

Benny Davidovitch

List of Publications by Year in descending order

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Version: 2024-02-01

30
papers

1,234
citations

394421

19
h-index

477307

29
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31
all docs

31
docs citations

31
times ranked

1136
citing authors

#	ARTICLE	IF	CITATIONS
1	Rucks and folds: delamination from a flat rigid substrate under uniaxial compression. European Physical Journal E, 2021, 44, 11.	1.6	9
2	Van der Waals interaction affects wrinkle formation in two-dimensional materials. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	24
3	Indentation of solid membranes on rigid substrates with van der Waals attraction. Physical Review E, 2021, 103, 043002.	2.1	7
4	Stretching Hookean ribbons part II: from buckling instability to far-from-threshold wrinkle pattern. European Physical Journal E, 2021, 44, 94.	1.6	1
5	Stretching Hookean ribbons part I: relative edge extension underlies transverse compression and buckling instability. European Physical Journal E, 2021, 44, 92.	1.6	2
6	Mesoscale structure of wrinkle patterns and defect-proliferated liquid crystalline phases. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3938-3943.	7.1	13
7	Stresses in thin sheets at fluid interfaces. Nature Materials, 2020, 19, 690-693.	27.5	16
8	Birth and decay of tensional wrinkles in hyperelastic sheets. Physical Review E, 2019, 100, 053003.	2.1	6
9	Geometrically incompatible confinement of solids. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1483-1488.	7.1	45
10	Partial wetting of thin solid sheets under tension. Soft Matter, 2018, 14, 4913-4934.	2.7	24
11	Regimes of wrinkling in an indented floating elastic sheet. Physical Review E, 2018, 98, 013003.	2.1	22
12	Indentation metrology of clamped, ultra-thin elastic sheets. Soft Matter, 2017, 13, 2264-2278.	2.7	43
13	Geometry-Driven Folding of a Floating Annular Sheet. Physical Review Letters, 2017, 118, 048004.	7.8	23
14	From Cylindrical to Stretching Ridges and Wrinkles in Twisted Ribbons. Physical Review Letters, 2016, 117, 104301.	7.8	15
15	Curvature-induced stiffness and the spatial variation of wavelength in wrinkled sheets. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1144-1149.	7.1	88
16	Roadmap to the Morphological Instabilities of a Stretched Twisted Ribbon. , 2016, , 137-189.		1
17	Roadmap to the Morphological Instabilities of a Stretched Twisted Ribbon. Journal of Elasticity, 2015, 119, 137-189.	1.9	57
18	Sheet on a deformable sphere: Wrinkle patterns suppress curvature-induced delamination. Physical Review E, 2015, 91, 012407.	2.1	36

#	ARTICLE	IF	CITATIONS
19	A comparative analysis of numerical approaches to the mechanics of elastic sheets. <i>Journal of the Mechanics and Physics of Solids</i> , 2015, 79, 92-107.	4.8	44
20	Indentation of Ultrathin Elastic Films and the Emergence of Asymptotic Isometry. <i>Physical Review Letters</i> , 2015, 114, 014301.	7.8	52
21	Optimal wrapping of liquid droplets with ultrathin sheets. <i>Nature Materials</i> , 2015, 14, 1206-1209.	27.5	62
22	Mechanics of large folds in thin interfacial films. <i>Physical Review E</i> , 2014, 90, 042401.	2.1	18
23	Universal collapse of stress and wrinkle-to-scar transition in spherically confined crystalline sheets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 12893-12898.	7.1	54
24	Elastic sheet on a liquid drop reveals wrinkling and crumpling as distinct symmetry-breaking instabilities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 9716-9720.	7.1	158
25	Capillary interactions among spherical particles at curved liquid interfaces. <i>Soft Matter</i> , 2012, 8, 8582.	2.7	49
26	Prototypical model for tensional wrinkling in thin sheets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 18227-18232.	7.1	189
27	Elastic Building Blocks for Confined Sheets. <i>Physical Review Letters</i> , 2011, 106, 074301.	7.8	39
28	Smooth Cascade of Wrinkles at the Edge of a Floating Elastic Film. <i>Physical Review Letters</i> , 2010, 105, 038302.	7.8	103
29	Linear dynamics of ion sputtered surfaces: instability, stability and bifurcations. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 224019.	1.8	12
30	Period fissioning and other instabilities of stressed elastic membranes. <i>Physical Review E</i> , 2009, 80, 025202.	2.1	22