Arkadii Arinstein

List of Publications by Year
in descending order

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41 papers	1,317 citations	430442 18 h-index	377514 34 g-index
42 all docs	42 docs citations	42 times ranked	1498 citing authors

#	Article	IF	Citations
1	Effect of supramolecular structure on polymer nanofibre elasticity. Nature Nanotechnology, 2007, 2, 59-62.	15.6	339
2	Quantum S-matrix of the (1 + 1)-dimensional Todd chain. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1979, 87, 389-392.	1.5	198
3	Electrospun polymer nanofibers: Mechanical and thermodynamic perspectives. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 691-707.	2.4	134
4	Polymer extension flows and instabilities. Progress in Polymer Science, 2014, 39, 959-978.	11.8	67
5	Polymer dynamics in semidilute solution during electrospinning: A simple model and experimental observations. Physical Review E, 2011, 84, 041806.	0.8	60
6	Equilibrium and irreversible unzipping of DNA in a nanopore. Europhysics Letters, 2006, 73, 128-134.	0.7	49
7	Cryo-Imaging of Hydrogels Supermolecular Structure. Scientific Reports, 2016, 6, 25495.	1.6	49
8	Postprocesses in tubular electrospun nanofibers. Physical Review E, 2007, 76, 056303.	0.8	41
9	Buckling behaviour of electrospun microtubes: a simple theoretical model and experimental observations. Journal Physics D: Applied Physics, 2009, 42, 015507.	1.3	37
10	Confinement mechanism of electrospun polymer nanofiber reinforcement. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 756-763.	2.4	32
11	The Role of Electrical Polarity in Electrospinning and on the Mechanical and Structural Properties of As-Spun Fibers. Materials, 2020, 13, 4169.	1.3	32
12	Free flight of an oscillated string pendulum as a tool for the mechanical characterization of an individual polymer nanofiber. Applied Physics Letters, 2008, 93, 193118.	1.5	27
13	Shifting of the melting point for semi-crystalline polymer nanofibers. Europhysics Letters, 2011, 93, 46001.	0.7	27
14	Fabrication of thermoset polymer nanofibers by co-electrospinning of uniform core-shell structures. Journal of Materials Chemistry, 2009, 19, 7198.	6.7	26
15	Thermo-mechanical behavior of electrospun thermoplastic polyurethane nanofibers. European Polymer Journal, 2013, 49, 3851-3856.	2.6	24
16	Sizeâ€dependent mechanical properties of glassy polymer nanofibers via molecular dynamics simulations. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 506-514.	2.4	22
17	Do surface effects explain the unique elasticity of polymer nanofibers?. Europhysics Letters, 2011, 96, 16006.	0.7	19
18	Liquid filament instability due to stretch-induced phase separation in polymer solutions. European Physical Journal E, 2014, 37, 10.	0.7	19

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19	pHâ€Controlled network formation in a mixture of oppositely charged cellulose nanocrystals and poly(allylamine). Journal of Polymer Science, Part B: Polymer Physics, 2019, 57, 1527-1536.	2.4	14
20	Inverted spring pendulum driven by a periodic force: linear versus nonlinear analysis. European Journal of Physics, 2008, 29, 385-392.	0.3	13
21	Polymerization kinetics under confinement. Polymer Chemistry, 2011, 2, 835.	1.9	13
22	Relaxation spectra of polymers and phenomena of electrical and hydrophobic recovery: Interplay between bulk and surface properties of polymers. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 198-205.	2.4	13
23	Estimating the Degree of Polymer Stretching during Electrospinning: An Experimental Imitation Method. Macromolecular Materials and Engineering, 2017, 302, 1600554.	1.7	11
24	Differentiation of Pancreatic Cyst Types by Analysis of Rheological Behavior of Pancreatic Cyst Fluid. Scientific Reports, 2017, 7, 45589.	1.6	10
25	Solution of the SU(N) massless thirring model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1980, 95, 280-284.	1.5	9
26	Models for formation of supermolecular oligomeric liquid structures: Theory and experiment. Polymer Engineering and Science, 1997, 37, 1339-1347.	1.5	4
27	Relaxation suppression in a stretched copolymer matrix above T_g. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1254-1259.	2.4	4
28	Conformational statistics of ribbonlike semiflexible polymer chains. Physical Review E, 2005, 72, 051805.	0.8	3
29	Uniaxial ordering and rotator phase of ribbonlike polymers. Physical Review E, 2005, 72, 051806.	0.8	3
30	Longitudinal oscillations and flights of the string pendulum driven by a periodic force. Physical Review E, 2009, 79, 056609.	0.8	3
31	Supermolecular Structure Formation During Electrospinning, and Its Effect on Electrospun Polymer Nanofiber Unique Features. Advanced Structured Materials, 2019, , 173-204.	0.3	3
32	Random walks and anomalous diffusion in two-component random media. Physical Review E, 2005, 72, 021104.	0.8	2
33	Creep anomaly in electrospun fibers made of globular proteins. Physical Review E, 2013, 88, 062605.	0.8	2
34	The features of ribbonâ€like polymers in thin films. Israel Journal of Chemistry, 2007, 47, 289-298.	1.0	1
35	Application of ferromagnetic fluids in dispersion media diagnostics. Journal of Magnetism and Magnetic Materials, 1990, 85, 264-268.	1.0	0
36	Explanations of the Size-Dependent Behavior by a Physicist: Some Possible Reasons and Mechanisms. , 2017, , 147-182.		0

#	Article	IF	Citations
37	Experimental Examination of Electrospun Polymer Nanofibers. , 2017, , 21-36.		0
38	Size-Dependent Behavior. , 2017, , 127-145.		0
39	Polymer Dynamics in Semi-dilute Solution During Electrospinning. , 2017, , 85-124.		0
40	Electrospinning of Polymer Nanofibers. , 2017, , 39-83.		0
41	3D printing of optical materials: an investigation of the microscopic properties. , 2018, , .		0