Louis Foucard

List of Publications by Year
in descending order

16 papers	285 citations	840776 11 h-index	996975 15 g-index
17 all docs	17 docs citations	17 times ranked	312 citing authors

#	Article	IF	Citations
1	Remotely Triggered Locomotion of Hydrogel Mag-bots in Confined Spaces. Scientific Reports, 2017, 7, 16178.	3.3	38
2	Mechanical hysteresis in actin networks. Soft Matter, 2018, 14, 2052-2058.	2.7	32
3	An XFEMâ€based numerical strategy to model mechanical interactions between biological cells and a deformable substrate. International Journal for Numerical Methods in Engineering, 2012, 92, 238-267.	2.8	24
4	Mechanics and stability of vesicles and droplets in confined spaces. Physical Review E, 2016, 94, 062613.	2.1	24
5	A thermodynamical model for stress-fiber organization in contractile cells. Applied Physics Letters, 2012, 100, 13702-137024.	3.3	23
6	Separating the contributions of zona pellucida and cytoplasm in the viscoelastic response of human oocytes. Acta Biomaterialia, 2019, 85, 253-262.	8.3	23
7	The Chain Distribution Tensor: Linking Nonlinear Rheology and Chain Anisotropy in Transient Polymers. Polymers, 2018, 10, 848.	4.5	20
8	A coupled Eulerianâ€"Lagrangian extended finite element formulation for simulating large deformations in hyperelastic media with moving free boundaries. Computer Methods in Applied Mechanics and Engineering, 2015, 283, 280-302.	6.6	18
9	The Effective Permeability of Cracks and Interfaces in Porous Media. Transport in Porous Media, 2012, 93, 815-829.	2.6	17
10	A theoretical treatment on the mechanics of interfaces in deformable porous media. International Journal of Solids and Structures, 2011, 48, 3129-3141.	2.7	15
11	Simultaneous cell traction and growth measurements using light. Journal of Biophotonics, 2019, 12, e201800182.	2.3	14
12	Cooperative buckling and the nonlinear mechanics of nematic semiflexible networks. Nonlinearity, 2015, 28, R89-R112.	1.4	9
13	An Xâ€FEMâ€based numericalâ€"asymptotic expansion for simulating a Stokes flow near a sharp corner. International Journal for Numerical Methods in Engineering, 2015, 102, 79-98.	2.8	9
14	A particleâ€based moving interface method (PMIM) for modeling the large deformation of boundaries in soft matter systems. International Journal for Numerical Methods in Engineering, 2016, 107, 923-946.	2.8	8
15	Bridging the Scales to Explore Cellular Adaptation and Remodeling. BioNanoScience, 2011, 1, 110-115.	3.5	7
16	Folding sticky elastica: dynamics and reversibility of folds in Langmuir monolayers. Soft Matter, 2017, 13, 6730-6742.	2.7	0