Taeyoon Kim

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5071378/publications.pdf

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30	847	687363 13	526287 27
papers	citations	h-index	g-index

31	31	31	870
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Computational Analysis of Viscoelastic Properties of Crosslinked Actin Networks. PLoS Computational Biology, 2009, 5, e1000439.	3.2	145
2	Disordered actomyosin networks are sufficient to produce cooperative and telescopic contractility. Nature Communications, 2016, 7, 12615.	12.8	108
3	Interplay of active processes modulates tension and drives phase transition in self-renewing, motor-driven cytoskeletal networks. Nature Communications, 2016, 7, 10323.	12.8	76
4	Determinants of Fluidlike Behavior and Effective Viscosity in Cross-Linked Actin Networks. Biophysical Journal, 2014, 106, 526-534.	0.5	59
5	Dynamic Mechanisms of Cell Rigidity Sensing: Insights from a Computational Model of Actomyosin Networks. PLoS ONE, 2012, 7, e49174.	2.5	57
6	Morphological Transformation and Force Generation of Active Cytoskeletal Networks. PLoS Computational Biology, 2017, 13, e1005277.	3.2	48
7	Dynamic Role of Cross-Linking Proteins in Actin Rheology. Biophysical Journal, 2011, 101, 1597-1603.	0.5	37
8	Determinants of contractile forces generated in disorganized actomyosin bundles. Biomechanics and Modeling in Mechanobiology, 2015, 14, 345-355.	2.8	36
9	Multiscale impact of nucleotides and cations on the conformational equilibrium, elasticity and rheology of actin filaments and crosslinked networks. Biomechanics and Modeling in Mechanobiology, 2015, 14, 1143-1155.	2.8	31
10	Buckling-induced F-actin fragmentation modulates the contraction of active cytoskeletal networks. Soft Matter, 2017, 13, 3213-3220.	2.7	28
11	Covalent cross-linking of basement membrane-like matrices physically restricts invasive protrusions in breast cancer cells. Matrix Biology, 2020, 85-86, 94-111.	3.6	27
12	Cytoskeletal Deformation at High Strains and the Role of Cross-link Unfolding or Unbinding. Cellular and Molecular Bioengineering, 2009, 2, 28-38.	2.1	23
13	F-actin cross-linking enhances the stability of force generation in disordered actomyosin networks. Computational Particle Mechanics, 2015, 2, 317-327.	3.0	21
14	Balance between Force Generation and Relaxation Leads to Pulsed Contraction of Actomyosin Networks. Biophysical Journal, 2018, 115, 2003-2013.	0.5	18
15	F-Actin Fragmentation Induces Distinct Mechanisms of Stress Relaxation in the Actin Cytoskeleton. ACS Macro Letters, 2016, 5, 641-645.	4.8	15
16	The nature of cell division forces in epithelial monolayers. Journal of Cell Biology, 2021, 220, .	5.2	15
17	Nonlinear Elastic and Inelastic Properties of Cells. Journal of Biomechanical Engineering, 2020, 142, .	1.3	14
18	Multi-scale regulation of cell branching: Modeling morphogenesis. Developmental Biology, 2019, 451, 40-52.	2.0	13

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19	Filament Nucleation Tunes Mechanical Memory in Active Polymer Networks. Advanced Functional Materials, 2019, 29, 1905243.	14.9	12
20	Dynamic motions of molecular motors in the actin cytoskeleton. Cytoskeleton, 2019, 76, 517-531.	2.0	12
21	Transient mechanical interactions between cells and viscoelastic extracellular matrix. Soft Matter, 2021, 17, 10274-10285.	2.7	11
22	Mechanical Model for Durotactic Cell Migration. ACS Biomaterials Science and Engineering, 2019, 5, 3954-3963.	5.2	10
23	Cellular Pushing Forces during Mitosis Drive Mitotic Elongation in Collagen Gels. Advanced Science, 2021, 8, 2000403.	11.2	8
24	Mobility of Molecular Motors Regulates Contractile Behaviors of Actin Networks. Biophysical Journal, 2019, 116, 2161-2171.	0.5	5
25	Collective and contractile filament motions in the myosin motility assay. Soft Matter, 2020, 16, 1548-1559.	2.7	5
26	Rapid assembly of a polar network architecture drives efficient actomyosin contractility. Cell Reports, 2022, 39, 110868.	6.4	4
27	Role of actin filaments and cis binding in cadherin clustering and patterning. PLoS Computational Biology, 2022, 18, e1010257.	3.2	4
28	Interplay Between the Persistent Random Walk and the Contact Inhibition of Locomotion Leads to Collective Cell Behaviors. Bulletin of Mathematical Biology, 2019, 81, 3301-3321.	1.9	3
29	Roles of Interactions Between Cells and Extracellular Matrices for Cell Migration and Matrix Remodeling. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2020, , 247-282.	1.0	1
30	A special issue on discrete modeling of the cytoskeleton. Cytoskeleton, 2019, 76, 493-494.	2.0	0