Manfred Lindau

List of Publications by Year
in descending order

97 papers	4,835 citations	87723 38 h-index	95083 68 g-index
99 all docs	99 docs citations	99 times ranked	4176 citing authors

#	Article	IF	Citations
1	On-Chip Cyclic Voltammetry Measurements Using a Compact 1024-Electrode CMOS IC. Analytical Chemistry, 2021, 93, 8027-8034.	3.2	3
2	Fusion pores with low conductance are cation selective. Cell Reports, 2021, 36, 109580.	2.9	3
3	Drug testing complementary metalâ€oxideâ€semiconductor chip reveals drug modulation of transmitter release for potential therapeutic applications. Journal of Neurochemistry, 2019, 151, 38-49.	2.1	6
4	Synaptic vesicle fusion: today and beyond. Nature Structural and Molecular Biology, 2019, 26, 663-668.	3.6	23
5	Precise Time Superresolution by Event Correlation Microscopy. Biophysical Journal, 2019, 116, 1732-1747.	0.2	1
6	Precision of Time Super-Resolution Imaging by Event Correlation Microscopy. Biophysical Journal, 2019, 116, 134a.	0.2	0
7	High throughput Drug Testing of Transmitter Release Events in Chromaffin Cells with Surface Modified CMOS Ic. Biophysical Journal, 2019, 116, 524a.	0.2	0
8	The Number of SNARE Complexes Changing Conformation during Vesicle Fusion. Biophysical Journal, 2019, 116, 528a.	0.2	0
9	Fusion Pore Dynamics and Snare Complex Mobility. Biophysical Journal, 2019, 116, 528a.	0.2	0
10	Structure-Based Estimate of Connexin 26 Conductance. Biophysical Journal, 2019, 116, 219a.	0.2	0
11	Relation between Release of Catecholamines and FFN511 Studied with Electrochemical Detector Arrays. Biophysical Journal, 2019, 116, 523a.	0.2	0
12	ELECTROCHEMICAL IMAGING OF EXOCYTOTIC FUSION EVENTS USING ELECTROCHEMICAL DETECTOR ARRAYS. , 2019, , 91-107.		0
13	Surface-modified CMOS IC electrochemical sensor array targeting single chromaffin cells for highly parallel amperometry measurements. Pflugers Archiv European Journal of Physiology, 2018, 470, 113-123.	1.3	17
14	Molecular mechanism of fusion pore formation driven by the neuronal SNARE complex. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12751-12756.	3.3	49
15	A Bidirectional-Current CMOS Potentiostat for Fast-Scan Cyclic Voltammetry Detector Arrays. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 894-903.	2.7	25
16	Single-Cell Recording of Vesicle Release From Human Neuroblastoma Cells Using 1024-ch Monolithic CMOS Bioelectronics. IEEE Transactions on Biomedical Circuits and Systems, 2018, 12, 1345-1355.	2.7	20
17	The fusion pore, 60Âyears after the first cartoon. FEBS Letters, 2018, 592, 3542-3562.	1.3	45
18	Fusion Pore Selectivity in Chromaffin Cells. Biophysical Journal, 2017, 112, 396a.	0.2	0

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19	Molecular Mechanism of Fusion Pore Formation. Biophysical Journal, 2017, 112, 473a.	0.2	0
20	A CMOS based Sensor Array Platform for Analysis of Exocytosis Events. Biophysical Journal, 2017, 112, 93a.	0.2	0
21	t-SNARE Transmembrane Domain Clustering Modulates Lipid Organization and Membrane Curvature. Journal of the American Chemical Society, 2017, 139, 18440-18443.	6.6	12
22	AFM/TIRF force clamp measurements of neurosecretory vesicle tethers reveal characteristic unfolding steps. PLoS ONE, 2017, 12, e0173993.	1.1	2
23	Prostaglandin E1 inhibits endocytosis in the Î²-cell endocytosis. Journal of Endocrinology, 2016, 229, 287-294.	1.2	5
24	Non-Faradaic Electrochemical Detection of Exocytosis from Mast and Chromaffin Cells Using Floating-Gate MOS Transistors. Scientific Reports, 2016, 5, 18477.	1.6	6
25	A Wireless FSCV Monitoring IC With Analog Background Subtraction and UWB Telemetry. IEEE Transactions on Biomedical Circuits and Systems, 2016, 10, 289-299.	2.7	28
26	The mystery of the fusion pore. Nature Structural and Molecular Biology, 2016, 23, 5-6.	3.6	15
27	v-SNARE transmembrane domains function as catalysts for vesicle fusion. ELife, 2016, 5, .	2.8	50
28	A Coarse Grained Model for a Lipid Membrane with Physiological Composition and Leaflet Asymmetry. PLoS ONE, 2015, 10, e0144814.	1.1	43
29	Positively Charged Amino Acids at the SNAP-25 C Terminus Determine Fusion Rates, Fusion Pore Properties, and Energetics of Tight SNARE Complex Zippering. Journal of Neuroscience, 2015, 35, 3230-3239.	1.7	25
30	Time Super-Resolution Fluorescence Imaging by Event Correlation Microscopy. Biophysical Journal, 2014, 106, 24a.	0.2	0
31	How Could SNARE Proteins Open a Fusion Pore?. Physiology, 2014, 29, 278-285.	1.6	50
32	Direct Measurement of Secretory Vesicle-Plasma Membrane Tethering Interactions by Correlated AFM Force-Clamp and TIRF Microscopy. Biophysical Journal, 2014, 106, 525a-526a.	0.2	1
33	Molecular Dynamics Simulations of SNARE Complex Unzipping. Biophysical Journal, 2014, 106, 30a.	0.2	0
34	Rapid structural change in synaptosomal-associated protein 25 (SNAP25) precedes the fusion of single vesicles with the plasma membrane in live chromaffin cells. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 14249-14254.	3.3	37
35	Juxtamembrane tryptophans of synaptobrevin 2 control the process of membrane fusion. FEBS Letters, 2013, 587, 67-72.	1.3	20
36	Direct Measurement of Ion Mobility in a Conducting Polymer. Advanced Materials, 2013, 25, 4488-4493.	11.1	267

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37	Parallel recording of neurotransmitters release from chromaffin cells using a 10Ã—10 CMOS IC potentiostat array with on-chip working electrodes. Biosensors and Bioelectronics, 2013, 41, 736-744.	5.3	83
38	Synaptotagmin 1 Is Necessary for the Ca2+ Dependence of Clathrin-Mediated Endocytosis. Journal of Neuroscience, 2012, 32, 3778-3785.	1.7	42
39	Transparent Electrode Materials for Simultaneous Amperometric Detection of Exocytosis and Fluorescence Microscopy. Journal of Biomaterials and Nanobiotechnology, 2012, 03, 243-253.	1.0	40
40	Coarse-Grain Simulations Reveal Movement of the Synaptobrevin C-Terminus in Response to Piconewton Forces. Biophysical Journal, 2012, 103, 959-969.	0.2	42
41	A Combined TIRF/AFM Approach to Investigate Nanomechanical Features at the Cytoplasmic Face of a Plasma Membrane. Biophysical Journal, 2012, 102, 318a.	0.2	0
42	High resolution electrophysiological techniques for the study of calcium-activated exocytosis. Biochimica Et Biophysica Acta - General Subjects, 2012, 1820, 1234-1242.	1.1	33
43	A Coarse Grain Model for a Lipid Membrane with Physiological Composition and Leaflet Asymmetry. Biophysical Journal, 2012, 102, 172a.	0.2	0
44	Coarse Grain Simulations Reveal Movement of Synaptobrevin C Terminus in Response to Piconewton Forces Suggesting a Novel Fusion Pore Mechanism. Biophysical Journal, 2012, 102, 318a.	0.2	0
45	Sub-Frame Time Resolution in Fluorescence Imaging Reveals Delay Between SNAP25 Conformational change and Secretory Events in Chromaffin Cells. Biophysical Journal, 2012, 102, 317a-318a.	0.2	1
46	The Conformational Change of SNAP25 during the Exocytosis. Biophysical Journal, 2011, 100, 407a.	0.2	0
47	Positively Charged Amino Acids in the C-Terminal Domain of SNAP-25 Affect Fusion Pore Structure and Dynamics. Biophysical Journal, 2011, 100, 408a.	0.2	0
48	Detection of Transmitter Release from Single Living Cells Using Conducting Polymer Microelectrodes. Advanced Materials, 2011, 23, H184-8.	11.1	71
49	Noradrenaline inhibits exocytosis via the G protein Î²Î³ subunit and refilling of the readily releasable granule pool via the Î±_{i1/2}subunit. Journal of Physiology, 2010, 588, 3485-3498.	1.3	54
50	Hormonal inhibition of endocytosis: novel roles for noradrenaline and G protein G_z. Journal of Physiology, 2010, 588, 3499-3509.	1.3	11
51	Push-and-pull regulation of the fusion pore by synaptotagmin-7. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19032-19037.	3.3	71
52	Role of the synaptobrevin C terminus in fusion pore formation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18463-18468.	3.3	84
53	Role of the Synaptobrevin C-terminus in Fusion Pore Formation. Biophysical Journal, 2010, 98, 678a.	0.2	0
54	Electrochemical Detection of Signalling Responses in Excitatory and Non Excitatory Cells using Chemoreceptive Neuron MOS Transistors(CVMOS). Biophysical Journal, 2010, 98, 195a.	0.2	0

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55	Direct Synthesis of Quaternized Polymer Brushes and Their Application for Guiding Neuronal Growth. Biomacromolecules, 2010, 11, 2027-2032.	2.6	27
56	Post-CMOS Fabrication of Working Electrodes for On-Chip Recordings of Transmitter Release. IEEE Transactions on Biomedical Circuits and Systems, 2010, 4, 86-92.	2.7	24
57	F-Actin and Myosin II Accelerate Catecholamine Release from Chromaffin Granules. Journal of Neuroscience, 2009, 29, 863-870.	1.7	97
58	Improved Surface-Patterned Platinum Microelectrodes for the Study of Exocytotic Events. Analytical Chemistry, 2009, 81, 8734-8740.	3.2	56
59	A Role For Protein Phosphorylation In Fusion Pore Opening And Transmitter Release. Biophysical Journal, 2009, 96, 101a-102a.	0.2	0
60	A Novel Approach For Wireless Communication Of In Vivo Data From Freely Moving Research Animals. Biophysical Journal, 2009, 96, 102a.	0.2	0
61	Dissociation Behavior of Weak Polyelectrolyte Brushes on a Planar Surface. Langmuir, 2009, 25, 4774-4779.	1.6	161
62	Tethering Forces of Secretory Granules Measured with Optical Tweezers. Biophysical Journal, 2008, 95, 4972-4978.	0.2	4
63	The role of the C terminus of the SNARE protein SNAP-25 in fusion pore opening and a model for fusion pore mechanics. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 15388-15392.	3.3	101
64	Fusion Gains Independence. Journal of General Physiology, 2008, 132, 9-11.	0.9	1
65	Design of a CMOS Potentiostat Circuit for Electrochemical Detector Arrays. IEEE Transactions on Circuits and Systems I: Regular Papers, 2007, 54, 736-744.	3.5	97
66	Exocytotic catecholamine release is not associated with cation flux through channels in the vesicle membrane but Na+ influx through the fusion pore. Nature Cell Biology, 2007, 9, 915-922.	4.6	45
67	Patterned Biofunctional Poly(acrylic acid) Brushes on Silicon Surfaces. Biomacromolecules, 2007, 8, 3082-3092.	2.6	140
68	Patch amperometry: high-resolution measurements of single-vesicle fusion and release. Nature Methods, 2005, 2, 699-708.	9.0	62
69	Phosphatidylinositol phosphate kinase type IÂ regulates dynamics of large dense-core vesicle fusion. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5204-5209.	3.3	96
70	Electrochemical imaging of fusion pore openings by electrochemical detector arrays. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 13879-13884.	3.3	134
71	The fusion pore. Biochimica Et Biophysica Acta - Molecular Cell Research, 2003, 1641, 167-173.	1.9	142
72	Exocytosis of single chromaffin granules in cell-free inside-out membrane patches. Nature Cell Biology, 2003, 5, 358-362.	4.6	68

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73	Differential Regulation of Exocytotic Fusion and Granule-Granule Fusion in Eosinophils by Ca2+ and GTP Analogs. Journal of Biological Chemistry, 2003, 278, 44929-44934.	1.6	19
74	Compound Exocytosis and Cumulative Fusion in Eosinophils. Journal of Biological Chemistry, 2003, 278, 44921-44928.	1.6	66
75	Synaptotagmin Function Illuminated. Journal of General Physiology, 2003, 122, 251-254.	0.9	5
76	Secretory Vesicles Membrane Area Is Regulated in Tandem with Quantal Size in Chromaffin Cells. Journal of Neuroscience, 2003, 23, 7917-7921.	1.7	107
77	Intracellular Patch Electrochemistry: Regulation of Cytosolic Catecholamines in Chromaffin Cells. Journal of Neuroscience, 2003, 23, 5835-5845.	1.7	126
78	An electrochemical detector array to study cell biology on the nanoscale. Nanotechnology, 2002, 13, 285-289.	1.3	62
79	Robust, High-Resolution, Whole Cell Patch-Clamp Capacitance Measurements Using Square Wave Stimulation. Biophysical Journal, 2001, 81, 937-948.	0.2	32
80	Voltage-Dependent Membrane Capacitance in Rat Pituitary Nerve Terminals Due to Gating Currents. Biophysical Journal, 2001, 80, 1220-1229.	0.2	21
81	Exocytosis of Catecholamine (CA)-containing and CA-free Granules in Chromaffin Cells. Journal of Biological Chemistry, 2001, 276, 39974-39979.	1.6	31
82	Resolution of Patch Capacitance Recordings and of Fusion Pore Conductances in Small Vesicles. Biophysical Journal, 2000, 78, 2983-2997.	0.2	72
83	High calcium concentrations shift the mode of exocytosis to the kiss-and-run mechanism. Nature Cell Biology, 1999, 1, 40-44.	4.6	386
84	Membrane capacitance techniques to monitor granule exocytosis in neutrophils. Journal of Immunological Methods, 1999, 232, 111-120.	0.6	53
85	Capacitance Flickers and Pseudoflickers of Small Granules, Measured in the Cell-Attached Configuration. Biophysical Journal, 1998, 75, 53-59.	0.2	48
86	Mechanism of Peptide-induced Mast Cell Degranulation. Journal of General Physiology, 1998, 112, 577-591.	0.9	94
87	Exocytotic Competence and Intergranular Fusion in Cord Blood-Derived Eosinophils During Differentiation. Blood, 1997, 89, 510-517.	0.6	15
88	Structure and function of fusion pores in exocytosis and ectoplasmic membrane fusion. Current Opinion in Cell Biology, 1995, 7, 509-517.	2.6	244
89	A novel Ca2+-dependent step in exocytosis subsequent to vesicle fusion. FEBS Letters, 1995, 363, 217-220.	1.3	66
90	Three Distinct Fusion Processes during Eosinophil Degranulation. Annals of the New York Academy of Sciences, 1994, 710, 232-247.	1.8	13

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91	12 Exocytosis and endocytosis in single peptidergic nerve terminals. Advances in Second Messenger and Phosphoprotein Research, 1994, 29, 173-187.	4.5	7
92	Timeâ€"resolved capacitance measurements: monitoring exocytosis in single cells. Quarterly Reviews of Biophysics, 1991, 24, 75-101.	2.4	90
93	Techniques and concepts in exocytosis: focus on mast cells. BBA - Biomembranes, 1991, 1071, 429-471.	7.9	102
94	GTPÎ³S-induced calcium transients and exocytosis in human neutrophils. Bioscience Reports, 1990, 10, 93-103.	1.1	17
95	Patch-clamp capacitance measurements: A tool for investigating the second messengers regulating exocytosis. The Protein Journal, 1989, 8, 438-441.	1.1	0
96	Patch-clamp techniques for time-resolved capacitance measurements in single cells. Pflugers Archiv European Journal of Physiology, 1988, 411, 137-146.	1.3	590
97	Pertussis toxin does not affect the time course of exocytosis in mast cells stimulated by intracellular application of GTP-Î³-S. FEBS Letters, 1987, 222, 317-321.	1.3	23