

# K Ulrich Bayer

## List of Publications by Year in descending order

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Version: 2024-02-01

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	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). <i>Autophagy</i> , 2016, 12, 1-222.	9.1	4,701
2	CaMKII regulation in information processing and storage. <i>Trends in Neurosciences</i> , 2012, 35, 607-618.	8.6	281
3	Transition from Reversible to Persistent Binding of CaMKII to Postsynaptic Sites and NR2B. <i>Journal of Neuroscience</i> , 2006, 26, 1164-1174.	3.6	223
4	Role of the CaMKII/NMDA Receptor Complex in the Maintenance of Synaptic Strength. <i>Journal of Neuroscience</i> , 2011, 31, 9170-9178.	3.6	220
5	CaM Kinase: Still Inspiring at 40. <i>Neuron</i> , 2019, 103, 380-394.	8.1	220
6	Autonomous CaMKII Mediates Both LTP and LTD Using a Mechanism for Differential Substrate Site Selection. <i>Cell Reports</i> , 2014, 6, 431-437.	6.4	173
7	Dual Mechanism of a Natural CaMKII Inhibitor. <i>Molecular Biology of the Cell</i> , 2007, 18, 5024-5033.	2.1	162
8	CaMKII "Autonomy" Is Required for Initiating But Not for Maintaining Neuronal Long-Term Information Storage. <i>Journal of Neuroscience</i> , 2010, 30, 8214-8220.	3.6	141
9	Calcium/Calmodulin-dependent Protein Kinase II Binds to Raf-1 and Modulates Integrin-stimulated ERK Activation. <i>Journal of Biological Chemistry</i> , 2003, 278, 45101-45108.	3.4	135
10	Selective translocation of Ca <sup>2+</sup> /calmodulin protein kinase II $\beta$ (CaMKII $\beta$ ) to inhibitory synapses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 20559-20564.	7.1	125
11	CaMKII in cerebral ischemia. <i>Acta Pharmacologica Sinica</i> , 2011, 32, 861-872.	6.1	114
12	Effective Post-insult Neuroprotection by a Novel Ca <sup>2+</sup> / Calmodulin-dependent Protein Kinase II (CaMKII) Inhibitor. <i>Journal of Biological Chemistry</i> , 2010, 285, 20675-20682.	3.4	109
13	CaMKII $\beta^2$ Association with the Actin Cytoskeleton Is Regulated by Alternative Splicing. <i>Molecular Biology of the Cell</i> , 2006, 17, 4656-4665.	2.1	101
14	The CaMKII holoenzyme structure in activation-competent conformations. <i>Nature Communications</i> , 2017, 8, 15742.	12.8	100
15	Alternative splicing modulates the frequency-dependent response of CaMKII to Ca <sup>2+</sup> oscillations. <i>EMBO Journal</i> , 2002, 21, 3590-3597.	7.8	99
16	NMDA Receptor Activation Strengthens Weak Electrical Coupling in Mammalian Brain. <i>Neuron</i> , 2014, 81, 1375-1388.	8.1	90
17	CaMKII Autonomy Is Substrate-dependent and Further Stimulated by Ca <sup>2+</sup> /Calmodulin. <i>Journal of Biological Chemistry</i> , 2010, 285, 17930-17937.	3.4	85
18	DAPK1 Mediates LTD by Making CaMKII/GluN2B Binding LTP Specific. <i>Cell Reports</i> , 2017, 19, 2231-2243.	6.4	73

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19	Nucleotides and Phosphorylation Bi-directionally Modulate Ca <sup>2+</sup> /Calmodulin-dependent Protein Kinase II (CaMKII) Binding to the N-Methyl-d-aspartate (NMDA) Receptor Subunit GluN2B. <i>Journal of Biological Chemistry</i> , 2011, 286, 31272-31281.	3.4	63
20	Nitric Oxide Induces Ca <sup>2+</sup> -independent Activity of the Ca <sup>2+</sup> /Calmodulin-dependent Protein Kinase II (CaMKII). <i>Journal of Biological Chemistry</i> , 2014, 289, 19458-19465.	3.4	63
21	The CaMKII/GluN2B Protein Interaction Maintains Synaptic Strength. <i>Journal of Biological Chemistry</i> , 2016, 291, 16082-16089.	3.4	63
22	CaMKII Metaplasticity Drives A $\beta$ Oligomer-Mediated Synaptotoxicity. <i>Cell Reports</i> , 2018, 23, 3137-3145.	6.4	61
23	Excitotoxic glutamate insults block autophagic flux in hippocampal neurons. <i>Brain Research</i> , 2014, 1542, 12-19.	2.2	60
24	CaMKII versus DAPK1 Binding to GluN2B in Ischemic Neuronal Cell Death after Resuscitation from Cardiac Arrest. <i>Cell Reports</i> , 2020, 30, 1-8.e4.	6.4	46
25	Autonomous CaMKII Activity as a Drug Target for Histological and Functional Neuroprotection after Resuscitation from Cardiac Arrest. <i>Cell Reports</i> , 2017, 18, 1109-1117.	6.4	45
26	Autonomous CaMKII requires further stimulation by Ca <sup>2+</sup> /calmodulin for enhancing synaptic strength. <i>FASEB Journal</i> , 2014, 28, 3810-3819.	0.5	44
27	Analysis of the CaMKII $\alpha$ and $\beta$ splice-variant distribution among brain regions reveals isoform-specific differences in holoenzyme formation. <i>Scientific Reports</i> , 2018, 8, 5448.	3.3	43
28	CaMKII regulates the depalmitoylation and synaptic removal of the scaffold protein AKAP79/150 to mediate structural long-term depression. <i>Journal of Biological Chemistry</i> , 2018, 293, 1551-1567.	3.4	43
29	CaMKII holoenzyme mechanisms that govern the LTP versus LTD decision. <i>Science Advances</i> , 2021, 7, .	10.3	42
30	Persistent Reversal of Enhanced Amphetamine Intake by Transient CaMKII Inhibition. <i>Journal of Neuroscience</i> , 2013, 33, 1411-1416.	3.6	41
31	Simultaneous Live Imaging of Multiple Endogenous Proteins Reveals a Mechanism for Alzheimer's-Related Plasticity Impairment. <i>Cell Reports</i> , 2019, 27, 658-665.e4.	6.4	39
32	Improving a Natural CaMKII Inhibitor by Random and Rational Design. <i>PLoS ONE</i> , 2011, 6, e25245.	2.5	37
33	A Significant but Rather Mild Contribution of T286 Autophosphorylation to Ca <sup>2+</sup> /CaM-Stimulated CaMKII Activity. <i>PLoS ONE</i> , 2012, 7, e37176.	2.5	32
34	Multiple CaMKII Binding Modes to the Actin Cytoskeleton Revealed by Single-Molecule Imaging. <i>Biophysical Journal</i> , 2016, 111, 395-408.	0.5	29
35	CaMKII Activity in the Ventral Tegmental Area Gates Cocaine-Induced Synaptic Plasticity in the Nucleus Accumbens. <i>Neuropsychopharmacology</i> , 2014, 39, 989-999.	5.4	28
36	Enzymatic Activity of CaMKII Is Not Required for Its Interaction with the Glutamate Receptor Subunit GluN2B. <i>Molecular Pharmacology</i> , 2013, 84, 834-843.	2.3	23

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37	Ca <sup>2+</sup> /Calmodulin-Dependent Protein Kinase II (CaMKII). <i>Neuromethods</i> , 2012, , 49-72.	0.3	21
38	Necessary, but not sufficient: Insights into the mechanisms of mGluR mediated long-term depression from a rat model of early life seizures. <i>Neuropharmacology</i> , 2014, 84, 1-12.	4.1	20
39	Differential regulation by ATP versus ADP further links CaMKII aggregation to ischemic conditions. <i>FEBS Letters</i> , 2009, 583, 3577-3581.	2.8	17
40	Conserved and divergent features of neuronal CaMKII holoenzyme structure, function, and high-order assembly. <i>Cell Reports</i> , 2021, 37, 110168.	6.4	17
41	CaMKII isoforms differ in their specific requirements for regulation by nitric oxide. <i>FEBS Letters</i> , 2014, 588, 4672-4676.	2.8	15
42	Live imaging of endogenous Ca <sup>2+</sup> /calmodulin-dependent protein kinase II in neurons reveals that ischemia-related aggregation does not require kinase activity. <i>Journal of Neurochemistry</i> , 2015, 135, 666-673.	3.9	15
43	CaMKII Binding to GluN2B Is Differentially Affected by Macromolecular Crowding Reagents. <i>PLoS ONE</i> , 2014, 9, e96522.	2.5	13
44	Calcium/Calmodulin-Dependent Kinase (CaMKII) Inhibition Protects Against Purkinje Cell Damage Following CA/CPR in Mice. <i>Molecular Neurobiology</i> , 2020, 57, 150-158.	4.0	12
45	The CaMKII K42M and K42R mutations are equivalent in suppressing kinase activity and targeting. <i>PLoS ONE</i> , 2020, 15, e0236478.	2.5	11
46	GluN2B S1303 phosphorylation by CaMKII or DAPK1: No indication for involvement in ischemia or LTP. <i>IScience</i> , 2021, 24, 103214.	4.1	11
47	CaMKII-mediated displacement of AIDA1 out of the postsynaptic density core. <i>FEBS Letters</i> , 2016, 590, 2934-2939.	2.8	10
48	Characterization of six CaMKII $\beta$ variants found in patients with schizophrenia. <i>IScience</i> , 2021, 24, 103184.	4.1	10
49	Developmental restoration of LTP deficits in heterozygous CaMKII $\beta$ KO mice. <i>Journal of Neurophysiology</i> , 2016, 116, 2140-2151.	1.8	9
50	NMDA-induced accumulation of Shank at the postsynaptic density is mediated by CaMKII. <i>Biochemical and Biophysical Research Communications</i> , 2014, 450, 808-811.	2.1	7
51	CaMKII $\beta$ knockout protects from ischemic neuronal cell death after resuscitation from cardiac arrest. <i>Brain Research</i> , 2021, 1773, 147699.	2.2	5
52	Young DAPK1 knockout mice have altered presynaptic function. <i>Journal of Neurophysiology</i> , 2021, 125, 1973-1981.	1.8	4
53	A $\beta$ <sup>2</sup> -induced synaptic impairments require CaMKII activity that is stimulated by indirect signaling events. <i>IScience</i> , 2022, 25, 104368.	4.1	0