

# Arne Gennerich

## List of Publications by Year in descending order

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30  
papers

2,478  
citations

430874

18  
h-index

477307

29  
g-index

38  
all docs

38  
docs citations

38  
times ranked

2007  
citing authors

#	ARTICLE	IF	CITATIONS
1	Single-Molecule Analysis of Dynein Processivity and Stepping Behavior. <i>Cell</i> , 2006, 126, 335-348.	28.9	571
2	Force-Induced Bidirectional Stepping of Cytoplasmic Dynein. <i>Cell</i> , 2007, 131, 952-965.	28.9	361
3	Intramolecular Strain Coordinates Kinesin Stepping Behavior along Microtubules. <i>Cell</i> , 2008, 134, 1030-1041.	28.9	276
4	Walking the walk: how kinesin and dynein coordinate their steps. <i>Current Opinion in Cell Biology</i> , 2009, 21, 59-67.	5.4	271
5	Cytoplasmic dynein regulates its attachment to microtubules via nucleotide state-switched mechanosensing at multiple AAA domains. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6371-6376.	7.1	110
6	Fluorescence Correlation Spectroscopy in Small Cytosolic Compartments Depends Critically on the Diffusion Model Used. <i>Biophysical Journal</i> , 2000, 79, 3294-3306.	0.5	109
7	Autoinhibition regulates the motility of the <i>C. elegans</i> intraflagellar transport motor OSM-3. <i>Journal of Cell Biology</i> , 2006, 174, 931-937.	5.2	105
8	Control of cytoplasmic dynein force production and processivity by its C-terminal domain. <i>Nature Communications</i> , 2015, 6, 6206.	12.8	75
9	Pathogenic mutations in the kinesin-3 motor KIF1A diminish force generation and movement through allosteric mechanisms. <i>Journal of Cell Biology</i> , 2021, 220, .	5.2	60
10	Molecular mechanism of cytoplasmic dynein tension sensing. <i>Nature Communications</i> , 2019, 10, 3332.	12.8	50
11	Kinesin-73 Is a Processive Motor That Localizes to Rab5-containing Organelles. <i>Journal of Biological Chemistry</i> , 2011, 286, 7457-7467.	3.4	48
12	Anisotropic Diffusion in Mitral Cell Dendrites Revealed by Fluorescence Correlation Spectroscopy. <i>Biophysical Journal</i> , 2002, 83, 510-522.	0.5	44
13	Finite-particle tracking reveals submicroscopic-size changes of mitochondria during transport in mitral cell dendrites. <i>Physical Biology</i> , 2006, 3, 45-53.	1.8	43
14	An Improved Optical Tweezers Assay for Measuring the Force Generation of Single Kinesin Molecules. <i>Methods in Molecular Biology</i> , 2014, 1136, 171-246.	0.9	43
15	Covalent Immobilization of Microtubules on Glass Surfaces for Molecular Motor Force Measurements and Other Single-Molecule Assays. <i>Methods in Molecular Biology</i> , 2014, 1136, 137-169.	0.9	43
16	Genotype and defects in microtubule-based motility correlate with clinical severity in KIF1A-associated neurological disorder. <i>Human Genetics and Genomics Advances</i> , 2021, 2, 100026.	1.7	34
17	A highly conserved 3 $\times 10^4$ helix within the kinesin motor domain is critical for kinesin function and human health. <i>Science Advances</i> , 2021, 7, .	10.3	31
18	Force production of human cytoplasmic dynein is limited by its processivity. <i>Science Advances</i> , 2020, 6, eaaz4295.	10.3	29

#	ARTICLE	IF	CITATIONS
19	The yeast dynein Dyn2-Pac11 complex is a dynein dimerization/processivity factor: structural and single-molecule characterization. <i>Molecular Biology of the Cell</i> , 2013, 24, 2362-2377.	2.1	28
20	<scp>ALS</scp> â€linked <scp>KIF5A Î”Exon27</scp> mutant causes neuronal toxicity through gainâ€ofâ€function. <i>EMBO Reports</i> , 2022, 23, .	4.5	25
21	Neuronal representation of odourants in the olfactory bulb of <i>Xenopus laevis</i> tadpoles. <i>European Journal of Neuroscience</i> , 2003, 17, 113-118.	2.6	18
22	Sizing-up finite fluorescent particles with nanometer-scale precision by convolution and correlation image analysis. <i>European Biophysics Journal</i> , 2005, 34, 181-199.	2.2	15
23	Combining Structureâ€Function and Single-Molecule Studies on Cytoplasmic Dynein. <i>Methods in Molecular Biology</i> , 2018, 1665, 53-89.	0.9	14
24	DNA takes control. <i>Nature Nanotechnology</i> , 2014, 9, 11-12.	31.5	13
25	Probing the Force Generation and Stepping Behavior of Cytoplasmic Dynein. <i>Methods in Molecular Biology</i> , 2011, 783, 63-80.	0.9	13
26	The regulatory function of the AAA4 ATPase domain of cytoplasmic dynein. <i>Nature Communications</i> , 2020, 11, 5952.	12.8	12
27	Optical Control of Mitosis with a Photoswitchable Eg5 Inhibitor. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	11
28	Sequences in the stalk domain regulate auto-inhibition and ciliary tip localization of the immotile kinesin-4 KIF7. <i>Journal of Cell Science</i> , 2021, 134, .	2.0	9
29	Low frequency voltage clamp: recording of voltage transients at constant average command voltage. <i>Journal of Neuroscience Methods</i> , 2000, 99, 129-135.	2.5	6
30	Optical Control of Mitosis with a Photoswitchable Eg5 Inhibitor. <i>Angewandte Chemie</i> , 0, , .	2.0	0