# Arnd Pralle

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5305166/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 63 papers | 5,654 citations | 304368 22 h-index | 253896 43 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. | 4.1 | 24 |
| 2 | Membrane nanodomains homeostasis during propofol anesthesia as function of dosage and temperature. Biochimica Et Biophysica Acta - Biomembranes, 2021, 1863, 183511. | 1.4 | 6 |
| 3 | Biophysics of Thermal and Mechanical Ultrasonic Neuromodulation. Biophysical Journal, 2021, 120, 237a. | 0.2 | 0 |
| 4 | Remote modulation of neuronal cells in the brain. Nature Materials, 2021, 20, 912-913. | 13.3 | 4 |
| 5 | Magnetothermal nanoparticle technology alleviates parkinsonian-like symptoms in mice. Nature Communications, 2021, 12, 5569. | 5.8 | 44 |
| 6 | Modulation and dynamics of cell membrane heterogeneities. Chemistry and Physics of Lipids, 2020, 233, 105006. | 1.5 | 4 |
| 7 | Calcium Influx through Piezo1 Channels Transiently Clusters PI(4,5)P2 and Recruits Actin Polymerization. Biophysical Journal, 2020, 118, 397a. | 0.2 | 0 |
| 8 | Outstanding heat loss via nano-octahedra above 20 nm in size: from wustite-rich nanoparticles to magnetite single-crystals. Nanoscale, 2019, 11, 16635-16649. | 2.8 | 38 |
| 9 | Nanoparticle Preparation for Magnetothermal Genetic Stimulation in Cell Culture and in the Brain of Live Rodents. Neuromethods, 2018, , 39-51. | 0.2 | 1 |
| 10 | Quantifying spatial and temporal variations of the cell membrane ultra-structure by bimFCS. Methods, 2018, 140-141, 151-160. | 1.9 | 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. | 2.8 | 7 |
| 12 | Transient Magnetothermal Neuronal Silencing Using the Chloride Channel Anoctamin 1 (TMEM16A). Frontiers in Neuroscience, 2018, 12, 560. | 1.4 | 24 |
| 13 | The Effect of Propofol on Plasma Membrane Ultrastructure in the Intact Cells. Biophysical Journal, 2017, 112, 320a. | 0.2 | 1 |
| 14 | Magnetothermal genetic deep brain stimulation of motor behaviors in awake, freely moving mice. ELife, 2017, 6, . | 2.8 | 115 |
| 15 | Live Quantification of Changes to Membrane Cytoskeleton due to Restricted Access to Laminin or Substrate Stiffness. Biophysical Journal, 2016, 110, 94a. | 0.2 | 0 |
| 16 | Compartmentalization of the Cell Membrane. Journal of Molecular Biology, 2016, 428, 4739-4748. | 2.0 | 66 |
| 17 | Transient Effect of Calcium Influx on PIP2 Clusters in the Inner Plasma Membrane Leaflet of Intact Cells. Biophysical Journal, 2016, 110, 204a. | 0.2 | 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. | 0.2 | 1 |

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|---|---|---|---|
| 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. | 0.2 | 1 |
| 20 | A role for the thermal environment in defining co-stimulation requirements for CD4+ T cell activation. Cell Cycle, 2015, 14, 2340-2354. | 1.3 | 23 |
| 21 | Local Temperature Evolution during Nanoparticle Hyperthermia Probed by Fluorescence Thermometry. Biophysical Journal, 2015, 108, 208a. | 0.2 | 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. | 3.2 | 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. | 1.1 | 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. | 0.6 | 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. | 0.2 | 2 |
| 27 | Monodisperse magnetofluorescent nanoplatforms for local heating and temperature sensing. Nanoscale, 2014, 6, 13463-13469. | 2.8 | 17 |
| 28 | Local Optical Temperature Measurements around Magnetosomes within Single Bacteria to Study Size and Geometry Effects on Heating. Biophysical Journal, 2014, 106, 382a. | 0.2 | 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. | 0.2 | 0 |
| 30 | The Immunomodulator Enterotoxin Influences BCR Signaling by Stabilizing Lipid Domains. Biophysical Journal, 2013, 104, 246a. | 0.2 | 0 |
| 31 | Mc Model of Lipid Raft Protein Diffusion Matched to Live Cell Measurements with Controlled Chemical Perturbation Experiments. Biophysical Journal, 2013, 104, 427a. | 0.2 | 0 |
| 32 | Nano-Domains of Cell Membrane Stiffness, Proteins Diffusion and Concentration Characterized by Thermal Noise Imaging. Biophysical Journal, 2013, 104, 246a. | 0.2 | 0 |
| 33 | Influence of Calcium on Lipid Domain Formation in Agarose Supported Lipid Bilayers. Biophysical Journal, 2013, 104, 587a. | 0.2 | 0 |
| 34 | Optimizing of Local Nano-Particle Heating for Thermo-Magnetic Stimulation of Cells. Biophysical Journal, 2013, 104, 678a-679a. | 0.2 | 0 |
| 35 | Influence of Calcium Concentration on Lipid Domains in the Inner and Outer Leaflets of the Plasma Membrane. Biophysical Journal, 2013, 104, 587a. | 0.2 | 1 |
| 36 | Stable, highâ€affinity streptavidin monomer for protein labeling and monovalent biotin detection. Biotechnology and Bioengineering, 2013, 110, 57-67. | 1.7 | 104 |

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|---|---|---|---|
| 37 | Local Cell Membrane Stiffness and Viscosity Mapped by Thermal Noise Imaging. Biophysical Journal, 2012, 102, 297a. | 0.2 | 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. | 0.2 | 1 |
| 39 | Nano-Scale, Microsecond Diffusion Imaging of Membrane Protein - lipid Raft Interaction in the Plasma Membrane. Biophysical Journal, 2011, 100, 254a. | 0.2 | 0 |
| 40 | Engineered Streptavidin Monomer and Dimer with Improved Stability and Function. Biochemistry, 2011, 50, 8682-8691. | 1.2 | 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. | 0.2 | 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. | 1.3 | 30 |
| 43 | Remote control of ion channels and neurons through magnetic-field heating of nanoparticles. Nature Nanotechnology, 2010, 5, 602-606. | 15.6 | 623 |
| 44 | Remote Steering of C. Elegans Using Nanoparticle Heating. Biophysical Journal, 2009, 96, 6a. | 0.2 | 0 |
| 45 | Real-time 3D Tracking of Structural Transitions in Adenylate Kinase by Thermal Noise Imaging. Biophysical Journal, 2009, 96, 377a-378a. | 0.2 | 0 |
| 46 | Random Insertion of Split-can Venus into Kv1.4 Yields Voltage Sensitive Fluorescent Probes. Biophysical Journal, 2009, 96, 403a. | 0.2 | 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. | 0.5 | 4 |
| 48 | A Selective Turn-On Fluorescent Sensor for Imaging Copper in Living Cells. Journal of the American Chemical Society, 2006, 128, 10-11. | 6.6 | 748 |
| 49 | Analysis of a RanGTP-regulated gradient in mitotic somatic cells. Nature, 2006, 440, 697-701. | 13.7 | 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. | 3.3 | 110 |
| 51 | Boronate-Based Fluorescent Probes for Imaging Cellular Hydrogen Peroxide. Journal of the American Chemical Society, 2005, 127, 16652-16659. | 6.6 | 537 |
| 52 | A Selective, Cell-Permeable Optical Probe for Hydrogen Peroxide in Living Cells. Journal of the American Chemical Society, 2004, 126, 15392-15393. | 6.6 | 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. | 0.2 | 20 |
| 54 | The Orientation and Molecular Movement of a K+ Channel Voltage-Sensing Domain. Neuron, 2003, 40, 515-525. | 3.8 | 119 |

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|---|---|---|---|
| 55 | Cellular Membranes Studied by Photonic Force Microscopy. Methods in Cell Biology, 2002, 68, 193-212. | 0.5 | 10 |
| 56 | ATP-dependent Membrane Assembly of F-Actin Facilitates Membrane Fusion. Molecular Biology of the Cell, 2001, 12, 155-170. | 0.9 | 106 |
| 57 | Photonic Force Microscopy: A New Tool Providing New Methods to Study Membranes at the Molecular Level. Single Molecules, 2000, 1, 129-133. | 1.7 | 21 |
| 58 | Sphingolipidâ€"Cholesterol Rafts Diffuse as Small Entities in the Plasma Membrane of Mammalian Cells. Journal of Cell Biology, 2000, 148, 997-1008. | 2.3 | 921 |
| 59 | Three-dimensional high-resolution particle tracking for optical tweezers by forward scattered light. , 1999, 44, 378-386. | | 298 |
| 60 | Local viscosity probed by photonic force microscopy. Applied Physics A: Materials Science and Processing, 1998, 66, S71-S73. | 1.1 | 102 |
| 61 | Photonic force microscope calibration by thermal noise analysis. Applied Physics A: Materials Science and Processing, 1998, 66, S75-S78. | 1.1 | 209 |
| 62 | A scanning force microscope for simultaneous force and patch-clamp measurements on living cell tissues. Review of Scientific Instruments, 1997, 68, 2583-2590. | 0.6 | 27 |
| 63 | Photonic Force Microscope Based on Optical Tweezers and Two-Photon Excitation for Biological Applications. Journal of Structural Biology, 1997, 119, 202-211. | 1.3 | 153 |