

Lyderic Bocquet

List of Publications by Year in descending order

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195
papers

21,426
citations

8172

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143
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all docs

196
docs citations

196
times ranked

13294
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanofluidics, from bulk to interfaces. <i>Chemical Society Reviews</i> , 2010, 39, 1073-1095.	18.7	1,121
2	Giant osmotic energy conversion measured in a single transmembrane boron nitride nanotube. <i>Nature</i> , 2013, 494, 455-458.	13.7	937
3	Large Slip Effect at a Nonwetting Fluid-Solid Interface. <i>Physical Review Letters</i> , 1999, 82, 4671-4674.	2.9	710
4	Molecular Origin of Fast Water Transport in Carbon Nanotube Membranes: Superlubricity versus Curvature Dependent Friction. <i>Nano Letters</i> , 2010, 10, 4067-4073.	4.5	666
5	Dynamic Clustering in Active Colloidal Suspensions with Chemical Signaling. <i>Physical Review Letters</i> , 2012, 108, 268303.	2.9	602
6	Flow boundary conditions from nano- to micro-scales. <i>Soft Matter</i> , 2007, 3, 685.	1.2	537
7	Massive radius-dependent flow slippage in carbon nanotubes. <i>Nature</i> , 2016, 537, 210-213.	13.7	537
8	Low-friction flows of liquid at nanopatterned interfaces. <i>Nature Materials</i> , 2003, 2, 237-240.	13.3	536
9	Interfacial Water at Hydrophobic and Hydrophilic Surfaces: Slip, Viscosity, and Diffusion. <i>Langmuir</i> , 2009, 25, 10768-10781.	1.6	433
10	Sedimentation and Effective Temperature of Active Colloidal Suspensions. <i>Physical Review Letters</i> , 2010, 105, 088304.	2.9	424
11	Slippage of Water Past Superhydrophobic Carbon Nanotube Forests in Microchannels. <i>Physical Review Letters</i> , 2006, 97, 156104.	2.9	396
12	Achieving large slip with superhydrophobic surfaces: Scaling laws for generic geometries. <i>Physics of Fluids</i> , 2007, 19, .	1.6	394
13	Water Slippage versus Contact Angle: A Quasiuniversal Relationship. <i>Physical Review Letters</i> , 2008, 101, 226101.	2.9	383
14	New avenues for the large-scale harvesting of blue energy. <i>Nature Reviews Chemistry</i> , 2017, 1, .	13.8	383
15	Moisture-induced ageing in granular media and the kinetics of capillary condensation. <i>Nature</i> , 1998, 396, 735-737.	13.7	362
16	Spatial cooperativity in soft glassy flows. <i>Nature</i> , 2008, 454, 84-87.	13.7	344
17	Making a splash with water repellency. <i>Nature Physics</i> , 2007, 3, 180-183.	6.5	335
18	Hydrodynamic boundary conditions, correlation functions, and Kubo relations for confined fluids. <i>Physical Review E</i> , 1994, 49, 3079-3092.	0.8	291

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19	Kinetic Theory of Plastic Flow in Soft Glassy Materials. <i>Physical Review Letters</i> , 2009, 103, 036001.	2.9	285
20	Particle Dynamics in Sheared Granular Matter. <i>Physical Review Letters</i> , 2000, 85, 1428-1431.	2.9	259
21	Hydrodynamics within the Electric Double Layer on Slipping Surfaces. <i>Physical Review Letters</i> , 2004, 93, 257805.	2.9	256
22	Nanofluidics coming of age. <i>Nature Materials</i> , 2020, 19, 254-256.	13.3	255
23	Influence of wetting properties on hydrodynamic boundary conditions at a fluid/solid interface. <i>Faraday Discussions</i> , 1999, 112, 119-128.	1.6	243
24	Subcontinuum mass transport of condensed hydrocarbons in nanoporous media. <i>Nature Communications</i> , 2015, 6, 6949.	5.8	239
25	A smooth future?. <i>Nature Materials</i> , 2011, 10, 334-337.	13.3	238
26	Boosting migration of large particles by solute contrasts. <i>Nature Materials</i> , 2008, 7, 785-789.	13.3	236
27	Linking Rheology and Printability for Dense and Strong Ceramics by Direct Ink Writing. <i>Scientific Reports</i> , 2017, 7, 6017.	1.6	234
28	Dynamics of simple liquids at heterogeneous surfaces: Molecular-dynamics simulations and hydrodynamic description. <i>European Physical Journal E</i> , 2004, 15, 427-438.	0.7	224
29	Granular shear flow dynamics and forces: Experiment and continuum theory. <i>Physical Review E</i> , 2001, 65, 011307.	0.8	204
30	Shear Localization in a Model Glass. <i>Physical Review Letters</i> , 2003, 90, 095702.	2.9	203
31	Giant Amplification of Interfacially Driven Transport by Hydrodynamic Slip: Diffusio-Osmosis and Beyond. <i>Physical Review Letters</i> , 2006, 96, 186102.	2.9	197
32	Dynamics of transient cavities. <i>Journal of Fluid Mechanics</i> , 2007, 591, 1-19.	1.4	194
33	Optimizing water permeability through the hourglass shape of aquaporins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 16367-16372.	3.3	194
34	Nanofluidics in the Debye Layer at Hydrophilic and Hydrophobic Surfaces. <i>Physical Review Letters</i> , 2008, 101, 114503.	2.9	186
35	A study of the static yield stress in a binary Lennard-Jones glass. <i>Journal of Chemical Physics</i> , 2004, 120, 2788-2801.	1.2	183
36	Liquid friction on charged surfaces: From hydrodynamic slippage to electrokinetics. <i>Journal of Chemical Physics</i> , 2006, 125, 204716.	1.2	178

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37	Osmosis, from molecular insights to large-scale applications. <i>Chemical Society Reviews</i> , 2019, 48, 3102-3144.	18.7	177
38	Elastic consequences of a single plastic event: A step towards the microscopic modeling of the flow of yield stress fluids. <i>European Physical Journal E</i> , 2004, 15, 371-381.	0.7	174
39	Fluids at the Nanoscale: From Continuum to Subcontinuum Transport. <i>Annual Review of Fluid Mechanics</i> , 2021, 53, 377-410.	10.8	172
40	Molecular streaming and its voltage control in Ångström-scale channels. <i>Nature</i> , 2019, 567, 87-90.	13.7	170
41	Intrusion and extrusion of water in hydrophobic mesopores. <i>Journal of Chemical Physics</i> , 2004, 120, 4927-4938.	1.2	165
42	Scaling Behavior for Ionic Transport and its Fluctuations in Individual Carbon Nanotubes. <i>Physical Review Letters</i> , 2016, 116, 154501.	2.9	158
43	Contact angle measurements on superhydrophobic carbon nanotube forests: Effect of fluid pressure. <i>Europhysics Letters</i> , 2005, 71, 104-109.	0.7	156
44	Colloidal Motility and Pattern Formation under Rectified Diffusiophoresis. <i>Physical Review Letters</i> , 2010, 104, 138302.	2.9	148
45	Slow flows of yield stress fluids: Complex spatiotemporal behavior within a simple elastoplastic model. <i>Physical Review E</i> , 2005, 71, 010501.	0.8	147
46	Large Apparent Electric Size of Solid-State Nanopores Due to Spatially Extended Surface Conduction. <i>Nano Letters</i> , 2012, 12, 4037-4044.	4.5	143
47	Pairwise frictional profile between particles determines discontinuous shear thickening transition in non-colloidal suspensions. <i>Nature Communications</i> , 2017, 8, 15633.	5.8	142
48	Probing the Nanohydrodynamics at Liquid-Solid Interfaces Using Thermal Motion. <i>Physical Review Letters</i> , 2006, 96, 046101.	2.9	139
49	Physics and technological aspects of nanofluidics. <i>Lab on A Chip</i> , 2014, 14, 3143-3158.	3.1	135
50	Effective charge saturation in colloidal suspensions. <i>Journal of Chemical Physics</i> , 2002, 117, 8138-8152.	1.2	133
51	Nonequilibrium Equation of State in Suspensions of Active Colloids. <i>Physical Review X</i> , 2015, 5, .	2.8	131
52	Nanoscale capillary freezing of ionic liquids confined between metallic interfaces and the role of electronic screening. <i>Nature Materials</i> , 2017, 16, 634-639.	13.3	125
53	Alexander's Prescription for Colloidal Charge Renormalization. <i>Langmuir</i> , 2003, 19, 4027-4033.	1.6	124
54	Aqueous Electrolytes near Hydrophobic Surfaces: Dynamic Effects of Ion Specificity and Hydrodynamic Slip. <i>Langmuir</i> , 2008, 24, 1442-1450.	1.6	118

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55	Metastability and Nucleation in Capillary Condensation. <i>Physical Review Letters</i> , 2000, 84, 2433-2436.	2.9	117
56	Simple model for heterogeneous flows of yield stress fluids. <i>Physical Review E</i> , 2002, 66, 051501.	0.8	113
57	Simple Approach for Charge Renormalization in Highly Charged Macroions. <i>Physical Review Letters</i> , 2002, 89, 248301.	2.9	112
58	Ultralow Liquid/Solid Friction in Carbon Nanotubes: Comprehensive Theory for Alcohols, Alkanes, OMCTS, and Water. <i>Langmuir</i> , 2012, 28, 14261-14272.	1.6	110
59	Activated desorption at heterogeneous interfaces and long-time kinetics of hydrocarbon recovery from nanoporous media. <i>Nature Communications</i> , 2016, 7, 11890.	5.8	100
60	Spontaneous formation of permanent shear bands in a mesoscopic model of flowing disordered matter. <i>Soft Matter</i> , 2012, 8, 4197.	1.2	97
61	Ultrahigh interlayer friction in multiwalled boron nitride nanotubes. <i>Nature Materials</i> , 2014, 13, 688-693.	13.3	97
62	Fluctuation-induced quantum friction in nanoscale water flows. <i>Nature</i> , 2022, 602, 84-90.	13.7	97
63	Effective charge versus bare charge: an analytical estimate for colloids in the infinite dilution limit. <i>Journal of Physics A</i> , 2003, 36, 5835-5840.	1.6	95
64	Water at polar and nonpolar solid walls (Review). <i>Biointerphases</i> , 2008, 3, FC23-FC39.	0.6	93
65	How does a soft glassy material flow: finite size effects, non local rheology, and flow cooperativity. <i>Soft Matter</i> , 2010, 6, 2668.	1.2	93
66	Chemisorption of Hydroxide on 2D Materials from DFT Calculations: Graphene versus Hexagonal Boron Nitride. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 4695-4700.	2.1	92
67	Origins of Negative Gas Adsorption. <i>CheM</i> , 2016, 1, 873-886.	5.8	89
68	Modeling of emergent memory and voltage spiking in ionic transport through angstrom-scale slits. <i>Science</i> , 2021, 373, 687-691.	6.0	89
69	Hydrodynamic boundary conditions and correlation functions of confined fluids. <i>Physical Review Letters</i> , 1993, 70, 2726-2729.	2.9	86
70	Large permeabilities of hourglass nanopores: From hydrodynamics to single file transport. <i>Journal of Chemical Physics</i> , 2014, 141, 18C526.	1.2	86
71	Secrets of successful stone-skipping. <i>Nature</i> , 2004, 427, 29-29.	13.7	85
72	Probability distributions for the run-and-tumble bacterial dynamics: An analogy to the Lorentz model. <i>European Physical Journal E</i> , 2012, 35, 84.	0.7	85

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73	Osmotic Flow through Fully Permeable Nanochannels. <i>Physical Review Letters</i> , 2014, 112, 244501.	2.9	85
74	Electrohydraulic Power Conversion in Planar Nanochannels. <i>Physical Review Letters</i> , 2009, 103, 144503.	2.9	83
75	Transport and dispersion across wiggling nanopores. <i>Nature Physics</i> , 2018, 14, 1108-1113.	6.5	81
76	Osmotic traps for colloids and macromolecules based on logarithmic sensing in salt taxis. <i>Soft Matter</i> , 2012, 8, 980-994.	1.2	79
77	Connecting Diffusion and Dynamical Heterogeneities in Actively Deformed Amorphous Systems. <i>Physical Review Letters</i> , 2011, 106, 156001.	2.9	77
78	On the Green-Kubo relationship for the liquid-solid friction coefficient. <i>Journal of Chemical Physics</i> , 2013, 139, 044704.	1.2	76
79	Nanofluidic Osmotic Diodes: Theory and Molecular Dynamics Simulations. <i>Physical Review Letters</i> , 2013, 111, 244501.	2.9	75
80	Ion-Specific Anomalous Electrokinetic Effects in Hydrophobic Nanochannels. <i>Physical Review Letters</i> , 2007, 98, 177801.	2.9	74
81	Massive Amplification of Surface-Induced Transport at Superhydrophobic Surfaces. <i>Physical Review Letters</i> , 2008, 101, 064503.	2.9	74
82	Osmotic manipulation of particles for microfluidic applications. <i>New Journal of Physics</i> , 2009, 11, 075022.	1.2	72
83	Shear thinning in non-Brownian suspensions. <i>Soft Matter</i> , 2018, 14, 879-893.	1.2	69
84	Microscale Rheology of a Soft Glassy Material Close to Yielding. <i>Physical Review Letters</i> , 2012, 108, 148301.	2.9	67
85	Skipping stones. <i>Journal of Fluid Mechanics</i> , 2005, 543, 137.	1.4	65
86	Physics of humid granular media. <i>Comptes Rendus Physique</i> , 2002, 3, 207-215.	0.3	64
87	Mechanically activated ionic transport across single-digit carbon nanotubes. <i>Nature Materials</i> , 2020, 19, 1057-1061.	13.3	64
88	Confined flows of a polymer microgel. <i>European Physical Journal E</i> , 2013, 36, 30.	0.7	62
89	High friction limit of the Kramers equation: The multiple time-scale approach. <i>American Journal of Physics</i> , 1997, 65, 140-144.	0.3	60
90	Wetting Controls Separation of Inertial Flows from Solid Surfaces. <i>Physical Review Letters</i> , 2010, 104, 084503.	2.9	60

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91	Sub-additive ionic transport across arrays of solid-state nanopores. <i>Physics of Fluids</i> , 2014, 26, .	1.6	57
92	Hydrodynamic Model for a Dynamical Jammed-to-Flowing Transition in Gravity Driven Granular Media. <i>Physical Review Letters</i> , 2002, 89, 184301.	2.9	55
93	Inhomogeneous shear flows in soft jammed materials with tunable attractive forces. <i>Physical Review E</i> , 2012, 85, 021503.	0.8	55
94	Intrusion and extrusion of water in highly hydrophobic mesoporous materials: effect of the pore texture. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2004, 241, 265-272.	2.3	54
95	Beyond the Tradeoff: Dynamic Selectivity in Ionic Transport and Current Rectification. <i>Journal of Physical Chemistry B</i> , 2019, 123, 1171-1185.	1.2	53
96	Labyrinthine water flow across multilayer graphene-based membranes: Molecular dynamics versus continuum predictions. <i>Journal of Chemical Physics</i> , 2016, 144, 234701.	1.2	51
97	Ionic Coulomb blockade as a fractional Wien effect. <i>Nature Nanotechnology</i> , 2019, 14, 573-578.	15.6	51
98	Carbon membranes for efficient water-ethanol separation. <i>Journal of Chemical Physics</i> , 2016, 145, 124708.	1.2	50
99	Driplons as localized and superfast ripples of water confined between graphene sheets. <i>Nature Communications</i> , 2018, 9, 1496.	5.8	50
100	Effective interactions and phase behaviour for a model clay suspension in an electrolyte. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 9339-9352.	0.7	49
101	Dramatic pressure-sensitive ion conduction in conical nanopores. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 4063-4068.	3.3	48
102	Electrokinetics at Aqueous Interfaces without Mobile Charges. <i>Langmuir</i> , 2010, 26, 12614-12625.	1.6	47
103	Thermal Fluctuations in Nanofluidic Transport. <i>Physical Review Letters</i> , 2012, 109, 024501.	2.9	46
104	Destabilization of a flow focused suspension of magnetotactic bacteria. <i>Physical Review Fluids</i> , 2016, 1, .	1.0	45
105	The interplay between screening properties and colloid anisotropy: Towards a reliable pair potential for disc-like charged particles. <i>European Physical Journal E</i> , 2004, 15, 345-357.	0.7	44
106	A molecular dynamics study of non-local effects in the flow of soft jammed particles. <i>Soft Matter</i> , 2013, 9, 7489.	1.2	43
107	Anomalous capillary filling and wettability reversal in nanochannels. <i>Physical Review E</i> , 2016, 93, 033123.	0.8	43
108	Comment on "Large Slip of Aqueous Liquid Flow over a Nanoengineered Superhydrophobic Surface". <i>Physical Review Letters</i> , 2006, 97, 109601; discussion 109602.	2.9	42

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109	Osmotic and diffusio-osmotic flow generation at high solute concentration. I. Mechanical approaches. <i>Journal of Chemical Physics</i> , 2017, 146, 194701.	1.2	41
110	A kinetic elasto-plastic model exhibiting viscosity bifurcation in soft glassy materials. <i>Soft Matter</i> , 2011, 7, 5524.	1.2	40
111	Universal and non-universal features in coarse-grained models of flow in disordered solids. <i>Soft Matter</i> , 2014, 10, 4648-4661.	1.2	39
112	Boundary conditions for soft glassy flows: slippage and surface fluidization. <i>Soft Matter</i> , 2014, 10, 6984-6989.	1.2	38
113	The physics of stone skipping. <i>American Journal of Physics</i> , 2003, 71, 150-155.	0.3	37
114	Enhanced nanofluidic transport in activated carbon nanoconduits. <i>Nature Materials</i> , 2022, 21, 696-702.	13.3	36
115	On the Brownian motion of a massive sphere suspended in a hard-sphere fluid. II. Molecular dynamics estimates of the friction coefficient. <i>Journal of Statistical Physics</i> , 1994, 76, 527-548.	0.5	35
116	On the Brownian motion of a massive sphere suspended in a hard-sphere fluid. I. Multiple-time-scale analysis and microscopic expression for the friction coefficient. <i>Journal of Statistical Physics</i> , 1994, 76, 505-526.	0.5	34
117	Multiple time scale derivation of the Fokker-Planck equation for two Brownian spheres suspended in a hard sphere fluid. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1995, 218, 125-144.	1.2	34
118	Osmotic and diffusio-osmotic flow generation at high solute concentration. II. Molecular dynamics simulations. <i>Journal of Chemical Physics</i> , 2017, 146, 194702.	1.2	34
119	Humidity effect on static aging of dry friction. <i>Europhysics Letters</i> , 1999, 47, 562-567.	0.7	32
120	On the fluid-fluid phase separation in charged-stabilized colloidal suspensions. <i>Journal of Physics Condensed Matter</i> , 2003, 15, S3523-S3536.	0.7	32
121	Theory and simulations of water flow through carbon nanotubes: prospects and pitfalls. <i>Journal of Physics Condensed Matter</i> , 2011, 23, 184110.	0.7	32
122	Comment on "Pumping of Confined Water in Carbon Nanotubes by Rotation-Translation Coupling". <i>Physical Review Letters</i> , 2010, 105, 209401; author reply 209402.	2.9	31
123	Scaling laws for slippage on superhydrophobic fractal surfaces. <i>Physics of Fluids</i> , 2012, 24, .	1.6	31
124	Soft Nanofluidic Transport in a Soap Film. <i>Physical Review Letters</i> , 2013, 110, 054502.	2.9	31
125	Interaction between charged anisotropic macromolecules: Application to rod-like polyelectrolytes. <i>Journal of Chemical Physics</i> , 2004, 120, 3969-3982.	1.2	30
126	Dynamical Flow Arrest in Confined Gravity Driven Flows of Soft Jammed Particles. <i>Physical Review Letters</i> , 2012, 109, 036001.	2.9	30

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127	Diffusion in pores and its dependence on boundary conditions. <i>Journal of Physics Condensed Matter</i> , 2005, 17, S4075-S4090.	0.7	28
128	Hydrodynamic properties of confined fluids. <i>Journal of Physics Condensed Matter</i> , 1996, 8, 9297-9300.	0.7	27
129	Crossover of the Power-Law Exponent for Carbon Nanotube Conductivity as a Function of Salinity. <i>Journal of Physical Chemistry B</i> , 2018, 122, 2992-2997.	1.2	27
130	Thermal fluctuations of hydrodynamic flows in nanochannels. <i>Physical Review E</i> , 2013, 88, 012106.	0.8	26
131	Nanorheology of Interfacial Water during Ice Gliding. <i>Physical Review X</i> , 2019, 9, .	2.8	26
132	Diffusion-controlled reactions: A revisit of Noyes's™ theory. <i>Journal of Chemical Physics</i> , 2001, 114, 6265-6275.	1.2	25
133	Where does a cohesive granular heap break?. <i>European Physical Journal E</i> , 2004, 14, 177-183.	0.7	25
134	Interfacial transport with mobile surface charges and consequences for ionic transport in carbon nanotubes. <i>European Physical Journal E</i> , 2018, 41, 148.	0.7	25
135	Adsorption Kinetics in Open Nanopores as a Source of Low-Frequency Noise. <i>Nano Letters</i> , 2019, 19, 7265-7272.	4.5	25
136	Diffusive Motion in Confined Fluids: Mode-Coupling Results and Molecular-Dynamics Calculations. <i>Europhysics Letters</i> , 1995, 31, 455-460.	0.7	24
137	Slow kinetics of capillary condensation in confined geometry: experiment and theory. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2002, 206, 69-77.	2.3	23
138	Experiments on Tracer Diffusion in Thin Free-Standing Liquid-Crystal Films. <i>Physical Review Letters</i> , 1997, 79, 4922-4925.	2.9	22
139	Electrostatic potential around charged finite rodlike macromolecules: nonlinear Poisson-Boltzmann theory. <i>Journal of Colloid and Interface Science</i> , 2005, 285, 609-618.	5.0	22
140	Electronic screening using a virtual Thomas-Fermi fluid for predicting wetting and phase transitions of ionic liquids at metal surfaces. <i>Nature Materials</i> , 2022, 21, 237-245.	13.3	22
141	Amorphization of a substitutional binary alloy: a computer 'experiment'. <i>Journal of Physics Condensed Matter</i> , 1992, 4, 2375-2387.	0.7	21
142	Microscopic derivation of non-Markovian thermalization of a Brownian particle. <i>Journal of Statistical Physics</i> , 1997, 87, 1005-1035.	0.5	21
143	Nucleation in Hydrophobic Cylindrical Pores: A Lattice Model. <i>Journal of Physical Chemistry B</i> , 2005, 109, 6520-6526.	1.2	21
144	Size Dependence of Tracer Diffusion in a Laponite Colloidal Gel. <i>Langmuir</i> , 2009, 25, 12048-12055.	1.6	20

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145	How a "pinch of salt" can tune chaotic mixing of colloidal suspensions. <i>Soft Matter</i> , 2014, 10, 4795.	1.2	20
146	Friction tensor for a pair of Brownian particles: Spurious finite-size effects and molecular dynamics estimates. <i>Journal of Statistical Physics</i> , 1997, 89, 321-346.	0.5	19
147	Polymer and surface roughness effects on the drag crisis for falling spheres. <i>European Physical Journal B</i> , 2007, 60, 469-476.	0.6	19
148	Using surface force apparatus, diffusion and velocimetry to measure slip lengths. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 1455-1468.	1.6	19
149	Entrance effects in concentration-gradient-driven flow through an ultrathin porous membrane. <i>Journal of Chemical Physics</i> , 2019, 151, 044705.	1.2	19
150	Velocity Condensation for Magnetotactic Bacteria. <i>Physical Review Letters</i> , 2016, 116, 168101.	2.9	18
151	Analytical estimation of effective charges at saturation in Poisson-Boltzmann cell models. <i>Journal of Physics Condensed Matter</i> , 2003, 15, S291-S296.	0.7	16
152	Electrostatic interactions between ions near Thomas-Fermi substrates and the surface energy of ionic crystals at imperfect metals. <i>Faraday Discussions</i> , 2017, 199, 129-158.	1.6	16
153	The anatomy of a crease, from folding to ironing. <i>Soft Matter</i> , 2012, 8, 3342.	1.2	15
154	Flows in one-dimensional and two-dimensional carbon nanochannels: Fast and curious. <i>MRS Bulletin</i> , 2017, 42, 278-282.	1.7	15
155	Dynamics of Fakir Liquids: from Slip to Splash. <i>Journal of Adhesion Science and Technology</i> , 2008, 22, 335-351.	1.4	13
156	Phonon modes for faster flow. <i>Nature Nanotechnology</i> , 2015, 10, 657-658.	15.6	13
157	Atomic rheology of gold nanojunctions. <i>Nature</i> , 2019, 569, 393-397.	13.7	13
158	Local and global force balance for diffusiophoretic transport. <i>Journal of Fluid Mechanics</i> , 2020, 892, .	1.4	13
159	Tasting edge effects. <i>American Journal of Physics</i> , 2007, 75, 148-150.	0.3	12
160	Reduction of dimensionality in a diffusion search process and kinetics of gene expression. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2000, 277, 71-82.	1.2	11
161	Electrostatic interaction of neutral semi-permeable membranes. <i>Journal of Chemical Physics</i> , 2012, 136, 034902.	1.2	11
162	Ultrafast photomechanical transduction through thermophoretic implosion. <i>Nature Communications</i> , 2020, 11, 50.	5.8	11

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163	Soft matter principles of microfluidics. <i>Soft Matter</i> , 2012, 8, 10527.	1.2	10
164	Bubbles as osmotic membranes. <i>Nature Nanotechnology</i> , 2014, 9, 249-251.	15.6	10
165	Chemisorbed vs physisorbed surface charge and its impact on electrokinetic transport: Carbon vs boron nitride surface. <i>Journal of Chemical Physics</i> , 2022, 156, 044703.	1.2	10
166	Influence of wetting properties on diffusion in a confined fluid. <i>European Physical Journal Special Topics</i> , 2000, 10, Pr7-27-Pr7-31.	0.2	9
167	Ultra-sensitive flow measurement in individual nanopores through pressure driven particle translocation. <i>Nanoscale</i> , 2015, 7, 7965-7970.	2.8	9
168	The Landau-Squire plume. <i>Journal of Fluid Mechanics</i> , 2017, 826, .	1.4	9
169	Active Osmotic Exchanger for Efficient Nanofiltration Inspired by the Kidney. <i>Physical Review X</i> , 2016, 6, .	2.8	8
170	Active sieving across driven nanopores for tunable selectivity. <i>Journal of Chemical Physics</i> , 2017, 147, 154701.	1.2	8
171	Nanotribology of Ionic Liquids: Transition to Yielding Response in Nanometric Confinement with Metallic Surfaces. <i>Physical Review X</i> , 2020, 10, .	2.8	8
172	Phenomenological Study of Hysteresis in Quasistatic Friction. <i>Journal De Physique, I</i> , 1997, 7, 1603-1625.	1.2	8
173	Thermally activated dynamics of capillary condensation. <i>Journal of Physics Condensed Matter</i> , 2000, 12, A419-A424.	0.7	6
174	MicroMegascope. <i>Nanotechnology</i> , 2018, 29, 355501.	1.3	6
175	MicroMegascope based dynamic surface force apparatus. <i>Nanotechnology</i> , 2019, 30, 195502.	1.3	6
176	Studying polymer diffusiophoresis with non-equilibrium molecular dynamics. <i>Journal of Chemical Physics</i> , 2020, 152, 164901.	1.2	6
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