

# Arnd Pralle

## List of Publications by Citations

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38  
papers

4,782  
citations

21  
h-index

66  
g-index

66  
ext. papers

5,258  
ext. citations

5.4  
avg, IF

5.19  
L-index

#	Paper	IF	Citations
38	Sphingolipid-cholesterol rafts diffuse as small entities in the plasma membrane of mammalian cells. <i>Journal of Cell Biology</i> , <b>2000</b> , 148, 997-1008	7.3	849
37	A selective turn-on fluorescent sensor for imaging copper in living cells. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 10-1	16.4	686
36	A selective, cell-permeable optical probe for hydrogen peroxide in living cells. <i>Journal of the American Chemical Society</i> , <b>2004</b> , 126, 15392-3	16.4	532
35	Remote control of ion channels and neurons through magnetic-field heating of nanoparticles. <i>Nature Nanotechnology</i> , <b>2010</b> , 5, 602-6	28.7	505
34	Boronate-based fluorescent probes for imaging cellular hydrogen peroxide. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 16652-9	16.4	484
33	Analysis of a RanGTP-regulated gradient in mitotic somatic cells. <i>Nature</i> , <b>2006</b> , 440, 697-701	50.4	290
32	Three-dimensional high-resolution particle tracking for optical tweezers by forward scattered light. <i>Microscopy Research and Technique</i> , <b>1999</b> , 44, 378-86	2.8	251
31	Photonic force microscope calibration by thermal noise analysis. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, S75-S78	2.6	164
30	Photonic force microscope based on optical tweezers and two-photon excitation for biological applications. <i>Journal of Structural Biology</i> , <b>1997</b> , 119, 202-11	3.4	118
29	The orientation and molecular movement of a k(+) channel voltage-sensing domain. <i>Neuron</i> , <b>2003</b> , 40, 515-25	13.9	110
28	ATP-dependent membrane assembly of F-actin facilitates membrane fusion. <i>Molecular Biology of the Cell</i> , <b>2001</b> , 12, 155-70	3.5	97
27	A fluorescent probe designed for studying protein conformational change. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 965-70	11.5	95
26	Local viscosity probed by photonic force microscopy. <i>Applied Physics A: Materials Science and Processing</i> , <b>1998</b> , 66, S71-S73	2.6	86
25	Model Driven Optimization of Magnetic Anisotropy of Exchange-coupled Core-Shell Ferrite Nanoparticles for Maximal Hysteretic Loss. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 7380-7387	9.6	76
24	Magnetothermal genetic deep brain stimulation of motor behaviors in awake, freely moving mice. <i>ELife</i> , <b>2017</b> , 6,	8.9	73
23	Stable, high-affinity streptavidin monomer for protein labeling and monovalent biotin detection. <i>Biotechnology and Bioengineering</i> , <b>2013</b> , 110, 57-67	4.9	69
22	Engineered streptavidin monomer and dimer with improved stability and function. <i>Biochemistry</i> , <b>2011</b> , 50, 8682-91	3.2	43

21	Compartmentalization of the Cell Membrane. <i>Journal of Molecular Biology</i> , <b>2016</b> , 428, 4739-4748	6.5	41
20	Effect of receptor dimerization on membrane lipid raft structure continuously quantified on single cells by camera based fluorescence correlation spectroscopy. <i>PLoS ONE</i> , <b>2015</b> , 10, e0121777	3.7	28
19	Random insertion of split-cans of the fluorescent protein venus into Shaker channels yields voltage sensitive probes with improved membrane localization in mammalian cells. <i>Journal of Neuroscience Methods</i> , <b>2011</b> , 199, 1-9	3	26
18	A scanning force microscope for simultaneous force and patch-clamp measurements on living cell tissues. <i>Review of Scientific Instruments</i> , <b>1997</b> , 68, 2583-2590	1.7	22
17	Outstanding heat loss via nano-octahedra above 20 nm in size: from wustite-rich nanoparticles to magnetite single-crystals. <i>Nanoscale</i> , <b>2019</b> , 11, 16635-16649	7.7	21
16	A role for the thermal environment in defining co-stimulation requirements for CD4(+) T cell activation. <i>Cell Cycle</i> , <b>2015</b> , 14, 2340-54	4.7	17
15	Determination and correction of position detection nonlinearity in single particle tracking and three-dimensional scanning probe microscopy. <i>Microscopy and Microanalysis</i> , <b>2004</b> , 10, 425-34	0.5	15
14	Transient Magnetothermal Neuronal Silencing Using the Chloride Channel Anoctamin 1 (TMEM16A). <i>Frontiers in Neuroscience</i> , <b>2018</b> , 12, 560	5.1	15
13	Photonic Force Microscopy: A New Tool Providing New Methods to Study Membranes at the Molecular Level. <i>Single Molecules</i> , <b>2000</b> , 1, 129-133		13
12	Monodisperse magnetofluorescent nanoplatforms for local heating and temperature sensing. <i>Nanoscale</i> , <b>2014</b> , 6, 13463-9	7.7	12
11	Quantifying spatial and temporal variations of the cell membrane ultra-structure by bimFCS. <i>Methods</i> , <b>2018</b> , 140-141, 151-160	4.6	8
10	Cellular membranes studied by photonic force microscopy. <i>Methods in Cell Biology</i> , <b>2002</b> , 68, 193-212	1.8	7
9	Multilayered inorganic-organic microdisks as ideal carriers for high magnetothermal actuation: assembling ferrimagnetic nanoparticles devoid of dipolar interactions. <i>Nanoscale</i> , <b>2018</b> , 10, 21879-21892	7.7	6
8	Magnetothermal nanoparticle technology alleviates parkinsonian-like symptoms in mice. <i>Nature Communications</i> , <b>2021</b> , 12, 5569	17.4	5
7	Chapter 21: Quantitative fluorescence lifetime imaging in cells as a tool to design computational models of ran-regulated reaction networks. <i>Methods in Cell Biology</i> , <b>2008</b> , 89, 541-68	1.8	4
6	Note: Three-dimensional linearization of optical trap position detection for precise high speed diffusion measurements. <i>Review of Scientific Instruments</i> , <b>2014</b> , 85, 076104	1.7	3
5	Transient Effect of Calcium Influx on PIP2 Clusters and Cholesterol-Stabilized Nano-Domains in the Inner Plasma Membrane Leaflet of Intact Cells. <i>Biophysical Journal</i> , <b>2014</b> , 106, 82a	2.9	2
4	Membrane nanodomains homeostasis during propofol anesthesia as function of dosage and temperature. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>2021</b> , 1863, 183511	3.8	2

3	Nanoparticle Preparation for Magnetothermal Genetic Stimulation in Cell Culture and in the Brain of Live Rodents. <i>Neuromethods</i> , <b>2018</b> , 39-51	0.4	1
2	Modulation and dynamics of cell membrane heterogeneities. <i>Chemistry and Physics of Lipids</i> , <b>2020</b> , 233, 105006	3.7	1
1	Remote modulation of neuronal cells in the brain. <i>Nature Materials</i> , <b>2021</b> , 20, 912-913	27	0