Volker Kiessling

List of Publications by Year
in descending order

56 papers	2,858 citations	218677 26 h-index	206112 48 g-index
63 all docs	63 docs citations	63 times ranked	3230 citing authors

#	Article	IF	Citations
1	Endosomes supporting fusion mediated by vesicular stomatitis virus glycoprotein have distinctive motion and acidification. Traffic, 2022, , .	2.7	1
2	Membrane order regulates SNARE mediated vesicle fusion in insulin-secreting cells. Biophysical Journal, 2022, 121, 292a-293a.	0.5	1
3	Lassa virus glycoprotein-mediated membrane fusion with endosomal model membranes. Biophysical Journal, 2022, 121, 75a.	0.5	0
4	Flagellin outer domain dimerization modulates motility in pathogenic and soil bacteria from viscous environments. Nature Communications, 2022, 13, 1422.	12.8	10
5	ATP and large signaling metabolites flux through caspase-activated Pannexin 1 channels. ELife, 2021, 10, .	6.0	50
6	Ebola virus glycoprotein interacts with cholesterol to enhance membrane fusion and cell entry. Nature Structural and Molecular Biology, 2021, 28, 181-189.	8.2	43
7	Conserved arginine residues in synaptotagmin 1 regulate fusion pore expansion through membrane contact. Nature Communications, 2021, 12, 761.	12.8	21
8	Structural Studies of Straight and Supercoiled Flagellar Filaments from Campylobacter jejuni. Biophysical Journal, 2021, 120, 174a-175a.	0.5	1
9	Distinct insulin Granule Subpopulations Contribute to the Secretory Pathology of Diabetes Types 1 and 2. Biophysical Journal, 2021, 120, 50a-51a.	0.5	0
10	Two Distinct Populations of Insulin Granules that Have Unique Properties. Biophysical Journal, 2020, 118, 402a.	0.5	0
11	HIV-cell membrane fusion intermediates are restricted by Serincs as revealed by cryo-electron and TIRF microscopy. Journal of Biological Chemistry, 2020, 295, 15183-15195.	3.4	42
12	Synaptotagminâ€7 enhances calciumâ€sensing of chromaffin cell granules and slows discharge of granule cargos. Journal of Neurochemistry, 2020, 154, 598-617.	3.9	20
13	Distinct insulin granule subpopulations implicated in the secretory pathology of diabetes types 1 and 2. ELife, 2020, 9, .	6.0	26
14	In vitro fusion of single synaptic and dense core vesicles reproduces key physiological properties. Nature Communications, 2019, 10, 3904.	12.8	37
15	Distinct reaction mechanisms for hyaluronan biosynthesis in different kingdoms of life. Glycobiology, 2018, 28, 108-121.	2.5	21
16	Complexin Binding to Membranes and Acceptor t-SNARE Complex Explains its Clamping and Stimulatory Effects on Fusion. Biophysical Journal, 2018, 114, 608a.	0.5	0
17	A molecular mechanism for calcium-mediated synaptotagmin-triggered exocytosis. Nature Structural and Molecular Biology, 2018, 25, 911-917.	8.2	32
18	Quaternary structure of the small amino acid transporter OprG from Pseudomonas aeruginosa. Journal of Biological Chemistry, 2018, 293, 17267-17277.	3.4	4

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19	A quantized mechanism for activation of pannexin channels. Nature Communications, 2017, 8, 14324.	12.8	120
20	Complexin Binding to Membranes and Acceptor t-SNAREs Explains Its Clamping Effect on Fusion. Biophysical Journal, 2017, 113, 1235-1250.	0.5	31
21	Calcium-Mediated Docking and Fusion of Purified Dense Core Vesicles with Reconstituted Membranes. Biophysical Journal, 2017, 112, 395a-396a.	0.5	0
22	Asymmetric Phosphatidylethanolamine Distribution Controls Fusion Pore Lifetime and Probability. Biophysical Journal, 2017, 113, 1912-1915.	0.5	31
23	Reconstitution of calcium-mediated exocytosis of dense-core vesicles. Science Advances, 2017, 3, e1603208.	10.3	45
24	HIV virions sense plasma membrane heterogeneity for cell entry. Science Advances, 2017, 3, e1700338.	10.3	95
25	Planar Supported Membranes with Mobile SNARE Proteins and Quantitative Fluorescence Microscopy Assays to Study Synaptic Vesicle Fusion. Frontiers in Molecular Neuroscience, 2017, 10, 72.	2.9	22
26	The role of cholesterol in membrane fusion. Chemistry and Physics of Lipids, 2016, 199, 136-143.	3.2	279
27	Line tension at lipid phase boundaries as driving force for HIV fusion peptide-mediated fusion. Nature Communications, 2016, 7, 11401.	12.8	120
28	Site-specific fluorescent labeling to visualize membrane translocation of a myristoyl switch protein. Scientific Reports, 2016, 6, 32866.	3.3	12
29	Assembly and Comparison of Plasma Membrane SNARE Acceptor Complexes. Biophysical Journal, 2016, 110, 2147-2150.	0.5	19
30	FLIC Microscopy Reveals Different Conformational States of Syntaxin 1a in Supported Lipid Bilayers. Biophysical Journal, 2016, 110, 248a.	0.5	0
31	Supported Lipid Bilayers as Models for Studying Membrane Domains. Current Topics in Membranes, 2015, 75, 1-23.	0.9	27
32	High Cholesterol Obviates a Prolonged Hemifusion Intermediate in Fast SNARE-Mediated Membrane Fusion. Biophysical Journal, 2015, 109, 319-329.	0.5	50
33	Reconstituting SNARE-mediated membrane fusion at the single liposome level. Methods in Cell Biology, 2015, 128, 339-363.	1.1	16
34	HIV gp41â€“mediated membrane fusion occurs at edges of cholesterol-rich lipid domains. Nature Chemical Biology, 2015, 11, 424-431.	8.0	175
35	Variable cooperativity in SNARE-mediated membrane fusion. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 12037-12042.	7.1	81
36	The Juxtamembrane Linker of Full-length Synaptotagmin 1 Controls Oligomerization and Calcium-dependent Membrane Binding. Journal of Biological Chemistry, 2014, 289, 22161-22171.	3.4	25

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37	Regulation of Rac translocation and activation by membrane domains and their boundaries. Journal of Cell Science, 2014, 127, 2565-76.	2.0	40
38	Pre-Fusion Structure of Syntaxin 1A Suggests Pathway for Folding into Neuronal Trans-Snare Complex Fusion Intermediate. Biophysical Journal, 2014, 106, 505a.	0.5	0
39	Rapid Fusion of Synaptic Vesicles with Reconstituted Target SNARE Membranes. Biophysical Journal, 2013, 104, 1950-1958.	0.5	39
40	Prefusion structure of syntaxin-1A suggests pathway for folding into neuronal <i>trans</i> -SNARE complex fusion intermediate. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19384-19389.	7.1	56
41	Transbilayer Coupling of Lipid Dynamics. Biophysical Journal, 2012, 103, 2409-2410.	0.5	4
42	Partitioning of Synaptotagmin I C2 Domains between Liquid-Ordered and Liquid-Disordered Inner Leaflet Lipid Phases. Biochemistry, 2011, 50, 2478-2485.	2.5	14
43	Morphological Changes Induced by the Action of Antimicrobial Peptides on Supported Lipid Bilayers. Journal of Physical Chemistry B, 2011, 115, 158-167.	2.6	33
44	Single vesicle millisecond fusion kinetics reveals number of SNARE complexes optimal for fast SNARE-mediated membrane fusion.. Journal of Biological Chemistry, 2010, 285, 11753.	3.4	5
45	Docking and Fast Fusion of Synaptobrevin Vesicles Depends on the Lipid Compositions of the Vesicle and the Acceptor SNARE Complex-Containing Target Membrane. Biophysical Journal, 2010, 99, 2936-2946.	0.5	64
46	Single SNARE-Mediated Vesicle Fusion Observed InÂVitro by Polarized TIRFM. Biophysical Journal, 2010, 99, 4047-4055.	0.5	42
47	Fast Single Vesicle SNARE-Mediated Membrane Fusion Assay in Planar Supported Bilayers Reveals Details About Fusion Mechanism. Biophysical Journal, 2010, 98, 669a.	0.5	0
48	Single Vesicle Millisecond Fusion Kinetics Reveals Number of SNARE Complexes Optimal for Fast SNARE-mediated Membrane Fusion. Journal of Biological Chemistry, 2009, 284, 32158-32166.	3.4	148
49	Domain coupling in asymmetric lipid bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 64-71.	2.6	194
50	Transbilayer Effects of Raft-Like Lipid Domains in Asymmetric Planar Bilayers Measured by Single Molecule Tracking. Biophysical Journal, 2006, 91, 3313-3326.	0.5	211
51	Potassium channel gating in adhesion: from an oocyte?silicon to a neuron?astrocyte adhesion contact. European Biophysics Journal, 2005, 34, 113-126.	2.2	1
52	Measuring Lipid Asymmetry in Planar Supported Bilayers by Fluorescence Interference Contrast Microscopy. Langmuir, 2005, 21, 1377-1388.	3.5	128
53	Imaging Fast SNARE Mediated-Membrane Fusion in Planar-Supported Bilayers. Biophysical Journal, 2005, 89, 2185-2186.	0.5	5
54	Membrane fusion: a structural perspective on the interplay of lipids and proteins. Current Opinion in Structural Biology, 2003, 13, 453-466.	5.7	172

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55	Measuring Distances in Supported Bilayers by Fluorescence Interference-Contrast Microscopy: Polymer Supports and SNARE Proteins. Biophysical Journal, 2003, 84, 408-418.	0.5	174
56	Extracellular Resistance in Cell Adhesion Measured with a Transistor Probe. Langmuir, 2000, 16, 3517-3521.	3.5	53