Marcelo A Dias

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3193942/publications.pdf

Version: 2024-02-01

26 papers 679 citations

759233 12 h-index 23 g-index

27 all docs

27 docs citations

27 times ranked 735 citing authors

#	Article	IF	CITATIONS
1	Stiffness of the human foot and evolution of the transverse arch. Nature, 2020, 579, 97-100.	27.8	112
2	Geometric Mechanics of Curved Crease Origami. Physical Review Letters, 2012, 109, 114301.	7.8	108
3	Kirigami actuators. Soft Matter, 2017, 13, 9087-9092.	2.7	79
4	"Wunderlich, Meet Kirchhoff― A General and Unified Description of Elastic Ribbons and Thin Rods. Journal of Elasticity, 2015, 119, 49-66.	1.9	66
5	A non-linear rod model for folded elastic strips. Journal of the Mechanics and Physics of Solids, 2014, 62, 57-80.	4.8	57
6	Multistable kirigami for tunable architected materials. Physical Review Materials, 2018, 2, .	2.4	46
7	The shape and mechanics of curved-fold origami structures. Europhysics Letters, 2012, 100, 54005.	2.0	31
8	Swimming near deformable membranes at low Reynolds number. Physics of Fluids, 2013, 25, .	4.0	19
9	Overcurvature induced multistability of linked conical frusta: how a  bendy straw' holds its shape. Soft Matter, 2018, 14, 8636-8642.	2.7	17
10	Analytic analysis of auxetic metamaterials through analogy with rigid link systems. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2018, 474, 20170753.	2.1	15
11	Foldable cones as a framework for nonrigid origami. Physical Review E, 2019, 100, 033003.	2.1	15
12	Recipes for selecting failure modes in 2-d lattices. Extreme Mechanics Letters, 2016, 9, 11-20.	4.1	14
13	Tunable wrinkling of thin nematic liquid crystal elastomer sheets. Physical Review E, 2019, 100, 022701.	2.1	13
14	Can confined mechanical metamaterials replace adhesives?. Extreme Mechanics Letters, 2021, 48, 101411.	4.1	13
15	Minimal model for transient swimming in a liquid crystal. European Physical Journal E, 2015, 38, 94.	1.6	11
16	Direct Observation of Topological Defects in Striped Block Copolymer Discs and Polymersomes. ACS Nano, 2020, 14, 4829-4838.	14.6	11
17	Diffusion of a Brownian ellipsoid in a force field. Europhysics Letters, 2016, 114, 30005.	2.0	9
18	Cutting holes in bistable folds. Mechanics Research Communications, 2022, 124, 103700.	1.8	8

#	Article	IF	CITATIONS
19	On local kirigami mechanics I: Isometric conical solutions. Journal of the Mechanics and Physics of Solids, 2021, 151, 104370.	4.8	8
20	Reentrant tensegrity: A three-periodic, chiral, tensegrity structure that is auxetic. Science Advances, 2021, 7, eabj6737.	10.3	7
21	Lifting Kirigami Actuators Up Where They Belong. , 2019, , .		6
22	On microscopic analysis of fracture in unidirectional composite material using phase field modelling. Composites Science and Technology, 2022, 220, 109242.	7.8	6
23	Embracing failure. Physics World, 2017, 30, 25-28.	0.0	3
24	"Wunderlich, Meet Kirchhoff― A General and Unified Description of Elastic Ribbons and Thin Rods. , 2016, , 49-66.		2
25	On local kirigami mechanics II: Stretchable creased solutions. Journal of the Mechanics and Physics of Solids, 2022, 161, 104812.	4.8	2
26	Geometric Mechanics of Curved Crease Origami. , 0, .		1