfate proteoglycan-based extracellular matrix in chicken (Gallus domesticus) brain. Brain Research, 2009, 1275, 10-23.	2.2	25
44	Perisynaptic aggrecanâ€based extracellular matrix coats in the human lateral geniculate body devoid of perineuronal nets. Journal of Neuroscience Research, 2012, 90, 376-387.	2.9	25
45	Deficiency of prolyl oligopeptidase in mice disturbs synaptic plasticity and reduces anxiety-like behaviour, body weight, and brain volume. European Neuropsychopharmacology, 2016, 26, 1048-1061.	0.7	25
46	Aggrecan-based extracellular matrix shows unique cortical features and conserved subcortical principles of mammalian brain organization in the Madagascan lesser hedgehog tenrec (Echinops) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	2.3	24
47	Synaptic coupling of inner ear sensory cells is controlled by brevican-based extracellular matrix baskets resembling perineuronal nets. BMC Biology, 2018, 16, 99.	3.8	23
48	Neurocan Contributes to Perineuronal Net Development. Neuroscience, 2020, 442, 69-86.	2.3	23
49	Differential transgene expression patterns in Alzheimer mouse models revealed by novel human amyloid precursor proteinâ€specific antibodies. Aging Cell, 2016, 15, 953-963.	6.7	22
50	Inhomogeneous distribution of <scp>A</scp>lzheimer pathology along the isocortical relief. Are cortical convolutions an <scp>A</scp>chilles heel of evolution?. Brain Pathology, 2017, 27, 603-611.	4.1	21
51	GAP43 shows partial co-localisation but no strong physical interaction with prolyl oligopeptidase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2010, 1804, 2162-2176.	2.3	20
52	Claudin-10a Deficiency Shifts Proximal Tubular Cl- Permeability to Cation Selectivity via Claudin-2 Redistribution. Journal of the American Society of Nephrology: JASN, 2022, 33, 699-717.	6.1	20
53	Reorganization of Synaptic Connections and Perineuronal Nets in the Deep Cerebellar Nuclei ofPurkinje Cell DegenerationMutant Mice. Neural Plasticity, 2016, 2016, 1-17.	2.2	18
54	Distribution and classification of aggrecanâ€based extracellular matrix in the thalamus of the rat. Journal of Neuroscience Research, 2010, 88, 3257-3266.	2.9	17

#	Article	IF	Citations
55	L-type Calcium Channel Cav1.2 Is Required for Maintenance of Auditory Brainstem Nuclei. Journal of Biological Chemistry, 2015, 290, 23692-23710.	3.4	17
56	Quantitative trace element analysis with sub-micron lateral resolution. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 734-737.	1.4	15
57	Chondroitin sulphate proteoglycan-based perineuronal net establishment is largely activity-independent in chick visual system. Journal of Chemical Neuroanatomy, 2010, 40, 243-247.	2.1	15
58	Tissue transglutaminase is not a biochemical marker for Alzheimer's disease. Neurobiology of Aging, 2013, 34, 2495-2498.	3.1	15
59	The protein tyrosine phosphatase RPTPÎ¶/phosphacan is critical for perineuronal net structure. Journal of Biological Chemistry, 2020, 295, 955-968.	3.4	14
60	Cellular and ultra structural evidence for cytoskeletal localization of prolyl endopeptidase-like protein in neurons. Neuroscience, 2013, 242, 128-139.	2.3	13
61	Mouse strain and brain regionâ€specific expression of the glutaminyl cyclases QC and isoQC. International Journal of Developmental Neuroscience, 2014, 36, 64-73.	1.6	13
62	High resolution quantitative element mapping of neuromelanin-containing neurons. Nuclear Instruments & Methods in Physics Research B, 2007, 260, 227-230.	1.4	12
63	Trace element mapping in Parkinsonian brain by quantitative ion beam microscopy. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 2156-2159.	1.4	12
64	Role of Prolyl Endopeptidase in Intracellular Transport and Protein Secretion. CNS and Neurological Disorders - Drug Targets, 2011, 10, 327-332.	1.4	12
65	Distribution and classification of the extracellular matrix in the olfactory bulb. Brain Structure and Function, 2020, 225, 321-344.	2.3	12
66	Antibody meets the microbeam â€“ or how to find neurofibrillary tangles. Nuclear Instruments & Methods in Physics Research B, 2005, 231, 229-233.	1.4	11
67	The Binding of Iron to Perineuronal Nets: A Combined Nuclear Microscopy and MÃ¶ssbauer Study. Hyperfine Interactions, 2005, 159, 285-291.	0.5	11
68	The protein tyrosine phosphatase RPTPÎ¶/phosphacan is critical for perineuronal net structure. Journal of Biological Chemistry, 2020, 295, 955-968.	3.4	11
69	Prolyl endopeptidase is involved in the degradation of neural cell adhesion molecules in vitro. Journal of Cell Science, 2016, 129, 3792-3802.	2.0	10
70	Carnosine selectively inhibits migration of IDH-wildtype glioblastoma cells in a co-culture model with fibroblasts. Cancer Cell International, 2018, 18, 111.	4.1	10
71	Peri-arterial Autonomic Innervation of the Human Ear. Scientific Reports, 2018, 8, 11469.	3.3	10
72	Biophysically motivated efficient estimation of the spatially isotropic component from a single gradientâ€recalled echo measurement. Magnetic Resonance in Medicine, 2019, 82, 1804-1811.	3.0	10

#	Article	IF	Citations
73	miR24â€“3p activity after delivery into pancreatic carcinoma cell lines exerts profound tumor-inhibitory effects through distinct pathways of apoptosis and autophagy induction. Cancer Letters, 2021, 503, 174-184.	7.2	10
74	Mapping the human lateral geniculate nucleus and its cytoarchitectonic subdivisions using quantitative MRI. NeuroImage, 2021, 244, 118559.	4.2	10
75	Brain extracellular matrix: An upcoming target in neurological and psychiatric disorders. European Journal of Neuroscience, 2021, 53, 3807-3810.	2.6	9
76	Morphological and elemental characterisation with the high-energy ion-nanoprobe LIPSION. Applied Surface Science, 2005, 252, 43-48.	6.1	8
77	Developmental Differences in Neocortex Neurogenesis and Maturation Between the Altricial Dwarf Rabbit and Precocial Guinea Pig. Frontiers in Neuroanatomy, 2021, 15, 678385.	1.7	8
78	Organization of brain extracellular matrix in the Chilean fat-tailed mouse opossum Thylamys elegans (Waterhouse, 1839). Journal of Chemical Neuroanatomy, 2006, 32, 143-158.	2.1	7
79	Cellular distribution and localisation of iron in adult rat brain (substantia nigra). Nuclear Instruments & Methods in Physics Research B, 2006, 249, 688-691.	1.4	7
80	On the quantification of intracellular proteins in multifluorescenceâ€labeled rat brain slices using slideâ€based cytometry. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2011, 79A, 485-491.	1.5	7
81	Finding the best clearing approach - Towards 3D wide-scale multimodal imaging of aged human brain tissue. NeuroImage, 2022, 247, 118832.	4.2	7
82	Influence of the extracellular matrix on water mobility in subcortical gray matter. Magnetic Resonance in Medicine, 2019, 81, 1265-1279.	3.0	6
83	Adhesion GPCR GPR56 Expression Profiling in Human Tissues. Cells, 2021, 10, 3557.	4.1	6
84	The human ubiquitin C promoter drives selective expression in principal neurons in the brain of a transgenic mouse line. Neurochemistry International, 2011, 59, 976-980.	3.8	5
85	Changes of several brain receptor complexes in the cerebral cortex of patients with Alzheimer disease: probable new potential pharmaceutical targets. Amino Acids, 2014, 46, 223-233.	2.7	5
86	Aggrecan modulates the expression and phosphorylation of tau in a novel bigenic TauP301L â€• Acan mouse model. European Journal of Neuroscience, 2021, 53, 3889-3904.	2.6	5
87	The Cytotoxic Effects of Camptothecin and Mastoparan on the Unicellular Green Alga Chlamydomonas reinhardtii. Journal of Eukaryotic Microbiology, 2017, 64, 806-819.	1.7	4
88	Neuroanatomical characterization of perineuronal net components in the human cochlear nucleus and superior olivary complex. Hearing Research, 2018, 367, 32-47.	2.0	4
89	Combining Deep Learning and Active Contours Opens The Way to Robust, Automated Analysis of Brain Cytoarchitectonics. Lecture Notes in Computer Science, 2018, , 179-187.	1.3	4
90	Perineuronal Nets in the Superior Olivary Complex. , 0, , 421-444.		3

#	Article	IF	Citations
91	High Iron and Iron Household Protein Contents in Perineuronal Net-Ensheathed Neurons Ensure Energy Metabolism with Safe Iron Handling. International Journal of Molecular Sciences, 2022, 23, 1634.	4.1	2
92	Towards a representative reference for MRI-based human axon radius assessment using light microscopy. NeuroImage, 2022, 249, 118906.	4.2	2
93	A Cytomic Approach Towards Genomic Individuality of Neurons. Neuromethods, 2017, , 81-106.	0.3	1
94	Tau Protein Modulates Perineuronal Extracellular Matrix Expression in the TauP301L-acan Mouse Model. Biomolecules, 2022, 12, 505.	4.0	1
95	[P1.69]: Subcellular localization of PREP and PREPL in neuronal cells suggests functions in intracellular transport and protein secretion. International Journal of Developmental Neuroscience, 2010, 28, 678-678.	1.6	0
96	Effect of brevican deficiency on neuroplasticity mediating molecules. SpringerPlus, 2015, 4, .	1.2	0