Hyeran Kang

List of Publications by Year
in descending order

39 papers	1,096 citations	759055 12 h-index	434063 31 g-index
39 all docs	39 docs citations	39 times ranked	1242 citing authors

#	Article	IF	Citations
1	Cofilin Tunes the Nucleotide State of Actin Filaments and Severs at Bare and Decorated Segment Boundaries. Current Biology, 2011, 21, 862-868.	1.8	192
2	Nonlinear Elasticity of Stiff Filament Networks: Strain Stiffening, Negative Normal Stress, and Filament Alignment in Fibrin Gels. Journal of Physical Chemistry B, 2009, 113, 3799-3805.	1.2	166
3	Cofilin-Linked Changes in Actin Filament Flexibility Promote Severing. Biophysical Journal, 2011, 101, 151-159.	0.2	131
4	Biophysics of actin filament severing by cofilin. FEBS Letters, 2013, 587, 1215-1219.	1.3	88
5	Experimental Realization of Few Layer Two-Dimensional MoS₂ Membranes of Near Atomic Thickness for High Efficiency Water Desalination. Nano Letters, 2019, 19, 5194-5204.	4.5	80
6	Identification of cation-binding sites on actin that drive polymerization and modulate bending stiffness. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16923-16927.	3.3	79
7	Site-specific cation release drives actin filament severing by vertebrate cofilin. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17821-17826.	3.3	45
8	Competitive displacement of cofilin can promote actin filament severing. Biochemical and Biophysical Research Communications, 2013, 438, 728-731.	1.0	42
9	Multi-Platform Compatible Software for Analysis of Polymer Bending Mechanics. PLoS ONE, 2014, 9, e94766.	1.1	39
10	Regulation of Actin by Ion-Linked Equilibria. Biophysical Journal, 2013, 105, 2621-2628.	0.2	37
11	Phosphomimetic S3D cofilin binds but only weakly severs actin filaments. Journal of Biological Chemistry, 2017, 292, 19565-19579.	1.6	35
12	Cations Modulate Actin Bundle Mechanics, Assembly Dynamics, and Structure. Journal of Physical Chemistry B, 2018, 122, 3826-3835.	1.2	21
13	Relative actin nucleation promotion efficiency by WASP and WAVE proteins in endothelial cells. Biochemical and Biophysical Research Communications, 2010, 400, 661-666.	1.0	13
14	Metavinculin Tunes the Flexibility and the Architecture of Vinculin-Induced Bundles of Actin Filaments. Journal of Molecular Biology, 2015, 427, 2782-2798.	2.0	13
15	Actin Filament Mechanics and Structure in Crowded Environments. Journal of Physical Chemistry B, 2019, 123, 2770-2779.	1.2	12
16	Gelsolin-mediated actin filament severing in crowded environments. Biochemical and Biophysical Research Communications, 2020, 532, 548-554.	1.0	12
17	Renewable algal photo H2 production without S control using acetate enriched fermenter effluents. International Journal of Hydrogen Energy, 2021, 46, 1740-1751.	3.8	12
18	Evaluation of Single Hydrogel Nanofiber Mechanics Using Persistence Length Analysis. ACS Omega, 2018, 3, 18304-18310.	1.6	9

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19	Regulation of Actin Bundle Mechanics and Structure by Intracellular Environmental Factors. Frontiers in Physics, 2021, 9, .	1.0	9
20	Intriguing Self-Assembly of Large Granules of F-Actin Facilitated by Gelsolin and Î±-Actinin. Langmuir, 2005, 21, 2789-2795.	1.6	8
21	Observation and Kinematic Description of Long Actin Tracks Induced by Spherical Beads. Biophysical Journal, 2010, 99, 2793-2802.	0.2	8
22	Biophysical characterization of actin bundles generated by the Chlamydia trachomatis Tarp effector. Biochemical and Biophysical Research Communications, 2018, 500, 423-428.	1.0	8
23	Equilibrium and heat of water vapor adsorption on the surface of natural lignocellulose materials. Chemical Engineering Research and Design, 2019, 147, 18-29.	2.7	6
24	SDS-PAGE for Monitoring the Dissolution of Zinc Oxide Bactericidal Nanoparticles (Zinkicide) in Aqueous Solutions. ACS Omega, 2020, 5, 1402-1407.	1.6	6
25	Crowding tunes the organization and mechanics of actin bundles formed by crosslinking proteins. FEBS Letters, 2021, 595, 26-40.	1.3	6
26	Graphene Enhances Actin Filament Assembly Kinetics and Modulates NIH-3T3 Fibroblast Cell Spreading. International Journal of Molecular Sciences, 2022, 23, 509.	1.8	6
27	Dynamics of Water Adsorption from Butanolâ€“Water Vapor in a Biosorbent Packed Column. Industrial & Engineering Chemistry Research, 2019, 58, 15619-15627.	1.8	4
28	Molecular dynamics study of interactions between polymorphic actin filaments and gelsolin segmentâ€1. Proteins: Structure, Function and Bioinformatics, 2020, 88, 385-392.	1.5	4
29	Kinetic overshoot in actin network assembly induced jointly by branching and capping proteins. Physical Review E, 2009, 80, 041913.	0.8	2
30	Actin Bundle Nanomechanics and Organization Are Modulated by Macromolecular Crowding and Electrostatic Interactions. Frontiers in Molecular Biosciences, 2021, 8, 760950.	1.6	2
31	Nanoscale quantification of longitudinal and transverse mechanics of bacterial bodies. Applied Physics Letters, 2020, 116, .	1.5	1
32	Site-Specific Cation Release Drives Actin Filament Severing by Vertebrate Cofilin. Biophysical Journal, 2015, 108, 24a-25a.	0.2	0
33	Tension-Regulated Actin Severing Revealed by Surface-Free Single-Molecule Force Spectroscopy. Biophysical Journal, 2016, 110, 95a.	0.2	0
34	Macromolecular crowding modulates actin bundle formation induced by actin crosslinking proteins. FASEB Journal, 2019, 33, 779.28.	0.2	0
35	Structural polymorphism in actin filaments modulates gelsolin binding. FASEB Journal, 2019, 33, 779.23.	0.2	0
36	The effect of caffeine on actin filament assembly. FASEB Journal, 2019, 33, 784.17.	0.2	0

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37	Tracking and Detection of Bactericidal Quantum Dots. FASEB Journal, 2019, 33, 785.12.	0.2	0
38	Molecular Crowding Modulates Actin Filament Mechanics and Structure. FASEB Journal, 2019, 33, 779.4.	0.2	0
39	Effects of Dihydromotuporamine C Derivatives on Actin Assembly Dynamics. FASEB Journal, 2019, 33, 784.2.	0.2	0