

Matthias Eder

List of Publications by Year in descending order

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59
papers

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citations

172457

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63
all docs

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docs citations

63
times ranked

10408
citing authors

#	ARTICLE	IF	CITATIONS
1	Ultramicroscopy: three-dimensional visualization of neuronal networks in the whole mouse brain. <i>Nature Methods</i> , 2007, 4, 331-336.	19.0	1,163
2	CB1 Cannabinoid Receptors and On-Demand Defense Against Excitotoxicity. <i>Science</i> , 2003, 302, 84-88.	12.6	1,083
3	The Endocannabinoid System Controls Key Epileptogenic Circuits in the Hippocampus. <i>Neuron</i> , 2006, 51, 455-466.	8.1	632
4	The Role of m6A/m-RNA Methylation in Stress Response Regulation. <i>Neuron</i> , 2018, 99, 389-403.e9.	8.1	293
5	Glutamatergic and Dopaminergic Neurons Mediate Anxiogenic and Anxiolytic Effects of CRHR1. <i>Science</i> , 2011, 333, 1903-1907.	12.6	268
6	Activation of the Cannabinoid Receptor Type 1 Decreases Glutamatergic and GABAergic Synaptic Transmission in the Lateral Amygdala of the Mouse. <i>Learning and Memory</i> , 2003, 10, 116-128.	1.3	191
7	Association of FKBP51 with Priming of Autophagy Pathways and Mediation of Antidepressant Treatment Response: Evidence in Cells, Mice, and Humans. <i>PLoS Medicine</i> , 2014, 11, e1001755.	8.4	141
8	Nectin-3 links CRHR1 signaling to stress-induced memory deficits and spine loss. <i>Nature Neuroscience</i> , 2013, 16, 706-713.	14.8	123
9	Cross-disorder risk gene CACNA1C differentially modulates susceptibility to psychiatric disorders during development and adulthood. <i>Molecular Psychiatry</i> , 2018, 23, 533-543.	7.9	119
10	Ucn3 and CRF-R2 in the medial amygdala regulate complex social dynamics. <i>Nature Neuroscience</i> , 2016, 19, 1489-1496.	14.8	91
11	Intranasally Administered Neuropeptide S (NPS) Exerts Anxiolytic Effects Following Internalization Into NPS Receptor-Expressing Neurons. <i>Neuropsychopharmacology</i> , 2012, 37, 1323-1337.	5.4	80
12	CRF receptor type 2 neurons in the posterior bed nucleus of the stria terminalis critically contribute to stress recovery. <i>Molecular Psychiatry</i> , 2017, 22, 1691-1700.	7.9	67
13	Infrared-Guided Laser Stimulation of Neurons in Brain Slices. <i>Science Signaling</i> , 2002, 2002, pl2-pl2.	3.6	65
14	The Rab5 guanylate exchange factor Rin1 regulates endocytosis of the EphA4 receptor in mature excitatory neurons. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 12539-12544.	7.1	64
15	Tumor suppressor down-regulated in renal cell carcinoma 1 (DRR1) is a stress-induced actin bundling factor that modulates synaptic efficacy and cognition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 17213-17218.	7.1	64
16	Tranexamic Acid Impairs $\hat{3}$ -Aminobutyric Acid Receptor Type Aâ€‘mediated Synaptic Transmission in the Murine Amygdala. <i>Anesthesiology</i> , 2014, 120, 639-649.	2.5	59
17	Extinction of avoidance behavior by safety learning depends on endocannabinoid signaling in the hippocampus. <i>Journal of Psychiatric Research</i> , 2017, 90, 46-59.	3.1	57
18	Functional optical probing of the hippocampal trisynaptic circuit in vitro: network dynamics, filter properties, and polysynaptic induction of CA1 LTP. <i>Frontiers in Neuroscience</i> , 2015, 9, 160.	2.8	53

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19	The co-chaperone Fkbp5 shapes the acute stress response in the paraventricular nucleus of the hypothalamus of male mice. <i>Molecular Psychiatry</i> , 2021, 26, 3060-3076.	7.9	52
20	CRFR1 in AgRP Neurons Modulates Sympathetic Nervous System Activity to Adapt to Cold Stress and Fasting. <i>Cell Metabolism</i> , 2016, 23, 1185-1199.	16.2	49
21	Consolidation of Remote Fear Memories Involves Corticotropin-Releasing Hormone (CRH) Receptor Type 1-Mediated Enhancement of AMPA Receptor GluR1 Signaling in the Dentate Gyrus. <i>Neuropsychopharmacology</i> , 2012, 37, 787-796.	5.4	48
22	Isoflurane and sevoflurane dose-dependently impair hippocampal long-term potentiation. <i>European Journal of Pharmacology</i> , 2009, 623, 47-51.	3.5	47
23	Activation of mGlu receptors induces LTD without affecting postsynaptic sensitivity of CA1 neurons in rat hippocampal slices. <i>Journal of Physiology</i> , 2003, 546, 455-460.	2.9	46
24	Isoflurane modulates glutamatergic and GABAergic neurotransmission in the amygdala. <i>European Journal of Neuroscience</i> , 2004, 20, 1276-1280.	2.6	45
25	Methylglyoxal-mediated anxiolysis involves increased protein modification and elevated expression of glyoxalase 1 in the brain. <i>Journal of Neurochemistry</i> , 2010, 113, 1240-1251.	3.9	45
26	Distribution and Properties of Functional Postsynaptic Kainate Receptors on Neocortical Layer V Pyramidal Neurons. <i>Journal of Neuroscience</i> , 2003, 23, 6660-6670.	3.6	44
27	Nitrous oxide (N2O) pre- and postsynaptically attenuates NMDA receptor-mediated neurotransmission in the amygdala. <i>Neuropharmacology</i> , 2007, 52, 716-723.	4.1	39
28	Anaesthesia Monitoring by Recurrence Quantification Analysis of EEG Data. <i>PLoS ONE</i> , 2010, 5, e8876.	2.5	37
29	Neocortical Long-Term Potentiation and Long-Term Depression: Site of Expression Investigated by Infrared-Guided Laser Stimulation. <i>Journal of Neuroscience</i> , 2002, 22, 7558-7568.	3.6	34
30	Activation of CRH receptor type 1 expressed on glutamatergic neurons increases excitability of CA1 pyramidal neurons by the modulation of voltage-gated ion channels. <i>Frontiers in Cellular Neuroscience</i> , 2013, 7, 91.	3.7	33
31	Entorhinal theta-frequency input to the dentate gyrus trisynaptically evokes hippocampal CA1 LTP. <i>Frontiers in Neural Circuits</i> , 2012, 6, 64.	2.8	32
32	Sevoflurane Anesthesia Improves Cognitive Performance in Mice, but Does Not Influence In Vitro Long-Term Potentiation in Hippocampus CA1 Stratum Radiatum. <i>PLoS ONE</i> , 2013, 8, e64732.	2.5	31
33	First Photoswitchable Neurotransmitter Transporter Inhibitor: Light-Induced Control of $\text{[}^3\text{H}$ -Aminobutyric Acid Transporter 1 (GAT1) Activity in Mouse Brain. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 6809-6821.	6.4	30
34	Shining Light on Neurons - Elucidation of Neuronal Functions by Photostimulation. <i>Reviews in the Neurosciences</i> , 2004, 15, 167-83.	2.9	29
35	Voltage-sensitive dye imaging demonstrates an enhancing effect of corticotropin-releasing hormone on neuronal activity propagation through the hippocampal formation. <i>Journal of Psychiatric Research</i> , 2011, 45, 256-261.	3.1	25
36	Low Dose Isoflurane Exerts Opposing Effects on Neuronal Network Excitability in Neocortex and Hippocampus. <i>PLoS ONE</i> , 2012, 7, e39346.	2.5	25

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37	Identification of a Role for the Ventral Hippocampus in Neuropeptide S-Elicited Anxiolysis. <i>PLoS ONE</i> , 2013, 8, e60219.	2.5	23
38	Crybb2 coding for β 2-crystallin affects sensorimotor gating and hippocampal function. <i>Mammalian Genome</i> , 2013, 24, 333-348.	2.2	20
39	Intranasally Applied Neuropeptide S Shifts a High-Anxiety Electrophysiological Endophenotype in the Ventral Hippocampus towards a "Normal"-Anxiety One. <i>PLoS ONE</i> , 2015, 10, e0120272.	2.5	20
40	Xenon Attenuates Excitatory Synaptic Transmission in the Rodent Prefrontal Cortex and Spinal Cord Dorsal Horn. <i>Anesthesiology</i> , 2009, 111, 1297-1307.	2.5	20
41	The xenon-mediated antagonism against the NMDA receptor is non-selective for receptors containing either NR2A or NR2B subunits in the mouse amygdala. <i>European Journal of Pharmacology</i> , 2009, 619, 33-37.	3.5	19
42	Loratadine and Analogues: Discovery and Preliminary Structure-Activity Relationship of Inhibitors of the Amino Acid Transporter B ⁰ /AT2. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 9473-9479.	6.4	19
43	Xenon Attenuates Hippocampal Long-term Potentiation by Diminishing Synaptic and Extrasynaptic α -methyl-D-aspartate Receptor Currents. <i>Anesthesiology</i> , 2012, 116, 673-682.	2.5	17
44	Real-Time Imaging of Amygdalar Network Dynamics <i>In Vitro</i> Reveals a Neurophysiological Link to Behavior in a Mouse Model of Extremes in Trait Anxiety. <i>Journal of Neuroscience</i> , 2013, 33, 16262-16267.	3.6	16
45	Development of New Photoswitchable Azobenzene Based β -Aminobutyric Acid (GABA) Uptake Inhibitors with Distinctly Enhanced Potency upon Photoactivation. <i>Journal of Medicinal Chemistry</i> , 2018, 61, 6211-6235.	6.4	15
46	Isoflurane slows inactivation kinetics of rat recombinant α 1 β 2 γ 2L GABAA receptors: enhancement of GABAergic transmission despite an open-channel block. <i>Neuroscience Letters</i> , 2001, 307, 97-100.	2.1	12
47	Effects of sensory deprivation on columnar organization of neuronal circuits in the rat barrel cortex. <i>European Journal of Neuroscience</i> , 2004, 20, 1118-1124.	2.6	12
48	Extracellular signal-regulated kinase phosphorylation in forebrain neurones contributes to osmoregulatory mechanisms. <i>Journal of Physiology</i> , 2014, 592, 1637-1654.	2.9	12
49	Optogenetic evocation of field inhibitory postsynaptic potentials in hippocampal slices: a simple and reliable approach for studying pharmacological effects on GABAA and GABAB receptor-mediated neurotransmission. <i>Frontiers in Cellular Neuroscience</i> , 2014, 8, 2.	3.7	11
50	Desipramine targets astrocytes to attenuate synaptic plasticity via modulation of the ephrinA3/EphA4 signalling. <i>Neuropharmacology</i> , 2016, 105, 154-163.	4.1	11
51	High-Speed imaging reveals opposing effects of chronic stress and antidepressants on neuronal activity propagation through the hippocampal trisynaptic circuit. <i>Frontiers in Neural Circuits</i> , 2015, 9, 70.	2.8	10
52	The potassium channel modulator flupirtine shifts the frequency-response function of hippocampal synapses to favour LTD in mice. <i>Neuroscience Letters</i> , 2004, 370, 186-190.	2.1	8
53	Loss of the psychiatric risk factor SLC6A15 is associated with increased metabolic functions in primary hippocampal neurons. <i>European Journal of Neuroscience</i> , 2021, 53, 390-401.	2.6	8
54	Local Optogenetic Induction of Fast (20-40 Hz) Pyramidal-Interneuron Network Oscillations in the <i>In Vitro</i> and <i>In Vivo</i> CA1 Hippocampus: Modulation by CRF and Enforcement of Perirhinal Theta Activity. <i>Frontiers in Cellular Neuroscience</i> , 2016, 10, 108.	3.7	7

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55	Sensory deprivation changes the pattern of synaptic connectivity in rat barrel cortex. NeuroReport, 2003, 14, 1787-1791.	1.2	6
56	WIN 55,212-2 decreases the spatial spread of neocortical excitation in vitro. NeuroReport, 2005, 16, 993-996.	1.2	4
57	Infrared-Guided Laser Stimulation as a Tool for Elucidating the Synaptic Site of Expression of Long-Term Synaptic Plasticity. Methods in Molecular Biology, 2007, 403, 113-122.	0.9	3
58	Infrared-Guided Laser Stimulation of Neurons in Brain Slices. Cold Spring Harbor Protocols, 2008, 2008, pdb.prot4851-pdb.prot4851.	0.3	0
59	Grundlagen der Physiologie von Nervenzellen. , 2008, , 61-69.		0