K Ulrich Bayer

List of Publications by Year
in descending order

53 papers	8,155 citations	159585 30 h-index	175258 52 g-index
57 all docs	57 docs citations	57 times ranked	16298 citing authors

#	Article	IF	Citations
1	Aî²-induced synaptic impairments require CaMKII activity that is stimulated by indirect signaling events. IScience, 2022, 25, 104368.	4.1	0
2	CaMKII holoenzyme mechanisms that govern the LTP versus LTD decision. Science Advances, 2021, 7, .	10.3	42
3	Young DAPK1 knockout mice have altered presynaptic function. Journal of Neurophysiology, 2021, 125, 1973-1981.	1.8	4
4	Characterization of six CaMKIIÎ± variants found in patients with schizophrenia. IScience, 2021, 24, 103184.	4.1	10
5	GluN2B S1303 phosphorylation by CaMKII or DAPK1: No indication for involvement in ischemia or LTP. IScience, 2021, 24, 103214.	4.1	11
6	CaMKIIÎ± knockout protects from ischemic neuronal cell death after resuscitation from cardiac arrest. Brain Research, 2021, 1773, 147699.	2.2	5
7	Conserved and divergent features of neuronal CaMKII holoenzyme structure, function, and high-order assembly. Cell Reports, 2021, 37, 110168.	6.4	17
8	Calcium/Calmodulin-Dependent Kinase (CaMKII) Inhibition Protects Against Purkinje Cell Damage Following CA/CPR in Mice. Molecular Neurobiology, 2020, 57, 150-158.	4.0	12
9	CaMKII versus DAPK1 Binding to GluN2B in Ischemic Neuronal Cell Death after Resuscitation from Cardiac Arrest. Cell Reports, 2020, 30, 1-8.e4.	6.4	46
10	The CaMKII K42M and K42R mutations are equivalent in suppressing kinase activity and targeting. PLoS ONE, 2020, 15, e0236478.	2.5	11
11	CaM Kinase: Still Inspiring at 40. Neuron, 2019, 103, 380-394.	8.1	220
12	Simultaneous Live Imaging of Multiple Endogenous Proteins Reveals a Mechanism for Alzheimerâ€™s-Related Plasticity Impairment. Cell Reports, 2019, 27, 658-665.e4.	6.4	39
13	Analysis of the CaMKIIÎ± and Î² splice-variant distribution among brain regions reveals isoform-specific differences in holoenzyme formation. Scientific Reports, 2018, 8, 5448.	3.3	43
14	CaMKII regulates the depalmitoylation and synaptic removal of the scaffold protein AKAP79/150 to mediate structural long-term depression. Journal of Biological Chemistry, 2018, 293, 1551-1567.	3.4	43
15	CaMKII Metaplasticity Drives Aî² Oligomer-Mediated Synaptotoxicity. Cell Reports, 2018, 23, 3137-3145.	6.4	61
16	Autonomous CaMKII Activity as a Drug Target for Histological and Functional Neuroprotection after Resuscitation from Cardiac Arrest. Cell Reports, 2017, 18, 1109-1117.	6.4	45
17	DAPK1 Mediates LTD by Making CaMKII/GluN2B Binding LTP Specific. Cell Reports, 2017, 19, 2231-2243.	6.4	73
18	The CaMKII holoenzyme structure in activation-competent conformations. Nature Communications, 2017, 8, 15742.	12.8	100

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19	Developmental restoration of LTP deficits in heterozygous CaMKIIÎ± KO mice. Journal of Neurophysiology, 2016, 116, 2140-2151.	1.8	9
20	Ca<scp>MKII</scp>â€•mediated displacement of <scp>AIDA</scp>â€•1 out of the postsynaptic density core. FEBS Letters, 2016, 590, 2934-2939.	2.8	10
21	Multiple CaMKII Binding Modes to the Actin Cytoskeleton Revealed by Single-Molecule Imaging. Biophysical Journal, 2016, 111, 395-408.	0.5	29
22	The CaMKII/GluN2B Protein Interaction Maintains Synaptic Strength. Journal of Biological Chemistry, 2016, 291, 16082-16089.	3.4	63
23	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	9.1	4,701
24	Live imaging of endogenous Ca²⁺/calmodulinâ€•dependent protein kinase <scp>II</scp> in neurons reveals that ischemiaâ€•related aggregation does not require kinase activity. Journal of Neurochemistry, 2015, 135, 666-673.	3.9	15
25	CaMKII Binding to GluN2B Is Differentially Affected by Macromolecular Crowding Reagents. PLoS ONE, 2014, 9, e96522.	2.5	13
26	CaMKII isoforms differ in their specific requirements for regulation by nitric oxide. FEBS Letters, 2014, 588, 4672-4676.	2.8	15
27	CaMKII Activity in the Ventral Tegmental Area Gates Cocaine-Induced Synaptic Plasticity in the Nucleus Accumbens. Neuropsychopharmacology, 2014, 39, 989-999.	5.4	28
28	Autonomous CaMKII Mediates Both LTP and LTD Using a Mechanism for Differential Substrate Site Selection. Cell Reports, 2014, 6, 431-437.	6.4	173
29	Necessary, but not sufficient: Insights into the mechanisms of mGluR mediated long-term depression from a rat model of early life seizures. Neuropharmacology, 2014, 84, 1-12.	4.1	20
30	Excitotoxic glutamate insults block autophagic flux in hippocampal neurons. Brain Research, 2014, 1542, 12-19.	2.2	60
31	NMDA-induced accumulation of Shank at the postsynaptic density is mediated by CaMKII. Biochemical and Biophysical Research Communications, 2014, 450, 808-811.	2.1	7
32	Nitric Oxide Induces Ca2+-independent Activity of the Ca2+/Calmodulin-dependent Protein Kinase II (CaMKII). Journal of Biological Chemistry, 2014, 289, 19458-19465.	3.4	63
33	Autonomous CaMKII requires further stimulation by Ca²⁺/calmodulin for enhancing synaptic strength. FASEB Journal, 2014, 28, 3810-3819.	0.5	44
34	NMDA Receptor Activation Strengthens Weak Electrical Coupling in Mammalian Brain. Neuron, 2014, 81, 1375-1388.	8.1	90
35	Enzymatic Activity of CaMKII Is Not Required for Its Interaction with the Glutamate Receptor Subunit GluN2B. Molecular Pharmacology, 2013, 84, 834-843.	2.3	23
36	Persistent Reversal of Enhanced Amphetamine Intake by Transient CaMKII Inhibition. Journal of Neuroscience, 2013, 33, 1411-1416.	3.6	41

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37	CaMKII regulation in information processing and storage. Trends in Neurosciences, 2012, 35, 607-618.	8.6	281
38	Ca2+/Calmodulin-Dependent Protein Kinase II (CaMKII). Neuromethods, 2012, , 49-72.	0.3	21
39	A Significant but Rather Mild Contribution of T286 Autophosphorylation to Ca2+/CaM-Stimulated CaMKII Activity. PLoS ONE, 2012, 7, e37176.	2.5	32
40	Improving a Natural CaMKII Inhibitor by Random and Rational Design. PLoS ONE, 2011, 6, e25245.	2.5	37
41	Role of the CaMKII/NMDA Receptor Complex in the Maintenance of Synaptic Strength. Journal of Neuroscience, 2011, 31, 9170-9178.	3.6	220
42	Nucleotides and Phosphorylation Bi-directionally Modulate Ca2+/Calmodulin-dependent Protein Kinase II (CaMKII) Binding to the N-Methyl-d-aspartate (NMDA) Receptor Subunit GluN2B. Journal of Biological Chemistry, 2011, 286, 31272-31281.	3.4	63
43	CaMKII in cerebral ischemia. Acta Pharmacologica Sinica, 2011, 32, 861-872.	6.1	114
44	Effective Post-insult Neuroprotection by a Novel Ca2+/ Calmodulin-dependent Protein Kinase II (CaMKII) Inhibitor. Journal of Biological Chemistry, 2010, 285, 20675-20682.	3.4	109
45	CaMKII "Autonomy" Is Required for Initiating But Not for Maintaining Neuronal Long-Term Information Storage. Journal of Neuroscience, 2010, 30, 8214-8220.	3.6	141
46	CaMKII Autonomy Is Substrate-dependent and Further Stimulated by Ca2+/Calmodulin. Journal of Biological Chemistry, 2010, 285, 17930-17937.	3.4	85
47	Selective translocation of Ca ²⁺ /calmodulin protein kinase IIÎ± (CaMKIIÎ±) to inhibitory synapses. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20559-20564.	7.1	125
48	Differential regulation by ATP versus ADP further links CaMKII aggregation to ischemic conditions. FEBS Letters, 2009, 583, 3577-3581.	2.8	17
49	Dual Mechanism of a Natural CaMKII Inhibitor. Molecular Biology of the Cell, 2007, 18, 5024-5033.	2.1	162
50	Transition from Reversible to Persistent Binding of CaMKII to Postsynaptic Sites and NR2B. Journal of Neuroscience, 2006, 26, 1164-1174.	3.6	223
51	CaMKIIÎ² Association with the Actin Cytoskeleton Is Regulated by Alternative Splicing. Molecular Biology of the Cell, 2006, 17, 4656-4665.	2.1	101
52	Calcium/Calmodulin-dependent Protein Kinase II Binds to Raf-1 and Modulates Integrin-stimulated ERK Activation. Journal of Biological Chemistry, 2003, 278, 45101-45108.	3.4	135
53	Alternative splicing modulates the frequency-dependent response of CaMKII to Ca2+ oscillations. EMBO Journal, 2002, 21, 3590-3597.	7.8	99