

# Lyderic Bocquet

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/8893580/lyderic-bocquet-publications-by-citations.pdf>

**Version:** 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

185  
papers

17,197  
citations

68  
h-index

129  
g-index

196  
ext. papers

19,316  
ext. citations

9.3  
avg, IF

7.19  
L-index

#	Paper	IF	Citations
185	Nanofluidics, from bulk to interfaces. <i>Chemical Society Reviews</i> , <b>2010</b> , 39, 1073-95	58.5	863
184	Giant osmotic energy conversion measured in a single transmembrane boron nitride nanotube. <i>Nature</i> , <b>2013</b> , 494, 455-8	50.4	675
183	Large Slip Effect at a Nonwetting Fluid-Solid Interface. <i>Physical Review Letters</i> , <b>1999</b> , 82, 4671-4674	7.4	628
182	Molecular origin of fast water transport in carbon nanotube membranes: superlubricity versus curvature dependent friction. <i>Nano Letters</i> , <b>2010</b> , 10, 4067-73	11.5	537
181	Dynamic clustering in active colloidal suspensions with chemical signaling. <i>Physical Review Letters</i> , <b>2012</b> , 108, 268303	7.4	494
180	Low-friction flows of liquid at nanopatterned interfaces. <i>Nature Materials</i> , <b>2003</b> , 2, 237-40	27	480
179	Flow boundary conditions from nano- to micro-scales. <i>Soft Matter</i> , <b>2007</b> , 3, 685-693	3.6	468
178	Sedimentation and effective temperature of active colloidal suspensions. <i>Physical Review Letters</i> , <b>2010</b> , 105, 088304	7.4	370
177	Massive radius-dependent flow slippage in carbon nanotubes. <i>Nature</i> , <b>2016</b> , 537, 210-3	50.4	370
176	Slippage of water past superhydrophobic carbon nanotube forests in microchannels. <i>Physical Review Letters</i> , <b>2006</b> , 97, 156104	7.4	360
175	Interfacial water at hydrophobic and hydrophilic surfaces: slip, viscosity, and diffusion. <i>Langmuir</i> , <b>2009</b> , 25, 10768-81	4	354
174	Achieving large slip with superhydrophobic surfaces: Scaling laws for generic geometries. <i>Physics of Fluids</i> , <b>2007</b> , 19, 123601	4.4	338
173	Moisture-induced ageing in granular media and the kinetics of capillary condensation. <i>Nature</i> , <b>1998</b> , 396, 735-737	50.4	330
172	Water slippage versus contact angle: a quasiuniversal relationship. <i>Physical Review Letters</i> , <b>2008</b> , 101, 226101	7.4	314
171	Spatial cooperativity in soft glassy flows. <i>Nature</i> , <b>2008</b> , 454, 84-7	50.4	313
170	Making a splash with water repellency. <i>Nature Physics</i> , <b>2007</b> , 3, 180-183	16.2	275
169	Kinetic theory of plastic flow in soft glassy materials. <i>Physical Review Letters</i> , <b>2009</b> , 103, 036001	7.4	255

168	Hydrodynamic boundary conditions, correlation functions, and Kubo relations for confined fluids. <i>Physical Review E</i> , <b>1994</b> , 49, 3079-3092	2.4	252
167	Hydrodynamics within the electric double layer on slipping surfaces. <i>Physical Review Letters</i> , <b>2004</b> , 93, 257805	7.4	225
166	Particle dynamics in sheared granular matter. <i>Physical Review Letters</i> , <b>2000</b> , 85, 1428-31	7.4	219
165	New avenues for the large-scale harvesting of blue energy. <i>Nature Reviews Chemistry</i> , <b>2017</b> , 1,	34.6	218
164	A smooth future?. <i>Nature Materials</i> , <b>2011</b> , 10, 334-7	27	212
163	Influence of wetting properties on hydrodynamic boundary conditions at a fluid/solid interface. <i>Faraday Discussions</i> , <b>1999</b> , 112, 119-128	3.6	207
162	Dynamics of simple liquids at heterogeneous surfaces: molecular-dynamics simulations and hydrodynamic description. <i>European Physical Journal E</i> , <b>2004</b> , 15, 427-38	1.5	202
161	Shear localization in a model glass. <i>Physical Review Letters</i> , <b>2003</b> , 90, 095702	7.4	190
160	Subcontinuum mass transport of condensed hydrocarbons in nanoporous media. <i>Nature Communications</i> , <b>2015</b> , 6, 6949	17.4	184
159	Boosting migration of large particles by solute contrasts. <i>Nature Materials</i> , <b>2008</b> , 7, 785-9	27	183
158	Granular shear flow dynamics and forces: experiment and continuum theory. <i>Physical Review E</i> , <b>2002</b> , 65, 011307	2.4	173
157	Giant amplification of interfacially driven transport by hydrodynamic slip: diffusio-osmosis and beyond. <i>Physical Review Letters</i> , <b>2006</b> , 96, 186102	7.4	171
156	A study of the static yield stress in a binary Lennard-Jones glass. <i>Journal of Chemical Physics</i> , <b>2004</b> , 120, 2788-801	3.9	170
155	Optimizing water permeability through the hourglass shape of aquaporins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 16367-72	11.5	158
154	Nanofluidics in the Debye layer at hydrophilic and hydrophobic surfaces. <i>Physical Review Letters</i> , <b>2008</b> , 101, 114503	7.4	155
153	Dynamics of transient cavities. <i>Journal of Fluid Mechanics</i> , <b>2007</b> , 591, 1-19	3.7	151
152	Contact angle measurements on superhydrophobic carbon nanotube forests: Effect of fluid pressure. <i>Europhysics Letters</i> , <b>2005</b> , 71, 104-109	1.6	150
151	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> , <b>2004</b> , 15, 371-81	1.5	150

150	Intrusion and extrusion of water in hydrophobic mesopores. <i>Journal of Chemical Physics</i> , <b>2004</b> , 120, 4927-38	3.9	147
149	Liquid friction on charged surfaces: from hydrodynamic slippage to electrokinetics. <i>Journal of Chemical Physics</i> , <b>2006</b> , 125, 204716	3.9	144
148	Slow flows of yield stress fluids: Complex spatiotemporal behavior within a simple elastoplastic model. <i>Physical Review E</i> , <b>2005</b> , 71, 010501	2.4	142
147	Nanofluidics coming of age. <i>Nature Materials</i> , <b>2020</b> , 19, 254-256	27	134
146	Probing the nanohydrodynamics at liquid-solid interfaces using thermal motion. <i>Physical Review Letters</i> , <b>2006</b> , 96, 046101	7.4	127
145	Effective charge saturation in colloidal suspensions. <i>Journal of Chemical Physics</i> , <b>2002</b> , 117, 8138-8152	3.9	125
144	Alexander's Prescription for Colloidal Charge Renormalization. <i>Langmuir</i> , <b>2003</b> , 19, 4027-4033	4	119
143	Linking Rheology and Printability for Dense and Strong Ceramics by Direct Ink Writing. <i>Scientific Reports</i> , <b>2017</b> , 7, 6017	4.9	117
142	Scaling Behavior for Ionic Transport and its Fluctuations in Individual Carbon Nanotubes. <i>Physical Review Letters</i> , <b>2016</b> , 116, 154501	7.4	113
141	Physics and technological aspects of nanofluidics. <i>Lab on A Chip</i> , <b>2014</b> , 14, 3143-58	7.2	113
140	Nonequilibrium Equation of State in Suspensions of Active Colloids. <i>Physical Review X</i> , <b>2015</b> , 5,	9.1	113
139	Colloidal motility and pattern formation under rectified diffusiophoresis. <i>Physical Review Letters</i> , <b>2010</b> , 104, 138302	7.4	111
138	Simple approach for charge renormalization in highly charged macroions. <i>Physical Review Letters</i> , <b>2002</b> , 89, 248301	7.4	107
137	Large apparent electric size of solid-state nanopores due to spatially extended surface conduction. <i>Nano Letters</i> , <b>2012</b> , 12, 4037-44	11.5	105
136	Simple model for heterogeneous flows of yield stress fluids. <i>Physical Review E</i> , <b>2002</b> , 66, 051501	2.4	105
135	Metastability and nucleation in capillary condensation. <i>Physical Review Letters</i> , <b>2000</b> , 84, 2433-6	7.4	105
134	Pairwise frictional profile between particles determines discontinuous shear thickening transition in non-colloidal suspensions. <i>Nature Communications</i> , <b>2017</b> , 8, 15633	17.4	104
133	Molecular streaming and its voltage control in μgstrm-scale channels. <i>Nature</i> , <b>2019</b> , 567, 87-90	50.4	99

132	Osmosis, from molecular insights to large-scale applications. <i>Chemical Society Reviews</i> , <b>2019</b> , 48, 3102-3145	14.5	98
131	Nanoscale capillary freezing of ionic liquids confined between metallic interfaces and the role of electronic screening. <i>Nature Materials</i> , <b>2017</b> , 16, 634-639	27	96
130	Aqueous electrolytes near hydrophobic surfaces: dynamic effects of ion specificity and hydrodynamic slip. <i>Langmuir</i> , <b>2008</b> , 24, 1442-50	4	93
129	Ultralow liquid/solid friction in carbon nanotubes: comprehensive theory for alcohols, alkanes, OMCTS, and water. <i>Langmuir</i> , <b>2012</b> , 28, 14261-72	4	92
128	Spontaneous formation of permanent shear bands in a mesoscopic model of flowing disordered matter. <i>Soft Matter</i> , <b>2012</b> , 8, 4197	3.6	91
127	How does a soft glassy material flow: finite size effects, non local rheology, and flow cooperativity. <i>Soft Matter</i> , <b>2010</b> , 6, 2668	3.6	87
126	Water at polar and nonpolar solid walls. <i>Biointerphases</i> , <b>2008</b> , 3, FC23-39	1.8	86
125	Effective charge versus bare charge: an analytical estimate for colloids in the infinite dilution limit. <i>Journal of Physics A</i> , <b>2003</b> , 36, 5835-5840		86
124	Ultrahigh interlayer friction in multiwalled boron nitride nanotubes. <i>Nature Materials</i> , <b>2014</b> , 13, 688-93	27	83
123	Activated desorption at heterogeneous interfaces and long-time kinetics of hydrocarbon recovery from nanoporous media. <i>Nature Communications</i> , <b>2016</b> , 7, 11890	17.4	77
122	Electrohydraulic power conversion in planar nanochannels. <i>Physical Review Letters</i> , <b>2009</b> , 103, 144503	7.4	77
121	Connecting diffusion and dynamical heterogeneities in actively deformed amorphous systems. <i>Physical Review Letters</i> , <b>2011</b> , 106, 156001	7.4	74
120	Large permeabilities of hourglass nanopores: from hydrodynamics to single file transport. <i>Journal of Chemical Physics</i> , <b>2014</b> , 141, 18C526	3.9	73
119	Hydrodynamic boundary conditions and correlation functions of confined fluids. <i>Physical Review Letters</i> , <b>1993</b> , 70, 2726-2729	7.4	73
118	Origins of Negative Gas Adsorption. <i>CheM</i> , <b>2016</b> , 1, 873-886	16.2	68
117	Massive amplification of surface-induced transport at superhydrophobic surfaces. <i>Physical Review Letters</i> , <b>2008</b> , 101, 064503	7.4	67
116	Ion-specific anomalous electrokinetic effects in hydrophobic nanochannels. <i>Physical Review Letters</i> , <b>2007</b> , 98, 177801	7.4	63
115	Chemisorption of Hydroxide on 2D Materials from DFT Calculations: Graphene versus Hexagonal Boron Nitride. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 4695-4700	6.4	61

114	Osmotic flow through fully permeable nanochannels. <i>Physical Review Letters</i> , <b>2014</b> , 112, 244501	7.4	61
113	Microscale rheology of a soft glassy material close to yielding. <i>Physical Review Letters</i> , <b>2012</b> , 108, 148301	7.4	61
112	Nanofluidic osmotic diodes: theory and molecular dynamics simulations. <i>Physical Review Letters</i> , <b>2013</b> , 111, 244501	7.4	60
111	On the Green-Kubo relationship for the liquid-solid friction coefficient. <i>Journal of Chemical Physics</i> , <b>2013</b> , 139, 044704	3.9	59
110	Physics of humid granular media. <i>Comptes Rendus Physique</i> , <b>2002</b> , 3, 207-215	1.4	59
109	Osmotic manipulation of particles for microfluidic applications. <i>New Journal of Physics</i> , <b>2009</b> , 11, 075022	2.9	58
108	Fluids at the Nanoscale: From Continuum to Subcontinuum Transport. <i>Annual Review of Fluid Mechanics</i> , <b>2021</b> , 53, 377-410	22	58
107	Osmotic traps for colloids and macromolecules based on logarithmic sensing in salt taxis. <i>Soft Matter</i> , <b>2012</b> , 8, 980-994	3.6	57
106	Probability distributions for the run-and-tumble bacterial dynamics: an analogy to the Lorentz model. <i>European Physical Journal E</i> , <b>2012</b> , 35, 84	1.5	57
105	Secrets of successful stone-skipping. <i>Nature</i> , <b>2004</b> , 427, 29	50.4	56
104	Confined flows of a polymer microgel. <i>European Physical Journal E</i> , <b>2013</b> , 36, 30	1.5	55
103	Skipping stones. <i>Journal of Fluid Mechanics</i> , <b>2005</b> , 543, 137	3.7	53
102	Transport and dispersion across wiggling nanopores. <i>Nature Physics</i> , <b>2018</b> , 14, 1108-1113	16.2	52
101	Hydrodynamic model for a dynamical jammed-to-flowing transition in gravity driven granular media. <i>Physical Review Letters</i> , <b>2002</b> , 89, 184301	7.4	51
100	Inhomogeneous shear flows in soft jammed materials with tunable attractive forces. <i>Physical Review E</i> , <b>2012</b> , 85, 021503	2.4	49
99	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> , <b>2004</b> , 241, 265-272	5.1	49
98	High friction limit of the Kramers equation: The multiple time-scale approach. <i>American Journal of Physics</i> , <b>1997</b> , 65, 140-144	0.7	48
97	Labyrinthine water flow across multilayer graphene-based membranes: Molecular dynamics versus continuum predictions. <i>Journal of Chemical Physics</i> , <b>2016</b> , 144, 234701	3.9	48

96	Shear thinning in non-Brownian suspensions. <i>Soft Matter</i> , <b>2018</b> , 14, 879-893	3.6	48
95	Effective interactions and phase behaviour for a model clay suspension in an electrolyte. <i>Journal of Physics Condensed Matter</i> , <b>2002</b> , 14, 9339-9352	1.8	47
94	Thermal fluctuations in nanofluidic transport. <i>Physical Review Letters</i> , <b>2012</b> , 109, 024501	7.4	42
93	A molecular dynamics study of non-local effects in the flow of soft jammed particles. <i>Soft Matter</i> , <b>2013</b> , 9, 7489	3.6	42
92	Electrokinetics at aqueous interfaces without mobile charges. <i>Langmuir</i> , <b>2010</b> , 26, 12614-25	4	42
91	Driplons as localized and superfast ripples of water confined between graphene sheets. <i>Nature Communications</i> , <b>2018</b> , 9, 1496	17.4	41
90	Carbon membranes for efficient water-ethanol separation. <i>Journal of Chemical Physics</i> , <b>2016</b> , 145, 124703	3.9	40
89	Wetting controls separation of inertial flows from solid surfaces. <i>Physical Review Letters</i> , <b>2010</b> , 104, 084503	5.0	39
88	The interplay between screening properties and colloid anisotropy: towards a reliable pair potential for disc-like charged particles. <i>European Physical Journal E</i> , <b>2004</b> , 15, 345-57	1.5	39
87	Sub-additive ionic transport across arrays of solid-state nanopores. <i>Physics of Fluids</i> , <b>2014</b> , 26, 012005	4.4	38
86	A kinetic elasto-plastic model exhibiting viscosity bifurcation in soft glassy materials. <i>Soft Matter</i> , <b>2011</b> , 7, 5524	3.6	38
85	Comment on "Large slip of aqueous liquid flow over a nanoengineered superhydrophobic surface". <i>Physical Review Letters</i> , <b>2006</b> , 97, 109601; discussion 109602	7.4	36
84	Boundary conditions for soft glassy flows: slippage and surface fluidization. <i>Soft Matter</i> , <b>2014</b> , 10, 6984-9	3.6	35
83	Universal and non-universal features in coarse-grained models of flow in disordered solids. <i>Soft Matter</i> , <b>2014</b> , 10, 4648-61	3.6	35
82	Destabilization of a flow focused suspension of magnetotactic bacteria. <i>Physical Review Fluids</i> , <b>2016</b> , 1,	2.8	35
81	Anomalous capillary filling and wettability reversal in nanochannels. <i>Physical Review E</i> , <b>2016</b> , 93, 033123	2.4	34
80	Osmotic and diffusio-osmotic flow generation at high solute concentration. I. Mechanical approaches. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 194701	3.9	33
79	Dramatic pressure-sensitive ion conduction in conical nanopores. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 4063-4068	11.5	33

78	On the fluid-fluid phase separation in charged-stabilized colloidal suspensions. <i>Journal of Physics Condensed Matter</i> , <b>2003</b> , 15, S3523-S3536	1.8	31
77	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> , <b>1994</b> , 76, 527-548	1.5	31
76	Comment on "pumping of confined water in carbon nanotubes by rotation-translation coupling". <i>Physical Review Letters</i> , <b>2010</b> , 105, 209401; author reply 209402	7.4	30
75	Dynamical flow arrest in confined gravity driven flows of soft jammed particles. <i>Physical Review Letters</i> , <b>2012</b> , 109, 036001	7.4	30
74	Humidity effect on static aging of dry friction. <i>Europhysics Letters</i> , <b>1999</b> , 47, 562-567	1.6	29
73	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> , <b>1995</b> , 218, 125-144	3.3	29
72	Scaling laws for slippage on superhydrophobic fractal surfaces. <i>Physics of Fluids</i> , <b>2012</b> , 24, 012001	4.4	28
71	Soft nanofluidic transport in a soap film. <i>Physical Review Letters</i> , <b>2013</b> , 110, 054502	7.4	28
70	Interaction between charged anisotropic macromolecules: application to rod-like polyelectrolytes. <i>Journal of Chemical Physics</i> , <b>2004</b> , 120, 3969-82	3.9	28
69	Mechanically activated ionic transport across single-digit carbon nanotubes. <i>Nature Materials</i> , <b>2020</b> , 19, 1057-1061	27	28
68	Beyond the Tradeoff: Dynamic Selectivity in Ionic Transport and Current Rectification. <i>Journal of Physical Chemistry B</i> , <b>2019</b> , 123, 1171-1185	3.4	28
67	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> , <b>1994</b> , 76, 505-526	1.5	27
66	Osmotic and diffusio-osmotic flow generation at high solute concentration. II. Molecular dynamics simulations. <i>Journal of Chemical Physics</i> , <b>2017</b> , 146, 194702	3.9	26
65	Ionic Coulomb blockade as a fractional Wien effect. <i>Nature Nanotechnology</i> , <b>2019</b> , 14, 573-578	28.7	26
64	Theory and simulations of water flow through carbon nanotubes: prospects and pitfalls. <i>Journal of Physics Condensed Matter</i> , <b>2011</b> , 23, 184110	1.8	26
63	Hydrodynamic properties of confined fluids. <i>Journal of Physics Condensed Matter</i> , <b>1996</b> , 8, 9297-9300	1.8	26
62	The physics of stone skipping. <i>American Journal of Physics</i> , <b>2003</b> , 71, 150-155	0.7	25
61	Diffusion in pores and its dependence on boundary conditions. <i>Journal of Physics Condensed Matter</i> , <b>2005</b> , 17, S4075-S4090	1.8	24



60	Where does a cohesive granular heap break?. <i>European Physical Journal E</i> , <b>2004</b> , 14, 177-83	1.5	23
59	Diffusive Motion in Confined Fluids: Mode-Coupling Results and Molecular-Dynamics Calculations. <i>Europhysics Letters</i> , <b>1995</b> , 31, 455-460	1.6	23
58	Slow kinetics of capillary condensation in confined geometry: experiment and theory. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2002</b> , 206, 69-77	5.1	22
57	Modeling of emergent memory and voltage spiking in ionic transport through angstrom-scale slits. <i>Science</i> , <b>2021</b> , 373, 687-691	33.3	22
56	Experiments on Tracer Diffusion in Thin Free-Standing Liquid-Crystal Films. <i>Physical Review Letters</i> , <b>1997</b> , 79, 4922-4925	7.4	21
55	Diffusion-controlled reactions: A revisit of Noyes theory. <i>Journal of Chemical Physics</i> , <b>2001</b> , 114, 6265-6275	21	21
54	Thermal fluctuations of hydrodynamic flows in nanochannels. <i>Physical Review E</i> , <b>2013</b> , 88, 012106	2.4	20
53	Adsorption Kinetics in Open Nanopores as a Source of Low-Frequency Noise. <i>Nano Letters</i> , <b>2019</b> , 19, 7265-7272	11.5	19
52	Size dependence of tracer diffusion in a laponite colloidal gel. <i>Langmuir</i> , <b>2009</b> , 25, 12048-55	4	19
51	Microscopic derivation of non-Markovian thermalization of a Brownian particle. <i>Journal of Statistical Physics</i> , <b>1997</b> , 87, 1005-1035	1.5	19
50	Electrostatic potential around charged finite rodlike macromolecules: nonlinear Poisson-Boltzmann theory. <i>Journal of Colloid and Interface Science</i> , <b>2005</b> , 285, 609-18	9.3	19
49	Amorphization of a substitutional binary alloy: a computer 'experiment'. <i>Journal of Physics Condensed Matter</i> , <b>1992</b> , 4, 2375-2387	1.8	19
48	Nanorheology of Interfacial Water during Ice Gliding. <i>Physical Review X</i> , <b>2019</b> , 9,	9.1	17
47	Using surface force apparatus, diffusion and velocimetry to measure slip lengths. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2008</b> , 366, 1455-68	3	17
46	Nucleation in hydrophobic cylindrical pores: a lattice model. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 6520-6	3.4	17
45	Polymer and surface roughness effects on the drag crisis for falling spheres. <i>European Physical Journal B</i> , <b>2007</b> , 60, 469-476	1.2	16
44	Friction tensor for a pair of Brownian particles: Spurious finite-size effects and molecular dynamics estimates. <i>Journal of Statistical Physics</i> , <b>1997</b> , 89, 321-346	1.5	15
43	Analytical estimation of effective charges at saturation in Poisson Boltzmann cell models. <i>Journal of Physics Condensed Matter</i> , <b>2003</b> , 15, S291-S296	1.8	15

42	Electrostatic interactions between ions near Thomas-Fermi substrates and the surface energy of ionic crystals at imperfect metals. <i>Faraday Discussions</i> , <b>2017</b> , 199, 129-158	3.6	14
41	Crossover of the Power-Law Exponent for Carbon Nanotube Conductivity as a Function of Salinity. <i>Journal of Physical Chemistry B</i> , <b>2018</b> , 122, 2992-2997	3.4	14
40	Velocity Condensation for Magnetotactic Bacteria. <i>Physical Review Letters</i> , <b>2016</b> , 116, 168101	7.4	14
39	Flows in one-dimensional and two-dimensional carbon nanochannels: Fast and curious. <i>MRS Bulletin</i> , <b>2017</b> , 42, 278-282	3.2	13
38	How a "pinch of salt" can tune chaotic mixing of colloidal suspensions. <i>Soft Matter</i> , <b>2014</b> , 10, 4795-9	3.6	13
37	The anatomy of a crease, from folding to ironing. <i>Soft Matter</i> , <b>2012</b> , 8, 3342	3.6	13
36	Dynamics of Fakir Liquids: from Slip to Splash. <i>Journal of Adhesion Science and Technology</i> , <b>2008</b> , 22, 335-351		13
35	Nanofluidics: Phonon modes for faster flow. <i>Nature Nanotechnology</i> , <b>2015</b> , 10, 657-8	28.7	12
34	Interfacial transport with mobile surface charges and consequences for ionic transport in carbon nanotubes. <i>European Physical Journal E</i> , <b>2018</b> , 41, 148	1.5	12
33	Electrostatic interaction of neutral semi-permeable membranes. <i>Journal of Chemical Physics</i> , <b>2012</b> , 136, 034902	3.9	10
32	Reduction of dimensionality in a diffusion search process and kinetics of gene expression. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2000</b> , 277, 71-82	3.3	10
31	Fluctuation-induced quantum friction in nanoscale water flows.. <i>Nature</i> , <b>2022</b> , 602, 84-90	50.4	10
30	Atomic rheology of gold nanojunctions. <i>Nature</i> , <b>2019</b> , 569, 393-397	50.4	9
29	Influence of wetting properties on diffusion in a confined fluid. <i>European Physical Journal Special Topics</i> , <b>2000</b> , 10, Pr7-27-Pr7-31		9
28	Entrance effects in concentration-gradient-driven flow through an ultrathin porous membrane. <i>Journal of Chemical Physics</i> , <b>2019</b> , 151, 044705	3.9	8
27	The Landau-Squire plume. <i>Journal of Fluid Mechanics</i> , <b>2017</b> , 826,	3.7	8
26	Tasting edge effects. <i>American Journal of Physics</i> , <b>2007</b> , 75, 148-150	0.7	8
25	Ultra-sensitive flow measurement in individual nanopores through pressure-driven particle translocation. <i>Nanoscale</i> , <b>2015</b> , 7, 7965-70	7.7	7

24	Local and global force balance for diffusiophoretic transport. <i>Journal of Fluid Mechanics</i> , <b>2020</b> , 892,	3.7	7
23	Phenomenological Study of Hysteresis in Quasistatic Friction. <i>Journal De Physique, I</i> , <b>1997</b> , 7, 1603-1625		7
22	Thermally activated dynamics of capillary condensation. <i>Journal of Physics Condensed Matter</i> , <b>2000</b> , 12, A419-A424	1.8	6
21	Active sieving across driven nanopores for tunable selectivity. <i>Journal of Chemical Physics</i> , <b>2017</b> , 147, 154701	3.9	5
20	Active Osmotic Exchanger for Efficient Nanofiltration Inspired by the Kidney. <i>Physical Review X</i> , <b>2016</b> , 6,	9.1	5
19	MicroMegascope. <i>Nanotechnology</i> , <b>2018</b> , 29, 355501	3.4	5
18	Electronic screening using a virtual Thomas-Fermi fluid for predicting wetting and phase transitions of ionic liquids at metal surfaces. <i>Nature Materials</i> , <b>2021</b> ,	27	5
17	MicroMegascope based dynamic surface force apparatus. <i>Nanotechnology</i> , <b>2019</b> , 30, 195502	3.4	4
16	Resonant osmosis across active switchable membranes. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 054704	3.9	4
15	Ultrafast photomechanical transduction through thermophoretic implosion. <i>Nature Communications</i> , <b>2020</b> , 11, 50	17.4	4
14	Blocking of metastable phase formation by an external field. <i>Physical Review E</i> , <b>1994</b> , 49, 1883-1887	2.4	4
13	Nanotribology of Ionic Liquids: Transition to Yielding Response in Nanometric Confinement with Metallic Surfaces. <i>Physical Review X</i> , <b>2020</b> , 10,	9.1	4
12	Studying polymer diffusiophoresis with non-equilibrium molecular dynamics. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 164901	3.9	3
11	A flux monitoring method for easy and accurate flow rate measurement in pressure-driven flows. <i>Lab on A Chip</i> , <b>2012</b> , 12, 872-5	7.2	3
10	The mystery of the skipping stone. <i>Physics World</i> , <b>2006</b> , 19, 29-31	0.5	3
9	A kinetic model for Brownian motion. <i>Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics</i> , <b>1994</b> , 16, 981-991		3
8	Effets Electrocinétiques sur Surfaces Glissantes. <i>Houille Blanche</i> , <b>2006</b> , 92, 53-58	0.3	3
7	Electrotunable wetting, and micro- and nanofluidics: general discussion. <i>Faraday Discussions</i> , <b>2017</b> , 199, 195-237	3.6	2

6	Dynamics of Colloidal Systems: Beyond the Stochastic Approach <b>2000</b> , 1-16		1
5	Un moteur à eau de mer pour déplacer des particules micrométriques <b>2013</b> , 10-15	0.1	1
4	From Paris to Lyon, and from simple to complex liquids: a view on Jean-Pierre Hansen's contribution. <i>Molecular Physics</i> , <b>2015</b> , 113, 2378-2382	1.7	0
3	FIB Design for Nanofluidic Applications. <i>Lecture Notes in Nanoscale Science and Technology</i> , <b>2013</b> , 373-389.	3	
2	Humidity Effects and Aging Behavior in Granular Media. <i>Materials Research Society Symposia Proceedings</i> , <b>1998</b> , 543, 363		
1	Nanohydrodynamique près d'une surface solide : caractérisation expérimentale à l'équilibre. <i>Houille Blanche</i> , <b>2008</b> , 94, 83-90	0.3	