Kari Dalnoki-Veress

List of Publications by Year
in descending order

105 papers	6,275 citations	125106 35 h-index	75989 78 g-index
106 all docs	106 docs citations	106 times ranked	5476 citing authors

#	Article	IF	Citations
1	Effect of Free Surfaces on the Glass Transition Temperature of Thin Polymer Films. Physical Review Letters, 1996, 77, 2002-2005.	2.9	1,028
2	The glass transition in thin polymer films. Advances in Colloid and Interface Science, 2001, 94, 167-195.	7.0	741
3	Interface and chain confinement effects on the glass transition temperature of thin polymer films. Physical Review E, 1997, 56, 5705-5716.	0.8	739
4	Molecular weight dependence of reductions in the glass transition temperature of thin, freely standing polymer films. Physical Review E, 2001, 63, 031801.	0.8	338
5	Chain Entanglement in Thin Freestanding Polymer Films. Physical Review Letters, 2005, 94, 127801.	2.9	213
6	A Direct Quantitative Measure of Surface Mobility in a Glassy Polymer. Science, 2014, 343, 994-999.	6.0	192
7	Homogeneous Crystallization of Poly(Ethylene Oxide) Confined to Droplets: The Dependence of the Crystal Nucleation Rate on Length Scale and Temperature. Physical Review Letters, 2004, 92, 255509.	2.9	178
8	Understanding and predicting viscous, elastic, plastic flows. European Physical Journal E, 2011, 34, 1.	0.7	152
9	Reduced Glass Transition Temperatures in Thin Polymer Films: Surface Effect or Artifact?. Physical Review Letters, 2012, 109, 055701.	2.9	151
10	Brillouin light scattering studies of the mechanical properties of thin freely standing polystyrene films. Physical Review E, 1998, 58, 6109-6114.	0.8	116
11	Phase separation morphology of spin-coated polymer blend thin films. Physica A: Statistical Mechanics and Its Applications, 1997, 239, 87-94.	1.2	87
12	Direct visualisation of homogeneous and heterogeneous crystallisation in an ensemble of confined domains of poly(ethylene oxide). European Physical Journal E, 2003, 12, 111-117.	0.7	82
13	Influence of slip on the Plateauâ€“Rayleigh instability on a fibre. Nature Communications, 2015, 6, 7409.	5.8	76
14	Crystallization kinetics and crystal morphology in thin poly(ethylene oxide) films. European Physical Journal E, 2003, 11, 191-198.	0.7	74
15	Hole formation and growth in freely standing polystyrene films. Physical Review E, 1999, 59, 2153-2156.	0.8	73
16	Homogeneous Bulk, Surface, and Edge Nucleation in Crystalline Nanodroplets. Physical Review Letters, 2010, 105, 237801.	2.9	72
17	Cooperative strings and glassy interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8227-8231.	3.3	70
18	Confinement Effects in Polymer Crystal Nucleation from the Bulk to Few-Chain Systems. Physical Review Letters, 2006, 97, 247802.	2.9	69

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19	When Does a Glass Transition Temperature Not Signify a Glass Transition?. ACS Macro Letters, 2014, 3, 310-314.	2.3	69
20	Viscoelastic properties of the nematode Caenorhabditis elegans , a self-similar, shear-thinning worm. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 4528-4533.	3.3	66
21	Nanoparticle Flotation Collectors: Mechanisms Behind a New Technology. Langmuir, 2011, 27, 10438-10446.	1.6	62
22	Crystal growth rate in ultrathin films of poly(ethylene oxide). Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 2615-2621.	2.4	57
23	Liquid Droplets on a Highly Deformable Membrane. Physical Review Letters, 2015, 115, 206101.	2.9	57
24	Crystal nucleation of polymers confined to droplets: Memory effects. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 3438-3443.	2.4	56
25	Plateau-Rayleigh instability in a torus: formation and breakup of a polymer ring. Soft Matter, 2010, 6, 1258.	1.2	56
26	Dispersion-Driven Morphology of Mechanically Confined Polymer Films. Physical Review Letters, 1999, 82, 1486-1489.	2.9	54
27	Surface energy of strained amorphous solids. Nature Communications, 2018, 9, 982.	5.8	53
28	Inelastic neutron scattering for investigating the dynamics of confined glass-forming liquids. Journal of Non-Crystalline Solids, 2005, 351, 2657-2667.	1.5	51
29	Effect of atmosphere on reductions in the glass transition of thin polystyrene films. European Physical Journal E, 2008, 27, 375-377.	0.7	49
30	Self-Similarity and Energy Dissipation in Stepped Polymer Films. Physical Review Letters, 2012, 109, 128303.	2.9	47
31	Phase separation morphology of thin films of polystyrene/polyisoprene blends. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 3017-3024.	2.4	45
32	Effect of Free Surfaces on the Glass Transition Temperature of Thin Polymer Films. Physical Review Letters, 1996, 77, 4108-4108.	2.9	41
33	Mechanical confinement effects on the phase separation morphology of polymer blend thin films. Physical Review E, 1998, 57, 5811-5817.	0.8	39
34	Adhesion and membrane tension of single vesicles and living cells using a micropipette-based technique. European Physical Journal E, 2009, 30, 117-21.	0.7	38
35	Droplet Shape of an Anisotropic Liquid. Physical Review Letters, 2006, 97, 204502.	2.9	36
36	Beyond Tannerâ€™s Law: Crossover between Spreading Regimes of a Viscous Droplet on an Identical Film. Physical Review Letters, 2012, 109, 154501.	2.9	34

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37	Systematic study of alginate-based microcapsules by micropipette aspiration and confocal fluorescence microscopy. Materials Science and Engineering C, 2013, 33, 4295-4304.	3.8	34
38	Controlling Marangoni-induced instabilities in spin-cast polymer films: How to prepare uniform films. European Physical Journal E, 2016, 39, 90.	0.7	34
39	Brillouin light scattering studies of the mechanical properties of polystyrene/polyisoprene multilayered thin films. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 3009-3016.	2.4	31
40	Direct Measurements of Drag Forces in C.Âelegans Crawling Locomotion. Biophysical Journal, 2014, 107, 1980-1987.	0.2	31
41	Capillary levelling of a cylindrical hole in a viscous film. Soft Matter, 2014, 10, 2550.	1.2	31
42	Capillary-driven flow induced by a stepped perturbation atop a viscous film. Physics of Fluids, 2012, 24, .	1.6	30
43	Numerical solutions of thin-film equations for polymer flows. European Physical Journal E, 2012, 35, 114.	0.7	30
44	Capillary levelling as a probe of thin film polymer rheology. Soft Matter, 2011, 7, 7832.	1.2	28
45	Surface nucleation in the crystallisation of polyethylene droplets. European Physical Journal E, 2011, 34, 6.	0.7	27
46	Self-Amplification of Solid Friction in Interleaved Assemblies. Physical Review Letters, 2016, 116, 015502.	2.9	25
47	The effects of viscosity on the undulatory swimming dynamics of C. elegans. Physics of Fluids, 2015, 27, .	1.6	22
48	Measurement of adhesion energies and Young's modulus in thin polymer films using a novel axi-symmetric peel test geometry. European Physical Journal E, 2006, 19, 453-459.	0.7	21
49	Step Edges in Thin Films of Lamellar-Forming Diblock Copolymer. Macromolecules, 2012, 45, 9531-9538.	2.2	21
50	Predicting the size of droplets produced through Laplace pressure induced snap-off. Soft Matter, 2016, 12, 7398-7404.	1.2	21
51	Sub-glass-transition temperature interface formation between an immiscible glass rubber pair. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 2664-2670.	2.4	20
52	Changes in the Morphology of Self-Assembled Polystyrene Microsphere Monolayers Produced by Annealing. Journal of Colloid and Interface Science, 2001, 243, 143-155.	5.0	20
53	Ellipsometry as a probe of crystallization kinetics in thin diblock copolymer films. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3448-3452.	2.4	20
54	Elastocapillary bending of microfibers around liquid droplets. Soft Matter, 2017, 13, 720-724.	1.2	20

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55	Spinodal wrinkling in thin-film poly(ethylene oxide)/polystyrene bilayers. European Physical Journal E, 2006, 19, 423-432.	0.7	18
56	Squeezing and Detachment of Living Cells. Biophysical Journal, 2010, 99, 3555-3562.	0.2	18
57	First inelastic neutron scattering studies on thin free standing polymer films. European Physical Journal E, 2003, 12, 93-96.	0.7	17
58	Crystal Growth Rate in a Blend of Long and Short Polymer Chains. Macromolecules, 2012, 45, 1688-1691.	2.2	17
59	Approach to universal self-similar attractor for the levelling of thin liquid films. Soft Matter, 2014, 10, 8608-8614.	1.2	17
60	Liquid Droplets Act as â€œCompass Needlesâ€•for the Stresses in a Deformable Membrane. Physical Review Letters, 2017, 118, 198002.	2.9	17
61	Instabilities in thin polymer films: from pattern formation to rupture. Macromolecular Symposia, 2000, 159, 143-150.	0.4	16
62	Hole nucleation in free-standing polymer membranes: the effects of varying molecular architecture. Soft Matter, 2010, 6, 5547.	1.2	15
63	Undulatory microswimming near solid boundaries. Physics of Fluids, 2014, 26, .	1.6	15
64	Differential pressure experiment to probe hole growth in freely standing polymer films. Review of Scientific Instruments, 2003, 74, 2796-2804.	0.6	14
65	Relaxation and intermediate asymptotics of a rectangular trench in a viscous film. Physical Review E, 2013, 88, 035001.	0.8	14
66	Reply to comment on â€œThe properties of free polymer surfaces and their effect upon the glass transition temperature of thin polystyrene films" by S.A. Hutcheson and G.B. McKenna. European Physical Journal E, 2007, 22, 287-291.	0.7	13
67	Kinetics of layer hopping in a diblock copolymer lamellar phase. European Physical Journal E, 2008, 27, 407-411.	0.7	13
68	Ordering of a lamella-forming fluid near an interface. Physical Review E, 2009, 80, 051803.	0.8	12
69	Dynamic force patterns of an undulatory microswimmer. Physical Review E, 2014, 89, 050701.	0.8	12
70	Direct Measurement of the Critical Pore Size in a Model Membrane. Physical Review Letters, 2016, 117, 257801.	2.9	12
71	Morphology Induced Spinodal Decomposition at the Surface of Symmetric Diblock Copolymer Films. ACS Macro Letters, 2013, 2, 441-445.	2.3	11
72	Capillary leveling of stepped films with inhomogeneous molecular mobility. Soft Matter, 2013, 9, 8297.	1.2	11

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73	Liquid droplets on a free-standing glassy membrane: Deformation through the glass transition. European Physical Journal E, 2017, 40, 69.	0.7	11
74	Adsorption-induced slip inhibition for polymer melts on ideal substrates. Nature Communications, 2018, 9, 1172.	5.8	11
75	Multiple droplets on a conical fiber: formation, motion, and droplet mergers. Soft Matter, 2022, 18, 1364-1370.	1.2	10
76	Spreading of diblock copolymer droplets: A probe of polymer micro-rheology. European Physical Journal E, 2009, 29, 239-244.	0.7	9
77	Droplets Capped with an Elastic Film Can Be Round, Elliptical, or Nearly Square. Physical Review Letters, 2018, 121, 248004.	2.9	9
78	Self-organisation and convection of confined magnetotactic bacteria. Scientific Reports, 2020, 10, 13578.	1.6	9
79	Swelling molecular entanglement networks in polymer glasses. Physical Review E, 2010, 82, 021802.	0.8	8
80	Symmetry plays a key role in the erasing of patterned surface features. Applied Physics Letters, 2015, 107, 053103.	1.5	8
81	Snap-off production of monodisperse droplets. European Physical Journal E, 2015, 38, 138.	0.7	8
82	Capillary Leveling of Freestanding Liquid Nanofilms. Physical Review Letters, 2016, 117, 167801.	2.9	8
83	Rearrangement of two dimensional aggregates of droplets under compression: Signatures of the energy landscape from crystal to glass. Physical Review Research, 2020, 2, .	1.3	8
84	Dynamics of interacting edge defects in copolymer lamellae. European Physical Journal E, 2011, 34, 1-7.	0.7	7
85	Tangling of Tethered Swimmers: Interactions between Two Nematodes. Physical Review Letters, 2014, 113, 138101.	2.9	7
86	Ion crater healing and variable temperature ellipsometry as complementary probes for the glass transition in thin polymer films. European Physical Journal E, 2003, 12, 81-85.	0.7	6
87	Glass transition at interfaces. Europhysics News, 2017, 48, 24-28.	0.1	6
88	Symmetrization of Thin Freestanding Liquid Films via a Capillary-Driven Flow. Physical Review Letters, 2020, 124, 184502.	2.9	6
89	Film coating by directional droplet spreading on fibers. Physical Review Fluids, 2021, 6, .	1.0	6
90	Quantized Contact Angles in the Dewetting of a Structured Liquid. Physical Review Letters, 2014, 112, 068303.	2.9	5

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91	The nematode C. elegans as a complex viscoelastic fluid. European Physical Journal E, 2015, 38, 118.	0.7	5
92	Liquid dewetting under a thin elastic film. Soft Matter, 2018, 14, 3557-3562.	1.2	5
93	PEO Penetration into Water-Plasticized Poly(vinylphenol) Thin Films. Macromolecules, 2004, 37, 494-500.	2.2	4
94	Ellipsometry as a probe of crystallization in binary blends of a sphereâ€forming diblock copolymer. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 712-716.	2.4	4
95	Onset of Area-Dependent Dissipation in Droplet Spreading. Physical Review Letters, 2015, 115, 046103.	2.9	4
96	Why canâ€™t you separate interleaved books?. Physics Today, 2016, 69, 74-75.	0.3	4
97	Mechanical properties of 2D aggregates of oil droplets as model mono-crystals. Soft Matter, 2021, 17, 1194-1201.	1.2	4
98	Capillary levelling of immiscible bilayer films. Journal of Fluid Mechanics, 2021, 911, .	1.4	3
99	Reversible sphere-to-lamellar wetting transition at the interface of a diblock copolymer system. European Physical Journal E, 2011, 34, 51.	0.7	2
100	Writhing and hockling instabilities in twisted elastic fibers. European Physical Journal E, 2021, 44, 149.	0.7	2
101	Strain rate effects on symmetric diblock copolymer liquid bridges: Order-induced stability of polymer fibres. European Physical Journal E, 2014, 37, 100.	0.7	1
102	Continuum Model Applied to Granular Analogs of Droplets and Puddles. Physical Review Letters, 2020, 125, 228001.	2.9	1
103	Stretching a Solid Modifies its Wettability â€¦ Or Does it?. ChemistryViews, 0, , .	0.0	1
104	Spontaneous Elastocapillary Winding of Thin Elastic Fibers in Contact with Bubbles. Physical Review Letters, 2021, 127, 218001.	2.9	1
105	New section for The European Physical Journal E: â€œTips and Tricks in Soft Matter and Biological Physicsâ€• European Physical Journal E, 2015, 38, 1.	0.7	0