Farid Alisafaei

List of Publications by Year
in descending order

26 papers	1,178 citations	567281 15 h-index	552781 26 g-index
30 all docs	30 docs citations	30 times ranked	1540 citing authors

#	Article	IF	Citations
1	Fibrous nonlinear elasticity enables positive mechanical feedback between cells and ECMs. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14043-14048.	7.1	267
2	Regulation of nuclear architecture, mechanics, and nucleocytoplasmic shuttling of epigenetic factors by cell geometric constraints. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13200-13209.	7.1	166
3	Compressive force induces reversible chromatin condensation and cell geometryâ€"dependent transcriptional response. Molecular Biology of the Cell, 2018, 29, 3039-3051.	2.1	106
4	Multiscale reverse engineering of the human ocular surface. Nature Medicine, 2019, 25, 1310-1318.	30.7	94
5	Dynamic analysis of multi-layered filament-wound composite pipes subjected to cyclic internal pressure and cyclic temperature. Composite Structures, 2010, 92, 1100-1109.	5.8	54
6	Nuclear Mechanics within Intact Cells Is Regulated by Cytoskeletal Network and Internal Nanostructures. Small, 2020, 16, e1907688.	10.0	52
7	Indentation Depth Dependent Mechanical Behavior in Polymers. Advances in Condensed Matter Physics, 2015, 2015, 1-20.	1.1	48
8	The nuclear piston activates mechanosensitive ion channels to generate cell migration paths in confining microenvironments. Science Advances, 2021, 7, .	10.3	45
9	Characterization of indentation size effects in epoxy. Polymer Testing, 2014, 40, 70-78.	4.8	44
10	On the origin of indentation size effects and depth dependent mechanical properties of elastic polymers. Journal of Polymer Engineering, 2016, 36, 103-111.	1.4	41
11	On the time and indentation depth dependence of hardness, dissipation and stiffness in polydimethylsiloxane. Polymer Testing, 2013, 32, 1220-1228.	4.8	40
12	The Balance between Actomyosin Contractility and Microtubule Polymerization Regulates Hierarchical Protrusions That Govern Efficient Fibroblastâ€"Collagen Interactions. ACS Nano, 2020, 14, 7868-7879.	14.6	37
13	Long-range mechanical signaling in biological systems. Soft Matter, 2021, 17, 241-253.	2.7	36
14	Surface-directed engineering of tissue anisotropy in microphysiological models of musculoskeletal tissue. Science Advances, 2021, 7, .	10.3	33
15	On couple-stress elasto-plastic constitutive frameworks for glassy polymers. International Journal of Plasticity, 2016, 77, 30-53.	8.8	24
16	Mechanics of concentric carbon nanotubes: Interaction force and suction energy. Computational Materials Science, 2011, 50, 1406-1413.	3.0	17
17	On the van der Waals interaction of carbon nanocones. Journal of Physics and Chemistry of Solids, 2012, 73, 751-756.	4.0	14
18	Length scale dependent deformation in natural rubber. Journal of Applied Polymer Science, 2015, 132, .	2.6	12

#	Article	IF	Citations
19	Length scale dependence in elastomers â€“ comparison of indentation experiments with numerical simulations. Polymer, 2016, 98, 201-209.	3.8	10
20	Mechanisms of Local Stress Amplification in Axons near the Gray-White Matter Interface. Biophysical Journal, 2020, 119, 1290-1300.	0.5	9
21	A semi-analytical approach for the interaction of carbon nanotori. Physica E: Low-Dimensional Systems and Nanostructures, 2014, 58, 63-66.	2.7	6
22	On thresholds in the indentation size effect of polymers. Polymer Bulletin, 2016, 73, 763-772.	3.3	5
23	Cytoskeleton-mediated alterations of nuclear mechanics by extracellular mechanical signals. Biophysical Journal, 2022, 121, 1-3.	0.5	5
24	Fiber Diameter-Dependent Elastic Deformation in Polymer Compositesâ€"A Numerical Study. Journal of Engineering Materials and Technology, Transactions of the ASME, 2020, 142, .	1.4	2
25	FORCE DISTRIBUTION AND OFFSET CONFIGURATION FOR CARBON NANOTUBES. International Journal of Nanoscience, 2012, 11, 1250014.	0.7	1
26	Nuclear Mechanics: Nuclear Mechanics within Intact Cells Is Regulated by Cytoskeletal Network and Internal Nanostructures (Small 18/2020). Small, 2020, 16, 2070098.	10.0	0