Arnd Pralle

List of Publications by Year
in descending order

64 papers	5,654 citations	279798 23 h-index	233421 45 g-index
67 all docs	67 docs citations	67 times ranked	7730 citing authors

#	ARTICLE	IF	CITATIONS
1	Molecular and cellular mechanisms for differential effects of chronic social isolation stress in males and females. Molecular Psychiatry, 2022, 27, 3056-3068.	7.9	24
2	Membrane nanodomains homeostasis during propofol anesthesia as function of dosage and temperature. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183511.	2.6	6
3	Biophysics of Thermal and Mechanical Ultrasonic Neuromodulation. Biophysical Journal, 2021, 120, 237a.	0.5	0
4	Remote modulation of neuronal cells in the brain. Nature Materials, 2021, 20, 912-913.	27.5	4
5	Magnetothermal nanoparticle technology alleviates parkinsonian-like symptoms in mice. Nature Communications, 2021, 12, 5569.	12.8	44
6	Modulation and dynamics of cell membrane heterogeneities. Chemistry and Physics of Lipids, 2020, 233, 105006.	3.2	4
7	Calcium Influx through Piezo1 Channels Transiently Clusters PI(4,5)P2 and Recruits Actin Polymerization. Biophysical Journal, 2020, 118, 397a.	0.5	0
8	Outstanding heat loss <i>via</i> nano-octahedra above 20 nm in size: from wustite-rich nanoparticles to magnetite single-crystals. Nanoscale, 2019, 11, 16635-16649.	5.6	38
9	Nanoparticle Preparation for Magnetothermal Genetic Stimulation in Cell Culture and in the Brain of Live Rodents. Neuromethods, 2018, , 39-51.	0.3	1
10	Quantifying spatial and temporal variations of the cell membrane ultra-structure by bimFCS. Methods, 2018, 140-141, 151-160.	3.8	10
11	Multilayered inorganicâ€“organic microdisks as ideal carriers for high magnetothermal actuation: assembling ferrimagnetic nanoparticles devoid of dipolar interactions. Nanoscale, 2018, 10, 21879-21892.	5.6	7
12	Transient Magnetothermal Neuronal Silencing Using the Chloride Channel Anoctamin 1 (TMEM16A). Frontiers in Neuroscience, 2018, 12, 560.	2.8	24
13	The Effect of Propofol on Plasma Membrane Ultrastructure in the Intact Cells. Biophysical Journal, 2017, 112, 320a.	0.5	1
14	Magnetothermal genetic deep brain stimulation of motor behaviors in awake, freely moving mice. ELife, 2017, 6, .	6.0	115
15	Live Quantification of Changes to Membrane Cytoskeleton due to Restricted Access to Laminin or Substrate Stiffness. Biophysical Journal, 2016, 110, 94a.	0.5	0
16	Compartmentalization of the Cell Membrane. Journal of Molecular Biology, 2016, 428, 4739-4748.	4.2	66
17	Transient Effect of Calcium Influx on PIP2 Clusters in the Inner Plasma Membrane Leaflet of Intact Cells. Biophysical Journal, 2016, 110, 204a.	0.5	0
18	Membrane Cytoskeletal Changes during In-Situ to Invasive Progression ofÂBreast Cancer Cells Observed by Multi-Scale Diffusion Analysis of Transmembrane Proteins. Biophysical Journal, 2015, 108, 79a-80a.	0.5	1

#	Article	IF	Citations
19	Transient Effect of Calcium Influx on PIP2 Clusters and Cholesterol-Stabilized Nano-Domains in the Inner Plasma Membrane Leaflet of Intact Cells. Biophysical Journal, 2015, 108, 79a.	0.5	1
20	A role for the thermal environment in defining co-stimulation requirements for CD4+ T cell activation. Cell Cycle, 2015, 14, 2340-2354.	2.6	23
21	Local Temperature Evolution during Nanoparticle Hyperthermia Probed by Fluorescence Thermometry. Biophysical Journal, 2015, 108, 208a.	0.5	0
22	Model Driven Optimization of Magnetic Anisotropy of Exchange-Coupled Coreâ€“Shell Ferrite Nanoparticles for Maximal Hysteretic Loss. Chemistry of Materials, 2015, 27, 7380-7387.	6.7	93
23	Effect of Receptor Dimerization on Membrane Lipid Raft Structure Continuously Quantified on Single Cells by Camera Based Fluorescence Correlation Spectroscopy. PLoS ONE, 2015, 10, e0121777.	2.5	32
24	Thermal Noise Imaging of Cell Membrane Stiffness and Tracking of Membrane Protein Motion. , 2015, , .		0
25	Note: Three-dimensional linearization of optical trap position detection for precise high speed diffusion measurements. Review of Scientific Instruments, 2014, 85, 076104.	1.3	4
26	Transient Effect of Calcium Influx on PIP2 Clusters and Cholesterol-Stabilized Nano-Domains in the Inner Plasma Membrane Leaflet of Intact Cells. Biophysical Journal, 2014, 106, 82a.	0.5	2
27	Monodisperse magnetofluorescent nanoplatforms for local heating and temperature sensing. Nanoscale, 2014, 6, 13463-13469.	5.6	17
28	Local Optical Temperature Measurements around Magnetosomes within Single Bacteria to Study Size and Geometry Effects on Heating. Biophysical Journal, 2014, 106, 382a.	0.5	0
29	Long-Term Live Observation of Membrane Protein Interaction with LipidÂNanodomains Show Dependence on Cell Cycle and Time After Transfection. Biophysical Journal, 2014, 106, 511a.	0.5	0
30	The Immunomodulator Enterotoxin Influences BCR Signaling by Stabilizing Lipid Domains. Biophysical Journal, 2013, 104, 246a.	0.5	0
31	Mc Model of Lipid Raft Protein Diffusion Matched to Live Cell Measurements with Controlled Chemical Perturbation Experiments. Biophysical Journal, 2013, 104, 427a.	0.5	0
32	Nano-Domains of Cell Membrane Stiffness, Proteins Diffusion and Concentration Characterized by Thermal Noise Imaging. Biophysical Journal, 2013, 104, 246a.	0.5	0
33	Influence of Calcium on Lipid Domain Formation in Agarose Supported Lipid Bilayers. Biophysical Journal, 2013, 104, 587a.	0.5	0
34	Optimizing of Local Nano-Particle Heating for Thermo-Magnetic Stimulation of Cells. Biophysical Journal, 2013, 104, 678a-679a.	0.5	0
35	Influence of Calcium Concentration on Lipid Domains in the Inner and Outer Leaflets of the Plasma Membrane. Biophysical Journal, 2013, 104, 587a.	0.5	1
36	Stable, highâ€affinity streptavidin monomer for protein labeling and monovalent biotin detection. Biotechnology and Bioengineering, 2013, 110, 57-67.	3.3	104

#	Article	IF	Citations
37	Local Cell Membrane Stiffness and Viscosity Mapped by Thermal Noise Imaging. Biophysical Journal, 2012, 102, 297a.	0.5	0
38	bim-FCS Analysis of Membrane Protein Diffusion Reveals Dynamics of Membrane Cytoskeleton and Lipid Domains in Intact Cells. Biophysical Journal, 2012, 102, 297a.	0.5	1
39	Nano-Scale, Microsecond Diffusion Imaging of Membrane Protein - lipid Raft Interaction in the Plasma Membrane. Biophysical Journal, 2011, 100, 254a.	0.5	0
40	Engineered Streptavidin Monomer and Dimer with Improved Stability and Function. Biochemistry, 2011, 50, 8682-8691.	2.5	57
41	Monitoring Association of Membrane Proteins with Micro-Domains and Cytoskeleton in Live Cells During Signaling and Perturbation. Biophysical Journal, 2011, 100, 252a-253a.	0.5	0
42	Random insertion of split-cans of the fluorescent protein venus into Shaker channels yields voltage sensitive probes with improved membrane localization in mammalian cells. Journal of Neuroscience Methods, 2011, 199, 1-9.	2.5	30
43	Remote control of ion channels and neurons through magnetic-field heating of nanoparticles. Nature Nanotechnology, 2010, 5, 602-606.	31.5	623
44	Remote Steering of C. Elegans Using Nanoparticle Heating. Biophysical Journal, 2009, 96, 6a.	0.5	0
45	Real-time 3D Tracking of Structural Transitions in Adenylate Kinase by Thermal Noise Imaging. Biophysical Journal, 2009, 96, 377a-378a.	0.5	0
46	Random Insertion of Split-can Venus into Kv1.4 Yields Voltage Sensitive Fluorescent Probes. Biophysical Journal, 2009, 96, 403a.	0.5	0
47	Chapter 21 Quantitative Fluorescence Lifetime Imaging in Cells as a Tool to Design Computational Models of Ranâ€Regulated Reaction Networks. Methods in Cell Biology, 2008, 89, 541-568.	1.1	4
48	A Selective Turn-On Fluorescent Sensor for Imaging Copper in Living Cells. Journal of the American Chemical Society, 2006, 128, 10-11.	13.7	748
49	Analysis of a RanGTP-regulated gradient in mitotic somatic cells. Nature, 2006, 440, 697-701.	27.8	339
50	A fluorescent probe designed for studying protein conformational change. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 965-970.	7.1	110
51	Boronate-Based Fluorescent Probes for Imaging Cellular Hydrogen Peroxide. Journal of the American Chemical Society, 2005, 127, 16652-16659.	13.7	537
52	A Selective, Cell-Permeable Optical Probe for Hydrogen Peroxide in Living Cells. Journal of the American Chemical Society, 2004, 126, 15392-15393.	13.7	594
53	Determination and Correction of Position Detection Nonlinearity in Single Particle Tracking and Three-Dimensional Scanning Probe Microscopy. Microscopy and Microanalysis, 2004, 10, 425-434.	0.4	20
54	The Orientation and Molecular Movement of a K+ Channel Voltage-Sensing Domain. Neuron, 2003, 40, 515-525.	8.1	119

#	Article	IF	Citations
55	Cellular Membranes Studied by Photonic Force Microscopy. Methods in Cell Biology, 2002, 68, 193-212.	1.1	10
56	ATP-dependent Membrane Assembly of F-Actin Facilitates Membrane Fusion. Molecular Biology of the Cell, 2001, 12, 155-170.	2.1	106
57	Photonic Force Microscopy: A New Tool Providing New Methods to Study Membranes at the Molecular Level. Single Molecules, 2000, 1, 129-133.	0.9	21
58	Sphingolipidâ€"Cholesterol Rafts Diffuse as Small Entities in the Plasma Membrane of Mammalian Cells. Journal of Cell Biology, 2000, 148, 997-1008.	5.2	921
59	Photonic Force Microscopy: A New Tool Providing New Methods to Study Membranes at the Molecular Level. Single Molecules, 2000, 1, 129-133.	0.9	1
60	Three-dimensional high-resolution particle tracking for optical tweezers by forward scattered light. Microscopy Research and Technique, 1999, 44, 378-386.	2.2	298
61	Local viscosity probed by photonic force microscopy. Applied Physics A: Materials Science and Processing, 1998, 66, S71-S73.	2.3	102
62	Photonic force microscope calibration by thermal noise analysis. Applied Physics A: Materials Science and Processing, 1998, 66, S75-S78.	2.3	209
63	A scanning force microscope for simultaneous force and patch-clamp measurements on living cell tissues. Review of Scientific Instruments, 1997, 68, 2583-2590.	1.3	27
64	Photonic Force Microscope Based on Optical Tweezers and Two-Photon Excitation for Biological Applications. Journal of Structural Biology, 1997, 119, 202-211.	2.8	153