Zezhou Liu

List of Publications by Year
in descending order

21 papers	238 citations	933264 10 h-index	996849 15 g-index
21 all docs	21 docs citations	21 times ranked	207 citing authors

#	Article	IF	Citations
1	Lubricated soft normal elastic contact of a sphere: a new numerical method and experiment. Soft Matter, 2022, 18, 1219-1227.	1.2	3
2	Elastocapillarity at Cell-Matrix Contacts. Physical Review X, 2022, 12, .	2.8	1
3	Meso-scale dislocations and friction of shape-complementary soft interfaces. Journal of the Royal Society Interface, 2021, 18, 20200940.	1.5	4
4	Energetics of cracks and defects in soft materials: The role of surface stress. Extreme Mechanics Letters, 2021, 48, 101424.	2.0	1
5	A surface flattening method for characterizing the surface stress, drained Poisson's ratio and diffusivity of poroelastic gels. Soft Matter, 2021, 17, 7332-7340.	1.2	2
6	Effect of elastocapillarity on the swelling kinetics of hydrogels. Journal of the Mechanics and Physics of Solids, 2020, 145, 104132.	2.3	14
7	Energy release rate of a single edge cracked specimen subjected to large deformation. International Journal of Fracture, 2020, 226, 71-79.	1.1	8
8	How surface stress transforms surface profiles and adhesion of rough elastic bodies. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200477.	1.0	7
9	Extreme cavity expansion in soft solids: Damage without fracture. Science Advances, 2020, 6, eaaz0418.	4.7	45
10	Modeling of surface mechanical behaviors of soft elastic solids: theory and examples. Soft Matter, 2020, 16, 6875-6889.	1.2	13
11	Droplets on an elastic membrane: Configurational energy balance and modified Young equation. Journal of the Mechanics and Physics of Solids, 2020, 138, 103902.	2.3	20
12	Mechanical behavior of unidirectional fiber reinforced soft composites. Extreme Mechanics Letters, 2020, 35, 100642.	2.0	13
13	Coupled flow and deformation fields due to a line load on a poroelastic half space: effect of surface stress and surface bending. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20190761.	1.0	6
14	Mechanics of zero degree peel test on a tape â€”Âeffects of large deformation, material nonlinearity, and finite bond length. Extreme Mechanics Letters, 2019, 32, 100518.	2.0	16
15	Size effect on elastic stress concentrations in unidirectional fiber reinforced soft composites. Extreme Mechanics Letters, 2019, 33, 100573.	2.0	16
16	A surface with stress, extensional elasticity, and bending stiffness. Soft Matter, 2019, 15, 3817-3827.	1.2	13
17	Effects of strain-dependent surface stress on the adhesive contact of a rigid sphere to a compliant substrate. Soft Matter, 2019, 15, 2223-2231.	1.2	10
18	Effect of large deformation and surface stiffening on the transmission of a line load on a neo-Hookean half space. Soft Matter, 2018, 14, 1847-1855.	1.2	18

#	Article	IF	Citations
19	Mechanics of an adhesive tape in a zero degree peel test: effect of large deformation and material nonlinearity. Soft Matter, 2018, 14, 9681-9692.	1.2	21
20	The effect of surface bending and surface stress on the transmission of a vertical line force in soft materials. Extreme Mechanics Letters, 2018, 23, 9-16.	2.0	3
21	Effect of surface bending and stress on the transmission of line force to an elastic substrate. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20170775.	1.0	4