Pascal S Kaeser

List of Publications by Year
in descending order

55 papers	6,236 citations	94433 37 h-index	149698 56 g-index
68 all docs	68 docs citations	68 times ranked	6856 citing authors

#	Article	IF	Citations
1	SynGO: An Evidence-Based, Expert-Curated Knowledge Base for the Synapse. Neuron, 2019, 103, 217-234.e4.	8.1	518
2	RIM Proteins Tether Ca2+ Channels to Presynaptic Active Zones via a Direct PDZ-Domain Interaction. Cell, 2011, 144, 282-295.	28.9	502
3	Molecular Mechanisms for Synchronous, Asynchronous, and Spontaneous Neurotransmitter Release. Annual Review of Physiology, 2014, 76, 333-363.	13.1	364
4	RIM Determines Ca2+ Channel Density and Vesicle Docking at the Presynaptic Active Zone. Neuron, 2011, 69, 304-316.	8.1	316
5	Complement facilitates early prion pathogenesis. Nature Medicine, 2001, 7, 488-492.	30.7	301
6	Immuno-SABER enables highly multiplexed and amplified protein imaging in tissues. Nature Biotechnology, 2019, 37, 1080-1090.	17.5	301
7	Transcellular Nanoalignment of Synaptic Function. Neuron, 2017, 96, 680-696.	8.1	258
8	RIM Proteins Activate Vesicle Priming by Reversing Autoinhibitory Homodimerization of Munc13. Neuron, 2011, 69, 317-331.	8.1	251
9	Endocannabinoid-Mediated Long-Term Plasticity Requires cAMP/PKA Signaling and RIM1Î±. Neuron, 2007, 54, 801-812.	8.1	238
10	Phosphorylation of RIM1Î± by PKA Triggers Presynaptic Long-Term Potentiation at Cerebellar Parallel Fiber Synapses. Cell, 2003, 115, 49-60.	28.9	232
11	The readily releasable pool of synaptic vesicles. Current Opinion in Neurobiology, 2017, 43, 63-70.	4.2	174
12	Dopamine Secretion Is Mediated by Sparse Active Zone-like Release Sites. Cell, 2018, 172, 706-718.e15.	28.9	172
13	Prions: health scare and biological challenge. Nature Reviews Molecular Cell Biology, 2001, 2, 118-126.	37.0	137
14	Spatial and temporal scales of dopamine transmission. Nature Reviews Neuroscience, 2021, 22, 345-358.	10.2	136
15	Sensory-Related Neural Activity Regulates the Structure of Vascular Networks in the Cerebral Cortex. Neuron, 2014, 83, 1117-1130.	8.1	131
16	Redundant functions of RIM1Î± and RIM2Î± in Ca2+-triggered neurotransmitter release. EMBO Journal, 2006, 25, 5852-5863.	7.8	120
17	Fusion Competent Synaptic Vesicles Persist upon Active Zone Disruption and Loss of Vesicle Docking. Neuron, 2016, 91, 777-791.	8.1	117
18	Rapid Sequential in Situ Multiplexing with DNA Exchange Imaging in Neuronal Cells and Tissues. Nano Letters, 2017, 17, 6131-6139.	9.1	116

#	Article	IF	Citations
19	RIM genes differentially contribute to organizing presynaptic release sites. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11830-11835.	7.1	111
20	Optimizing Nervous System-Specific Gene Targeting with Cre Driver Lines: Prevalence of Germline Recombination and Influencing Factors. Neuron, 2020, 106, 37-65.e5.	8.1	109
21	An action potential initiation mechanism in distal axons for the control of dopamine release. Science, 2022, 375, 1378-1385.	12.6	107
22	Mechanisms and regulation of dopamine release. Current Opinion in Neurobiology, 2019, 57, 46-53.	4.2	98
23	ELKS2Î±/CAST Deletion Selectively Increases Neurotransmitter Release at Inhibitory Synapses. Neuron, 2009, 64, 227-239.	8.1	96
24	RIM1Î± and RIM1Î² Are Synthesized from Distinct Promoters of the<i>RIM1</i>Gene to Mediate Differential But Overlapping Synaptic Functions. Journal of Neuroscience, 2008, 28, 13435-13447.	3.6	84
25	Neurotransmitter Release at the Thalamocortical Synapse Instructs Barrel Formation But Not Axon Patterning in the Somatosensory Cortex. Journal of Neuroscience, 2012, 32, 6183-6196.	3.6	79
26	RIM1Î± phosphorylation at serine-413 by protein kinase A is not required for presynaptic long-term plasticity or learning. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 14680-14685.	7.1	69
27	Efficient Lymphoreticular Prion Propagation Requires PrP c in Stromal and Hematopoietic Cells. Journal of Virology, 2001, 75, 7097-7106.	3.4	67
28	Liprin-Î±3 controls vesicle docking and exocytosis at the active zone of hippocampal synapses. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 2234-2239.	7.1	67
29	The Active Zone Protein Family ELKS Supports Ca²⁺Influx at Nerve Terminals of Inhibitory Hippocampal Neurons. Journal of Neuroscience, 2014, 34, 12289-12303.	3.6	66
30	Synapse and Active Zone Assembly in the Absence of Presynaptic Ca2+ Channels and Ca2+ Entry. Neuron, 2020, 107, 667-683.e9.	8.1	64
31	Genetic evidence for a protein-kinase-A-mediated presynaptic component in NMDA-receptor-dependent forms of long-term synaptic potentiation. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 9365-9370.	7.1	62
32	Rab3B protein is required for long-term depression of hippocampal inhibitory synapses and for normal reversal learning. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14300-14305.	7.1	62
33	Assembly of the presynaptic active zone. Current Opinion in Neurobiology, 2020, 63, 95-103.	4.2	59
34	ELKS controls the pool of readily releasable vesicles at excitatory synapses through its N-terminal coiled-coil domains. ELife, 2016, 5, .	6.0	56
35	The RAB3-RIM Pathway Is Essential for the Release of Neuromodulators. Neuron, 2019, 104, 1065-1080.e12.	8.1	53
36	RIM C2B Domains Target Presynaptic Active Zone Functions to PIP2-Containing Membranes. Neuron, 2018, 98, 335-349.e7.	8.1	52

#	Article	IF	Citations
37	Role of Efficient Neurotransmitter Release in Barrel Map Development. Journal of Neuroscience, 2006, 26, 2692-2703.	3.6	50
38	PKC-phosphorylation of Liprin-Î±3 triggers phase separation and controls presynaptic active zone structure. Nature Communications, 2021, 12, 3057.	12.8	46
39	Synaptotagmin-1 is the Ca2+ sensor for fast striatal dopamine release. ELife, 2020, 9, .	6.0	45
40	ELKS1 localizes the synaptic vesicle priming protein bMunc13-2 to a specific subset of active zones. Journal of Cell Biology, 2017, 216, 1143-1161.	5.2	43
41	RIM1Î± and Interacting Proteins Involved in Presynaptic Plasticity Mediate Prepulse Inhibition and Additional Behaviors Linked to Schizophrenia. Journal of Neuroscience, 2010, 30, 5326-5333.	3.6	42
42	RIM1 and RIM2 redundantly determine Ca²⁺ channel density and readily releasable pool size at a large hindbrain synapse. Journal of Neurophysiology, 2015, 113, 255-263.	1.8	34
43	RIM is essential for stimulated but not spontaneous somatodendritic dopamine release in the midbrain. ELife, 2019, 8, .	6.0	33
44	ELKS active zone proteins as multitasking scaffolds for secretion. Open Biology, 2018, 8, .	3.6	29
45	ELKS1 Captures Rab6-Marked Vesicular Cargo in Presynaptic Nerve Terminals. Cell Reports, 2020, 31, 107712.	6.4	29
46	Molecular and functional architecture of striatal dopamine release sites. Neuron, 2022, 110, 248-265.e9.	8.1	29
47	Rebuilding essential active zone functions within a synapse. Neuron, 2022, 110, 1498-1515.e8.	8.1	18
48	Pushing synaptic vesicles over the RIM. Cellular Logistics, 2011, 1, 106-110.	0.9	16
49	Intact synapse structure and function after combined knockout of PTPÎ´, PTPÏƒ, and LAR. ELife, 2021, 10, .	6.0	13
50	Firing Rate Homeostasis Can Occur in the Absence of Neuronal Activity-Regulated Transcription. Journal of Neuroscience, 2019, 39, 9885-9899.	3.6	10
51	A Presynaptic Liquid Phase Unlocks the Vesicle Cluster. Trends in Neurosciences, 2018, 41, 772-774.	8.6	6
52	Presynaptic short-term plasticity persists in the absence of PKC phosphorylation of Munc18-1. Journal of Neuroscience, 2021, 41, JN-RM-0347-21.	3.6	6
53	Liquid Active Zones for Controlling the Phases of Synaptic Transmission. Molecular Cell, 2019, 73, 859-860.	9.7	4
54	Directing Traffic into the Future. Developmental Cell, 2013, 27, 480-484.	7.0	2

#	Article	IF	Citations
55	Nanoscale Location Matters: Emerging Principles of Ca2+ Channel Organization at the Presynaptic Active Zone. Neuron, 2019, 104, 627-629.	8.1	2