

Taeyoon Kim

List of Publications by Year in descending order

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Version: 2024-02-01

30
papers

847
citations

687363

13
h-index

526287

27
g-index

31
all docs

31
docs citations

31
times ranked

870
citing authors

#	ARTICLE	IF	CITATIONS
1	Rapid assembly of a polar network architecture drives efficient actomyosin contractility. <i>Cell Reports</i> , 2022, 39, 110868.	6.4	4
2	Role of actin filaments and cis binding in cadherin clustering and patterning. <i>PLoS Computational Biology</i> , 2022, 18, e1010257.	3.2	4
3	Transient mechanical interactions between cells and viscoelastic extracellular matrix. <i>Soft Matter</i> , 2021, 17, 10274-10285.	2.7	11
4	The nature of cell division forces in epithelial monolayers. <i>Journal of Cell Biology</i> , 2021, 220, .	5.2	15
5	Cellular Pushing Forces during Mitosis Drive Mitotic Elongation in Collagen Gels. <i>Advanced Science</i> , 2021, 8, 2000403.	11.2	8
6	Covalent cross-linking of basement membrane-like matrices physically restricts invasive protrusions in breast cancer cells. <i>Matrix Biology</i> , 2020, 85-86, 94-111.	3.6	27
7	Roles of Interactions Between Cells and Extracellular Matrices for Cell Migration and Matrix Remodeling. <i>Studies in Mechanobiology, Tissue Engineering and Biomaterials</i> , 2020, , 247-282.	1.0	1
8	Collective and contractile filament motions in the myosin motility assay. <i>Soft Matter</i> , 2020, 16, 1548-1559.	2.7	5
9	Nonlinear Elastic and Inelastic Properties of Cells. <i>Journal of Biomechanical Engineering</i> , 2020, 142, .	1.3	14
10	Filament Nucleation Tunes Mechanical Memory in Active Polymer Networks. <i>Advanced Functional Materials</i> , 2019, 29, 1905243.	14.9	12
11	Mobility of Molecular Motors Regulates Contractile Behaviors of Actin Networks. <i>Biophysical Journal</i> , 2019, 116, 2161-2171.	0.5	5
12	Mechanical Model for Durotactic Cell Migration. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 3954-3963.	5.2	10
13	Interplay Between the Persistent Random Walk and the Contact Inhibition of Locomotion Leads to Collective Cell Behaviors. <i>Bulletin of Mathematical Biology</i> , 2019, 81, 3301-3321.	1.9	3
14	A special issue on discrete modeling of the cytoskeleton. <i>Cytoskeleton</i> , 2019, 76, 493-494.	2.0	0
15	Dynamic motions of molecular motors in the actin cytoskeleton. <i>Cytoskeleton</i> , 2019, 76, 517-531.	2.0	12
16	Multi-scale regulation of cell branching: Modeling morphogenesis. <i>Developmental Biology</i> , 2019, 451, 40-52.	2.0	13
17	Balance between Force Generation and Relaxation Leads to Pulsed Contraction of Actomyosin Networks. <i>Biophysical Journal</i> , 2018, 115, 2003-2013.	0.5	18
18	Buckling-induced F-actin fragmentation modulates the contraction of active cytoskeletal networks. <i>Soft Matter</i> , 2017, 13, 3213-3220.	2.7	28

#	ARTICLE	IF	CITATIONS
19	Morphological Transformation and Force Generation of Active Cytoskeletal Networks. PLoS Computational Biology, 2017, 13, e1005277.	3.2	48
20	F-Actin Fragmentation Induces Distinct Mechanisms of Stress Relaxation in the Actin Cytoskeleton. ACS Macro Letters, 2016, 5, 641-645.	4.8	15
21	Disordered actomyosin networks are sufficient to produce cooperative and telescopic contractility. Nature Communications, 2016, 7, 12615.	12.8	108
22	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
23	F-actin cross-linking enhances the stability of force generation in disordered actomyosin networks. Computational Particle Mechanics, 2015, 2, 317-327.	3.0	21
24	Determinants of contractile forces generated in disorganized actomyosin bundles. Biomechanics and Modeling in Mechanobiology, 2015, 14, 345-355.	2.8	36
25	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
26	Determinants of Fluidlike Behavior and Effective Viscosity in Cross-Linked Actin Networks. Biophysical Journal, 2014, 106, 526-534.	0.5	59
27	Dynamic Mechanisms of Cell Rigidity Sensing: Insights from a Computational Model of Actomyosin Networks. PLoS ONE, 2012, 7, e49174.	2.5	57
28	Dynamic Role of Cross-Linking Proteins in Actin Rheology. Biophysical Journal, 2011, 101, 1597-1603.	0.5	37
29	Computational Analysis of Viscoelastic Properties of Crosslinked Actin Networks. PLoS Computational Biology, 2009, 5, e1000439.	3.2	145
30	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