

Mark Owen Robbins

List of Publications by Year in descending order

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184
papers

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19655

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185
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185
docs citations

185
times ranked

7094
citing authors

#	ARTICLE	IF	CITATIONS
1	Shear flow near solids: Epitaxial order and flow boundary conditions. <i>Physical Review A</i> , 1990, 41, 6830-6837.	2.5	688
2	Phase diagram and dynamics of Yukawa systems. <i>Journal of Chemical Physics</i> , 1988, 88, 3286-3312.	3.0	635
3	The breakdown of continuum models for mechanical contacts. <i>Nature</i> , 2005, 435, 929-932.	27.8	587
4	Simulations of contact-line motion: Slip and the dynamic contact angle. <i>Physical Review Letters</i> , 1989, 63, 766-769.	7.8	414
5	Adsorbed Layers and the Origin of Static Friction. <i>Science</i> , 1999, 284, 1650-1652.	12.6	411
6	Phase transitions and universal dynamics in confined films. <i>Physical Review Letters</i> , 1992, 68, 3448-3451.	7.8	385
7	Finite element modeling of elasto-plastic contact between rough surfaces. <i>Journal of the Mechanics and Physics of Solids</i> , 2005, 53, 2385-2409.	4.8	305
8	A continuum and molecular dynamics hybrid method for micro- and nano-fluid flow. <i>Journal of Fluid Mechanics</i> , 2004, 500, 55-64.	3.4	301
9	Simple Microscopic Theory of Amontons's Laws for Static Friction. <i>Physical Review Letters</i> , 2001, 86, 1295-1298.	7.8	274
10	Contact between rough surfaces and a criterion for macroscopic adhesion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 3298-3303.	7.1	251
11	Meeting the Contact-Mechanics Challenge. <i>Tribology Letters</i> , 2017, 65, 1.	2.6	232
12	Dynamical Transition in Quasistatic Fluid Invasion in Porous Media. <i>Physical Review Letters</i> , 1988, 60, 2042-2045.	7.8	221
13	Interfacial Stability of Immiscible Displacement in a Porous Medium. <i>Physical Review Letters</i> , 1986, 57, 1718-1721.	7.8	212
14	Phase Diagram of Yukawa Systems: Model for Charge-Stabilized Colloids. <i>Physical Review Letters</i> , 1986, 57, 2694-2697.	7.8	189
15	Influence of contact angle on quasistatic fluid invasion of porous media. <i>Physical Review B</i> , 1990, 41, 11508-11521.	3.2	177
16	Structure and Shear Response in Nanometer-Thick Films. <i>Israel Journal of Chemistry</i> , 1995, 35, 93-106.	2.3	167
17	Critical phenomena in fluid invasion of porous media. <i>Physical Review Letters</i> , 1991, 66, 1058-1061.	7.8	163
18	AIREBO-M: A reactive model for hydrocarbons at extreme pressures. <i>Journal of Chemical Physics</i> , 2015, 142, 024903.	3.0	159

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19	Shear yielding of amorphous glassy solids: Effect of temperature and strain rate. <i>Physical Review E</i> , 2003, 68, 011507.	2.1	158
20	Thin liquid films on rough or heterogeneous solids. <i>Physical Review A</i> , 1991, 43, 4344-4354.	2.5	154
21	Strain hardening of polymer glasses: Effect of entanglement density, temperature, and rate. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2006, 44, 3487-3500.	2.1	154
22	Cracks and Crazes: On Calculating the Macroscopic Fracture Energy of Glassy Polymers from Molecular Simulations. <i>Physical Review Letters</i> , 2002, 89, 148304.	7.8	146
23	Friction on adsorbed monolayers. <i>Physical Review B</i> , 1996, 54, 8252-8260.	3.2	143
24	Growth, microstructure, and failure of crazes in glassy polymers. <i>Physical Review E</i> , 2003, 68, 011801.	2.1	141
25	Energy Dissipation During Rupture of Adhesive Bonds. <i>Science</i> , 1996, 271, 482-484.	12.6	133
26	Yield conditions for deformation of amorphous polymer glasses. <i>Physical Review E</i> , 2001, 64, 051801.	2.1	133
27	Contact of single asperities with varying adhesion: Comparing continuum mechanics to atomistic simulations. <i>Physical Review E</i> , 2006, 74, 026111.	2.1	131
28	Statistical Mechanics of Static and Low-Velocity Kinetic Friction. <i>Advances in Chemical Physics</i> , 2003, , 187-272.	0.3	127
29	Melting of Yukawa systems: A test of phenomenological melting criteria. <i>Journal of Chemical Physics</i> , 1993, 98, 2319-2324.	3.0	125
30	Interactions between charged spherical macroions. <i>Journal of Chemical Physics</i> , 1996, 104, 5209-5219.	3.0	125
31	Conditions for static friction between flat crystalline surfaces. <i>Physical Review B</i> , 2000, 61, 2335-2342.	3.2	123
32	Strain Hardening in Polymer Glasses: Limitations of Network Models. <i>Physical Review Letters</i> , 2007, 99, 117801.	7.8	119
33	Avalanches in Strained Amorphous Solids: Does Inertia Destroy Critical Behavior?. <i>Physical Review Letters</i> , 2012, 109, 105703.	7.8	118
34	Critical Velocity of Stick-Slip Motion. <i>Science</i> , 1991, 253, 916-916.	12.6	117
35	Stiffness of Contacts between Rough Surfaces. <i>Physical Review Letters</i> , 2011, 106, 204301.	7.8	113
36	Simulations of the kinetic friction due to adsorbed surface layers. <i>Tribology Letters</i> , 2001, 10, 7-14.	2.6	112

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37	Complete Wetting on Rough Surfaces: Statics. Europhysics Letters, 1988, 7, 731-736.	2.0	111
38	Elastic contact between rough surfaces: Effect of roughness at large and small wavelengths. Tribology International, 2007, 40, 1413-1422.	5.9	107
39	Multiscale modeling of two-dimensional contacts. Physical Review E, 2006, 74, 046710.	2.1	104
40	Microscopic studies of static and dynamic contact angles. Journal of Adhesion Science and Technology, 1993, 7, 535-554.	2.6	103
41	Energy Dissipation in Interfacial Friction. MRS Bulletin, 1998, 23, 23-26.	3.5	103
42	Unified Description of Aging and Rate Effects in Yield of Glassy Solids. Physical Review Letters, 2005, 95, 225504.	7.8	100
43	Strain hardening of polymer glasses: Entanglements, energetics, and plasticity. Physical Review E, 2008, 77, 031801.	2.1	100
44	Motion of a contact line on a heterogeneous surface. Journal of Chemical Physics, 1990, 92, 3206-3212.	3.0	99
45	Elastic contact between self-affine surfaces: comparison of numerical stress and contact correlation functions with analytic predictions. Journal of Physics Condensed Matter, 2008, 20, 354013.	1.8	98
46	Simulations of Crazeing in Polymer Glasses: Effect of Chain Length and Surface Tension. Macromolecules, 2001, 34, 4200-4209.	4.8	97
47	Scaling relations for interface motion through disordered media: Application to two-dimensional fluid invasion. Physical Review B, 1991, 44, 12294-12306.	3.2	89
48	A continuum-atomistic simulation of heat transfer in micro- and nano-flows. Journal of Computational Physics, 2007, 227, 279-291.	3.8	89
49	Simulations of shear-induced melting and ordering. Physical Review E, 1993, 48, 3778-3792.	2.1	88
50	Finite-size scaling in the interfacial stiffness of rough elastic contacts. Physical Review E, 2013, 87, 062809.	2.1	87
51	Electronic theory of ordering and segregation in transition-metal alloys. Physical Review B, 1984, 29, 1333-1348.	3.2	84
52	Defining Contact at the Atomic Scale. Tribology Letters, 2010, 39, 329-348.	2.6	84
53	Shear melting of colloids: A nonequilibrium phase diagram. Physical Review Letters, 1991, 66, 3004-3007.	7.8	83
54	Effect of inertia on sheared disordered solids: Critical scaling of avalanches in two and three dimensions. Physical Review E, 2013, 88, 062206.	2.1	83

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55	Percolative, self-affine, and faceted domain growth in random three-dimensional magnets. <i>Physical Review B</i> , 1992, 46, 14519-14527.	3.2	81
56	Contact area of rough spheres: Large scale simulations and simple scaling laws. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	79
57	Understanding and illustrating the atomic origins of friction. <i>American Journal of Physics</i> , 2004, 72, 884-891.	0.7	76
58	Thermal effects in stretching of Go-like models of titin and secondary structures. <i>Proteins: Structure, Function and Bioinformatics</i> , 2004, 56, 285-297.	2.6	73
59	Origin of Broadband Noise in Charge-Density-Wave Conductors. <i>Physical Review Letters</i> , 1985, 54, 2453-2456.	7.8	72
60	Transition from compact to self-similar growth in disordered systems: Fluid invasion and magnetic-domain growth. <i>Physical Review A</i> , 1991, 44, 2538-2542.	2.5	66
61	Molecular Dynamics Simulations of Polymer Welding: Strength from Interfacial Entanglements. <i>Physical Review Letters</i> , 2013, 110, 098301.	7.8	65
62	Folding and stretching in a Go-like model of titin. <i>Proteins: Structure, Function and Bioinformatics</i> , 2002, 49, 114-124.	2.6	64
63	Thermal folding and mechanical unfolding pathways of protein secondary structures. <i>Proteins: Structure, Function and Bioinformatics</i> , 2002, 49, 104-113.	2.6	62
64	Contact and friction of nanoasperities: Effects of adsorbed monolayers. <i>Physical Review E</i> , 2010, 81, 016102.	2.1	62
65	Nanoindentation of 35 Virus Capsids in a Molecular Model: Relating Mechanical Properties to Structure. <i>PLoS ONE</i> , 2013, 8, e63640.	2.5	62
66	Simulations of the static friction due to adsorbed molecules. <i>Physical Review B</i> , 2001, 64, .	3.2	61
67	Interactions and structure of poly(dimethylsiloxane) at silicon dioxide surfaces: Electronic structure and molecular dynamics studies. <i>Journal of Chemical Physics</i> , 2003, 118, 5132-5142.	3.0	60
68	Probing large viscosities in glass-formers with nonequilibrium simulations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 7952-7957.	7.1	60
69	Tilt and splay of surfactants on surfaces. <i>Physical Review A</i> , 1986, 33, 2186-2189.	2.5	59
70	Tensile Fracture of Welded Polymer Interfaces: Miscibility, Entanglements, and Crazing. <i>Macromolecules</i> , 2014, 47, 6982-6989.	4.8	59
71	Elasticity limits structural superlubricity in large contacts. <i>Physical Review B</i> , 2016, 93, .	3.2	57
72	Hybrid Atomistic/Continuum Study of Contact and Friction Between Rough Solids. <i>Tribology Letters</i> , 2009, 36, 1-16.	2.6	55

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73	Relating Chain Conformations to Extensional Stress in Entangled Polymer Melts. <i>Physical Review Letters</i> , 2018, 121, 047801.	7.8	55
74	Hybrid continuum-atomistic simulation of singular corner flow. <i>Physics of Fluids</i> , 2004, 16, 3579-3591.	4.0	54
75	Jamming under Tension in Polymer Crazes. <i>Physical Review Letters</i> , 2002, 89, 195501.	7.8	53
76	Anisotropic Power Law Strain Correlations in Sheared Amorphous 2D Solids. <i>Physical Review Letters</i> , 2009, 102, 225502.	7.8	53
77	Interface dynamics in porous media: A random-field description. <i>Physical Review Letters</i> , 1988, 60, 1386-1389.	7.8	51
78	Connecting Molecular-Scale and Macroscopic Tribology. <i>Langmuir</i> , 1996, 12, 4543-4547.	3.5	51
79	Resolving Singular Forces in Cavity Flow: Multiscale Modeling from Atomic to Millimeter Scales. <i>Physical Review Letters</i> , 2006, 96, 134501.	7.8	50
80	Healing of polymer interfaces: Interfacial dynamics, entanglements, and strength. <i>Physical Review E</i> , 2014, 90, 012602.	2.1	50
81	Harmonic generation as a probe of dissipation at a moving contact line. <i>Physical Review Letters</i> , 1990, 65, 1885-1888.	7.8	49
82	Uncovering Molecular Mechanisms of Electrowetting and Saturation with Simulations. <i>Physical Review Letters</i> , 2012, 108, 216101.	7.8	47
83	Seamless elastic boundaries for atomistic calculations. <i>Physical Review B</i> , 2012, 86, .	3.2	46
84	Effect of equilibration on primitive path analyses of entangled polymers. <i>Physical Review E</i> , 2005, 72, 061802.	2.1	43
85	Morphology and dynamics of interfaces in random two-dimensional media. <i>Physical Review Letters</i> , 1993, 71, 2074-2077.	7.8	42
86	Nanoindentation of virus capsids in a molecular model. <i>Journal of Chemical Physics</i> , 2010, 132, 015101.	3.0	41
87	Evolution of displacements and strains in sheared amorphous solids. <i>Journal of Physics Condensed Matter</i> , 2008, 20, 244128.	1.8	40
88	Electronic theory of ordering and segregation in binary alloys: Application to simple metals. <i>Physical Review B</i> , 1982, 25, 2343-2357.	3.2	39
89	Renormalization-group methods for the spectra of disordered chains. <i>Physical Review B</i> , 1983, 27, 7703-7715.	3.2	39
90	Scaling of the strain hardening modulus of glassy polymers with the flow stress. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2009, 47, 1406-1411.	2.1	39

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91	Where do polymer adhesives fail?. Europhysics Letters, 1999, 48, 150-155.	2.0	38
92	Effect of disorder and lattice type on domain-wall motion in two dimensions. Physical Review B, 1992, 46, 5258-5265.	3.2	37
93	Chain Ends and the Ultimate Strength of Polyethylene Fibers. ACS Macro Letters, 2016, 5, 263-267.	4.8	37
94	Stress Relaxation in Highly Oriented Melts of Entangled Polymers. Macromolecules, 2019, 52, 8540-8550.	4.8	37
95	Rheological Properties of Liquids Under Conditions of Elastohydrodynamic Lubrication. Tribology Letters, 2019, 67, 1.	2.6	37
96	Strain hardening in bidisperse polymer glasses: Separating the roles of chain orientation and interchain entanglement. Journal of Chemical Physics, 2009, 131, 244901.	3.0	36
97	Structure and Strength at Immiscible Polymer Interfaces. ACS Macro Letters, 2013, 2, 882-886.	4.8	35
98	Entanglements in Glassy Polymer Crazing: Cross-Links or Tubes?. Macromolecules, 2017, 50, 459-471.	4.8	35
99	Molecular and Continuum Boundary Conditions for a Miscible Binary Fluid. Physical Review Letters, 2001, 87, 178302.	7.8	33
100	Renormalization group treatment for the electronic spectrum of partially ordered one-dimensional alloys. Solid State Communications, 1983, 45, 955-959.	1.9	32
101	Molecular dynamics study of slip at the interface between immiscible polymers. Physical Review E, 2001, 63, 021801.	2.1	32
102	Effect of Inertia and Elasticity on Stick-Slip Motion. Physical Review Letters, 2004, 93, 036105.	7.8	32
103	Anisotropic plasticity and chain orientation in polymer glasses. Journal of Polymer Science, Part B: Polymer Physics, 2010, 48, 1473-1482.	2.1	32
104	Fluid wetting properties and the invasion of square networks. Physical Review B, 1992, 45, 7762-7767.	3.2	31
105	Molecular simulations of electroosmotic flows in rough nanochannels. Journal of Computational Physics, 2010, 229, 7834-7847.	3.8	31
106	Capillary adhesion at the nanometer scale. Physical Review E, 2014, 89, 062402.	2.1	31
107	Effect of finite system size on thermal fluctuations: Implications for melting. Physical Review B, 1990, 42, 5579-5585.	3.2	27
108	Fcc-bcc transition for Yukawa interactions determined by applied strain deformation. Physical Review E, 2004, 69, 056103.	2.1	27

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109	Crazing of nanocomposites with polymer-tethered nanoparticles. <i>Journal of Chemical Physics</i> , 2016, 145, 094902.	3.0	27
110	Slip boundary conditions over curved surfaces. <i>Physical Review E</i> , 2016, 93, 013105.	2.1	27
111	Electronic-structure calculations of binary-alloy phase diagrams. <i>Physical Review B</i> , 1986, 33, 4782-4792.	3.2	25
112	Broadband-noise spectrum in sliding-charge-density-wave conductors. <i>Physical Review B</i> , 1989, 40, 5826-5829.	3.2	25
113	Macroscopic friction laws and shear yielding of glassy solids. <i>Computer Physics Communications</i> , 2005, 169, 177-182.	7.5	25
114	Opportunities in theoretical and computational polymeric materials and soft matter. <i>Soft Matter</i> , 2015, 11, 2326-2332.	2.7	25
115	Charge-Density-Wave Depinning: A Dynamical Critical Phenomenon?. <i>Physical Review Letters</i> , 1985, 55, 2822-2825.	7.8	24
116	Simulations of Nanometer-Thick Lubricating Films. <i>MRS Bulletin</i> , 1993, 18, 45-49.	3.5	24
117	Dynamics of a Disturbed Sessile Drop Measured by Atomic Force Microscopy (AFM). <i>Langmuir</i> , 2011, 27, 11966-11972.	3.5	23
118	Nanocapillary Adhesion between Parallel Plates. <i>Langmuir</i> , 2016, 32, 7788-7795.	3.5	23
119	Elastic energies and order in epitaxial Si-Ge alloys. <i>Physical Review B</i> , 1989, 40, 12554-12557.	3.2	22
120	Morphology transitions in three-dimensional domain growth with Gaussian random fields. <i>Physical Review B</i> , 2000, 62, 5771-5778.	3.2	21
121	Molecular simulations of deformation and failure in bonds formed by glassy polymer adhesives. <i>Journal of Adhesion Science and Technology</i> , 2003, 17, 369-381.	2.6	21
122	Computer Simulations of Friction, Lubrication, and Wear. <i>Mechanics & Materials Science</i> , 2000, , .	0.1	21
123	To slip or not to slip?. <i>Physics World</i> , 1990, 3, 35-38.	0.0	20
124	Adhesion and Friction of Thin Films. <i>MRS Bulletin</i> , 1997, 22, 22-26.	3.5	20
125	Stretching of proteins in the entropic limit. <i>Physical Review E</i> , 2004, 69, 011912.	2.1	20
126	The autocorrelation function for island areas on self-affine surfaces. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 215004.	1.8	20

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127	Bulk and interfacial shear thinning of immiscible polymers. <i>Physical Review E</i> , 2002, 65, 021808.	2.1	19
128	Mapping molecular models to continuum theories for partially miscible fluids. <i>Physical Review E</i> , 2004, 69, 021505.	2.1	19
129	General continuum boundary conditions for miscible binary fluids from molecular dynamics simulations. <i>Journal of Chemical Physics</i> , 2006, 125, 214102.	3.0	19
130	Effect of quenched disorder on moving interfaces in two dimensions. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1994, 205, 342-354.	2.6	18
131	Scale- and load-dependent friction in commensurate sphere-on-flat contacts. <i>Physical Review B</i> , 2017, 96, .	3.2	18
132	Determination of pressure-viscosity relation of 2,2,4-trimethylhexane by all-atom molecular dynamics simulations. <i>Fluid Phase Equilibria</i> , 2019, 495, 28-32.	2.5	18
133	Molecular origins of anisotropic shock propagation in crystalline and amorphous polyethylene. <i>Physical Review Materials</i> , 2018, 2, .	2.4	18
134	Micromechanical models for the stiffness and strength of UHMWPE microfibrils. <i>Journal of the Mechanics and Physics of Solids</i> , 2018, 116, 70-98.	4.8	17
135	Effect of Flow-Induced Molecular Alignment on Welding and Strength of Polymer Interfaces. <i>Macromolecules</i> , 2020, 53, 8417-8427.	4.8	17
136	Effective slip boundary conditions for sinusoidally corrugated surfaces. <i>Physical Review Fluids</i> , 2016, 1, .	2.5	16
137	A microscopic theory of binary alloy phase equilibrium. <i>Solid State Communications</i> , 1985, 55, 253-256.	1.9	15
138	ac response of pinned-charge-density-wave conductors. <i>Physical Review B</i> , 1985, 32, 6939-6941.	3.2	15
139	Charge-density-wave conduction: Dynamics and finite-size effects. <i>Physical Review B</i> , 1986, 34, 8496-8506.	3.2	15
140	Shock-wave propagation and reflection in semicrystalline polyethylene: A molecular-level investigation. <i>Physical Review Materials</i> , 2017, 1, .	2.4	15
141	Localization properties of random and partially ordered one-dimensional systems. <i>Physical Review B</i> , 1985, 32, 4576-4583.	3.2	14
142	X-ray studies of the charge-density wave transitions in TaS ₂ . <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1980, 42, 705-715.	0.6	13
143	Stretching of homopolymers and contact order. <i>Physical Review E</i> , 2004, 70, 011917.	2.1	13
144	Electronic theory of ordering in (GaAs) _{1-x} Ge _{2x} alloys. <i>Physical Review B</i> , 1988, 38, 10524-10532.	3.2	12

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145	A molecular view of bond rupture. <i>Computational and Theoretical Polymer Science</i> , 1999, 9, 35-40.	1.1	12
146	Critical dynamics of contact-line motion. <i>Physical Review E</i> , 1995, 52, R5776-R5779.	2.1	11
147	Fractal geometry of contacting patches in rough elastic contacts. <i>Journal of the Mechanics and Physics of Solids</i> , 2022, 160, 104797.	4.8	11
148	Effect of Roughness and Elasticity on Interactions between Charged Colloidal Spheres. <i>Langmuir</i> , 2019, 35, 15948-15959.	3.5	10
149	Anisotropic avalanches and critical depinning of three-dimensional magnetic domain walls. <i>Physical Review E</i> , 2019, 100, 042121.	2.1	10
150	Models for the behavior of boron carbide in extreme dynamic environments. <i>Journal of the American Ceramic Society</i> , 2022, 105, 3043-3061.	3.8	10
151	Sliding Friction of Amorphous Asperities on Crystalline Substrates: Scaling with Contact Radius and Substrate Thickness. <i>ACS Nano</i> , 2020, 14, 16997-17003.	14.6	9
152	Criticality in sheared, disordered solids. I. Rate effects in stress and diffusion. <i>Physical Review E</i> , 2021, 103, 042605.	2.1	9
153	Simulations of Lubricant Behavior at the Interface with Bearing Solids. <i>Tribology Series</i> , 1993, 25, 347-360.	0.1	8
154	All stressed out. <i>Nature</i> , 1997, 389, 331-333.	27.8	7
155	Molecular dynamics study of the stress singularity at a corner. <i>Physical Review B</i> , 1999, 60, 12002-12006.	3.2	7
156	Growth and morphology transitions in anisotropic disordered media. <i>Physical Review B</i> , 2010, 82, .	3.2	7
157	Multi-scale simulation method for electroosmotic flows. <i>European Physical Journal: Special Topics</i> , 2016, 225, 1551-1582.	2.6	7
158	Inductive anomaly and noise spectrum of a sliding-charge-density-wave conductor. <i>Physical Review B</i> , 1991, 43, 1835-1838.	3.2	6
159	Criticality in sheared, disordered solids. II. Correlations in avalanche dynamics. <i>Physical Review E</i> , 2021, 103, 042606.	2.1	6
160	Probing the nonequilibrium dynamics of stress, orientation, and entanglements in polymer melts with orthogonal interrupted shear simulations. <i>Journal of Rheology</i> , 2022, 66, 619-637.	2.6	6
161	Shear faults in a model brittle solid. <i>Chaos</i> , 2007, 17, 041105.	2.5	5
162	Molecular models for creep in oriented polyethylene fibers. <i>Journal of Chemical Physics</i> , 2020, 153, 144904.	3.0	5

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163	Effects of Coarse-Graining on Molecular Simulations of Mechanical Properties of Glassy Polymers. <i>Macromolecules</i> , 2021, 54, 2277-2287.	4.8	5
164	Friction and Plasticity in Contacts Between Amorphous Solids. <i>Tribology Letters</i> , 2021, 69, 1.	2.6	5
165	Green's function method for dynamic contact calculations. <i>Physical Review E</i> , 2021, 103, 053305.	2.1	5
166	Growth in Systems with Quenched Disorder. <i>NATO ASI Series Series B: Physics</i> , 1993, , 65-75.	0.2	5
167	Stick-Slip Motion, Transient Behavior, and Memory in Confined Films. , 1997, , 533-553.		5
168	Effects of Coarse-Graining on Molecular Simulation of Craze Formation in Polymer Glass. <i>Macromolecules</i> , 2022, 55, 1267-1278.	4.8	5
169	Structure and Dynamics of Confined Fluids. , 1993, , 127-138.		4
170	Multiscale Modeling of Two Dimensional Rough Surface Contacts. <i>Materials Research Society Symposia Proceedings</i> , 2004, 841, R7.4.1.	0.1	3
171	Reply to Bair: Crossover to Arrhenius behavior at high viscosities in squalane. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E8807-E8808.	7.1	3
172	Craze formation and the fracture energy of glassy polymers. <i>Chaos</i> , 2004, 14, S5-S5.	2.5	2
173	Atomistic Computer Simulations of Nanotribology. , 2004, , 717-738.		2
174	Linear ac response of a depinned charge-density wave. <i>Physical Review B</i> , 1988, 38, 3773-3776.	3.2	1
175	Molecular Dynamics Simulations of Contact Line Motion. <i>Materials Research Society Symposia Proceedings</i> , 1989, 177, 411.	0.1	1
176	Response of Thin Oligomer Films to Steady and Transient Shear. <i>ACS Symposium Series</i> , 1999, , 91-115.	0.5	1
177	Oâ€™Connor, Alvarez, and Robbins Reply. <i>Physical Review Letters</i> , 2019, 122, 059804.	7.8	1
178	Scale Effects and the Molecular Origins of Tribological Behavior. , 2003, , 29-44.		1
179	Electronic Energy and Short-Range Order in Binary Alloys. <i>Materials Research Society Symposia Proceedings</i> , 1982, 19, 53.	0.1	0
180	Density Functional Theory of Interactions Between Charged Macroions in Solution. <i>Materials Research Society Symposia Proceedings</i> , 1989, 177, 237.	0.1	0

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181	Molecular Simulation of Electrokinetic Transport in Nanofluidics. , 2009, , .		0
182	Publisher's Note: Molecular Dynamics Simulations of Polymer Welding: Strength from Interfacial Entanglements [Phys. Rev. Lett.110, 098301 (2013)]. Physical Review Letters, 2013, 110, .	7.8	0
183	Atomistic Computer Simulations of Nanotribology. , 2004, , 717-738.		0
184	Morphology and Dynamics of Domain-Wall Motion in Disordered Two-Dimensional Magnets. , 1994, , 75-84.		0