

# Erkan Tuzel

## List of Publications by Year in descending order

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Version: 2024-02-01

66  
papers

1,626  
citations

304743

22  
h-index

315739

38  
g-index

72  
all docs

72  
docs citations

72  
times ranked

1932  
citing authors

#	ARTICLE	IF	CITATIONS
1	Shifting the optimal stiffness for cell migration. <i>Nature Communications</i> , 2017, 8, 15313.	12.8	217
2	Myosin XI Is Essential for Tip Growth in <i>Physcomitrella patens</i> . <i>Plant Cell</i> , 2010, 22, 1868-1882.	6.6	142
3	Selection of Functional Human Sperm with Higher DNA Integrity and Fewer Reactive Oxygen Species. <i>Advanced Healthcare Materials</i> , 2014, 3, 1671-1679.	7.6	98
4	Exhaustion of Racing Sperm in Nature-Mimicking Microfluidic Channels During Sorting. <i>Small</i> , 2013, 9, 3374-3384.	10.0	96
5	Anterograde Microtubule Transport Drives Microtubule Bending in LLC-PK1 Epithelial Cells. <i>Molecular Biology of the Cell</i> , 2009, 20, 2943-2953.	2.1	83
6	Transport by Populations of Fast and Slow Kinesins Uncovers Novel Family-Dependent Motor Characteristics Important for In Vivo Function. <i>Biophysical Journal</i> , 2014, 107, 1896-1904.	0.5	83
7	Motor transport of self-assembled cargos in crowded environments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 20814-20819.	7.1	82
8	Actin Interacting Protein1 and Actin Depolymerizing Factor Drive Rapid Actin Dynamics in <i>Physcomitrella patens</i> . <i>Plant Cell</i> , 2011, 23, 3696-3710.	6.6	70
9	A Perspective on the Role of Myosins as Mechanosensors. <i>Biophysical Journal</i> , 2016, 110, 2568-2576.	0.5	64
10	Loop formation of microtubules during gliding at high density. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 374104.	1.8	55
11	Guidance and Self-Sorting of Active Swimmers: 3D Periodic Arrays Increase Persistence Length of Human Sperm Selecting for the Fittest. <i>Advanced Science</i> , 2018, 5, 1700531.	11.2	53
12	Quantitative analysis of organelle distribution and dynamics in <i>Physcomitrella patens</i> protonemal cells. <i>BMC Plant Biology</i> , 2012, 12, 70.	3.6	48
13	Apical myosin XI anticipates F-actin during polarized growth of <i>Physcomitrella patens</i> cells. <i>Plant Journal</i> , 2013, 73, 417-428.	5.7	47
14	Motor Dynamics Underlying Cargo Transport by Pairs of Kinesin-1 and Kinesin-3 Motors. <i>Biophysical Journal</i> , 2019, 116, 1115-1126.	0.5	45
15	Consistent particle-based algorithm with a non-ideal equation of state. <i>Europhysics Letters</i> , 2006, 73, 664-670.	2.0	41
16	Analysis of Microtubule Curvature. <i>Methods in Cell Biology</i> , 2007, 83, 237-268.	1.1	40
17	Mesoscopic model for the fluctuating hydrodynamics of binary and ternary mixtures. <i>Europhysics Letters</i> , 2007, 80, 40010.	2.0	31
18	Taking another look with fluorescence microscopy: Image processing techniques in Langmuir monolayers for the twenty-first century. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2010, 1798, 1289-1300.	2.6	30

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19	F-Actin Mediated Focusing of Vesicles at the Cell Tip Is Essential for Polarized Growth. <i>Plant Physiology</i> , 2018, 176, 352-363.	4.8	30
20	Force Generation by Membrane-Associated Myosin-I. <i>Scientific Reports</i> , 2016, 6, 25524.	3.3	28
21	The kinesin-like proteins, KAC1/2, regulate actin dynamics underlying chloroplast light avoidance in <i>Physcomitrella patens</i> . <i>Journal of Integrative Plant Biology</i> , 2015, 57, 106-119.	8.5	27
22	Eg5 Inhibitors Have Contrasting Effects on Microtubule Stability and Metaphase Spindle Integrity. <i>ACS Chemical Biology</i> , 2017, 12, 1038-1046.	3.4	27
23	Invadopodia-mediated ECM degradation is enriched in the G1 phase of the cell cycle. <i>Journal of Cell Science</i> , 2019, 132, .	2.0	25
24	Microtubule binding kinetics of membrane-bound kinesin-1 predicts high motor copy numbers on intracellular cargo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 26564-26570.	7.1	22
25	TESTING A HYPOTHESIS FOR THE EVOLUTION OF SEX. <i>International Journal of Modern Physics C</i> , 2000, 11, 973-986.	1.7	13
26	Constructing thermodynamically consistent models with a non-ideal equation of state. <i>Mathematics and Computers in Simulation</i> , 2006, 72, 232-236.	4.4	12
27	Dynamics of thermally driven capillary waves for two-dimensional droplets. <i>Journal of Chemical Physics</i> , 2010, 132, 174701.	3.0	12
28	Characterization of Cell Boundary and Confocal Effects Improves Quantitative FRAP Analysis. <i>Biophysical Journal</i> , 2018, 114, 1153-1164.	0.5	12
29	Kinesin-2 from <i>C. Reinhardtii</i> Is an Atypically Fast and Auto-inhibited Motor that Is Activated by Heterotrimerization for Intraflagellar Transport. <i>Current Biology</i> , 2020, 30, 1160-1166.e5.	3.9	11
30	Quantitative cell biology of tip growth in moss. <i>Plant Molecular Biology</i> , 2021, 107, 227-244.	3.9	11
31	Strategies for the evolution of sex. <i>Physical Review E</i> , 2001, 64, 061908.	2.1	9
32	<i>In vivo</i> Interactions between myosin XI, vesicles, and filamentous actin are fast and transient. <i>Journal of Cell Science</i> , 2020, 133, .	2.0	9
33	Glassy dynamics of protein folding. <i>Physical Review E</i> , 2000, 61, R1040-R1043.	2.1	7
34	Measurement of the persistence length of cytoskeletal filaments using curvature distributions. <i>Biophysical Journal</i> , 2022, 121, 1813-1822.	0.5	7
35	Monitoring Neutropenia for Cancer Patients at the Point of Care. <i>Small Methods</i> , 2017, 1, 1700193.	8.6	4
36	Re-track: Software to analyze the retraction and protrusion velocities of neurites, filopodia and other structures. <i>Analytical Biochemistry</i> , 2020, 596, 113626.	2.4	4

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37	Myosin XI drives polarized growth by vesicle focusing and local enrichment of F-actin in <i>Physcomitrium patens</i> . <i>Plant Physiology</i> , 2021, 187, 2509-2529.	4.8	4
38	Static and dynamic properties of a particle-based algorithm for non-ideal fluids and binary mixtures. <i>Progress in Computational Fluid Dynamics</i> , 2008, 8, 138.	0.2	3
39	Hydrophobic models of protein folding and the thermodynamics of chain-boundary interactions. <i>Brazilian Journal of Physics</i> , 2003, 33, 573-588.	1.4	3
40	Dissipative Dynamics and the Statistics of Energy States of a Hookean Model for Protein Folding. <i>Journal of Statistical Physics</i> , 2000, 100, 405-422.	1.2	2
41	Monitoring Diffusion of Reptating Polymer Chains by a Direct Energy Transfer Method: A Monte Carlo Simulation. <i>Macromolecular Theory and Simulations</i> , 2002, 11, 678.	1.4	2
42	Organelle Dynamics: A Tale of Fusing Nucleoli. <i>Current Biology</i> , 2011, 21, R395-R397.	3.9	2
43	Accelerating a novel particle-based fluid simulation on the GPU. , 2013, , .		2
44	Understanding Boundary Effects and Confocal Optics Enables Quantitative FRAP Analysis in the Confined Geometries of Animal, Plant and Fungal Cells. <i>Biophysical Journal</i> , 2018, 114, 349a-350a.	0.5	2
45	A GPU accelerated virtual scanning confocal microscope. , 2014, , .		1
46	Eg5 Inhibitors have Contrasting Effects on Microtubule Stability and Spindle Integrity Depending on their Modes of Action. <i>Biophysical Journal</i> , 2017, 112, 427a-428a.	0.5	1
47	Modeling of Motor Mediated Microtubule Bending. <i>Biophysical Journal</i> , 2009, 96, 572a.	0.5	0
48	Lipid Monolayer Experiments and Simulations to Extract Line Tension. <i>Biophysical Journal</i> , 2009, 96, 349a.	0.5	0
49	Lipid Monolayer Line Tension Measurements and Model Convolution. <i>Biophysical Journal</i> , 2010, 98, 275a.	0.5	0
50	Coarse-Grained Modeling of Organelle Motility in Living Cells. <i>Biophysical Journal</i> , 2011, 100, 600a.	0.5	0
51	Coarse-Grained Model of Cooperative Chloroplast Transport in Moss. <i>Biophysical Journal</i> , 2012, 102, 378a.	0.5	0
52	Microtubule Motor Traffic Jams. <i>Biophysical Journal</i> , 2012, 102, 368a.	0.5	0
53	Experimental and Computational Investigations into Cooperative Cargo Transport by Mixtures of Kinesins from Different Families. <i>Biophysical Journal</i> , 2013, 104, 325a.	0.5	0
54	Microtubule Dependent Anomalous Diffusion of Chloroplasts in Moss. <i>Biophysical Journal</i> , 2013, 104, 650a-651a.	0.5	0

#	ARTICLE	IF	CITATIONS
55	Motility of Self-Assembled Quantum Dot Cargos. Biophysical Journal, 2013, 104, 650a.	0.5	0
56	Microfluidic Sorting: Exhaustion of Racing Sperm in Natureâ€Mimicking Microfluidic Channels During Sorting (Small 20/2013). Small, 2013, 9, 3366-3366.	10.0	0
57	Cooperative Transport by Populations of Fast and Slow Kinesins Uncovers Novel Family-Dependent Motor Characteristics Important for in vivo Function. Biophysical Journal, 2015, 108, 136a.	0.5	0
58	Force Generation by Membrane-Associated Myosin-I. Biophysical Journal, 2016, 110, 467a.	0.5	0
59	Modeling Cargo Transport by Pairs of Kinesin-1 and -3 Motors. Biophysical Journal, 2017, 112, 263a.	0.5	0
60	Measurement of the Persistence Length of Cytoskeletal Filaments using Curvature Distributions. Biophysical Journal, 2017, 112, 566a.	0.5	0
61	Boundary Effects in FRAP Recovery in the Confined Geometries of Animal, Plant and Fungal Cells. Biophysical Journal, 2017, 112, 583a.	0.5	0
62	Microfluidics: Guidance and Selfâ€Sorting of Active Swimmers: 3D Periodic Arrays Increase Persistence Length of Human Sperm Selecting for the Fittest (Adv. Sci. 2/2018). Advanced Science, 2018, 5, 1870008.	11.2	0
63	F-Actin Mediated Focusing of Vesicles at the Cell Tip is Essential for Polarized Growth. Biophysical Journal, 2018, 114, 648a.	0.5	0
64	Three-Dimensional Model of Cooperative Transport of Pairs of Kinesin-1 and âˆ²2 Motors. Biophysical Journal, 2019, 116, 407a.	0.5	0
65	Binding Kinetics between Membrane-Bound Kinesin Motors and Microtubules. Biophysical Journal, 2019, 116, 411a.	0.5	0
66	THE DISSIPATIVE DYNAMICS AND RELAXATION BEHAVIOR OF A GENERIC MODEL FOR HYDROPHOBIC COLLAPSE. , 2000, , 205-227.		0