Howard A Stone

List of Publications by Year in Descending Order

554 papers	39,625 citations	97 h-index	184 g-index
605 ext. papers	44,876 ext. citations	6.8 avg, IF	7.77 L-index

#	Paper	IF	Citations
554	Buckling of elastic fibers in a shear flow. *New Journal of Physics*, **2022**, 24, 013013	2.9	1
553	Inexpensive Multipatient Respiratory Monitoring System for Helmet Ventilation During COVID-19 Pandemic. *Journal of Medical Devices, Transactions of the ASME*, **2022**, 16,	1.3	1
552	The Influence of Boundaries on Gravity Currents and Thin Films: Drainage, Confinement, Convergence, and Deformation Effects. *Annual Review of Fluid Mechanics*, **2022**, 54, 27-56	22	1
551	Generating Resonant and Repeated Root Solutions to Ordinary Differential Equations Using Perturbation Methods. *SIAM Review*, **2022**, 64, 485-499	7.4	
550	A geometric criterion for the optimal spreading of active polymers in porous media. *Nature Communications*, **2021**, 12, 7088	17.4	8
549	Quantifying the effect of a mask on expiratory flows. *Physical Review Fluids*, **2021**, 6,	2.8	2
548	Tracking the air exhaled by an opera singer. *Physical Review Fluids*, **2021**, 6,	2.8	3
547	Shear-induced migration of confined flexible fibers. *Soft Matter*, **2021**,	3.6	3
546	Metal-catalyst-free gas-phase synthesis of long-chain hydrocarbons. *Nature Communications*, **2021**, 12, 5937	17.4	2
545	Universal features of the shape of elastic fibres in shear flow. *Journal of Fluid Mechanics*, **2021**, 914,	3.7	6
544	Draining and spreading along geometries that cause converging flows: Viscous gravity currents on a downward-pointing cone and a bowl-shaped hemisphere. *Physical Review Fluids*, **2021**, 6,	2.8	1
543	Chemically Triggered Coalescence and Reactivity of Droplet Fibers. *Journal of the American Chemical Society*, **2021**, 143, 5558-5564	16.4	1
542	Hydrophilic slippery surface enabled coarsening effect for rapid water harvesting. *Cell Reports Physical Science*, **2021**, 2, 100387	6.1	15
541	Diffusiophoresis and diffusioosmosis in tandem: Two-dimensional particle motion in the presence of multiple electrolytes. *Physical Review Fluids*, **2021**, 6,	2.8	4
540	Hierarchical transitions and fractal wrinkling drive bacterial pellicle morphogenesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	3
539	Hydraulic transmissivity inferred from ice-sheet relaxation following Greenland supraglacial lake drainages. *Nature Communications*, **2021**, 12, 3955	17.4	1
538	Low-Reynolds-number, biflagellated Quincke swimmers with multiple forms of motion. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	5

537	Evaporation of Binary-Mixture Liquid Droplets: The Formation of Picoliter Pancakelike Shapes. *Physical Review Letters*, **2021**, 127, 024501	7.4	3
536	Flow rate–pressure drop relation for shear-thinning fluids in narrow channels: approximate solutions and comparison with experiments. *Journal of Fluid Mechanics*, **2021**, 923,	3.7	2
535	Electrostatics, conformation, and rheology of unentangled semidilute polyelectrolyte solutions. *Journal of Rheology*, **2021**, 65, 507-526	4.1	4
534	Plasmodesmata and the problems with size: Interpreting the confusion. *Journal of Plant Physiology*, **2021**, 257, 153341	3.6	8
533	CO-Driven diffusiophoresis and water cleaning: similarity solutions for predicting the exclusion zone in a channel flow. *Lab on A Chip*, **2021**, 21, 3387-3400	7.2	2
532	Roadmap on emerging concepts in the physical biology of bacterial biofilms: from surface sensing to community formation. *Physical Biology*, **2021**, 18,	3	16
531	CO-Driven diffusiophoresis for maintaining a bacteria-free surface. *Soft Matter*, **2021**, 17, 2568-2576	3.6	3
530	Electrostatic wrapping of a microfiber around a curved particle. *Soft Matter*, **2021**, 17, 3609-3618	3.6	2
529	Simulation of impulsively induced viscoelastic jets using the Oldroyd-B model. *Journal of Fluid Mechanics*, **2021**, 911,	3.7	2
528	Microswimmers near corrugated, periodic surfaces. *Soft Matter*, **2021**, 17, 3322-3332	3.6	0
527	Non-unique bubble dynamics in a vertical capillary with an external flow. *Journal of Fluid Mechanics*, **2021**, 911,	3.7	3
526	Diffusion and flow across shape-perturbed plasmodesmata nanopores in plants. *European Physical Journal Plus*, **2021**, 136, 1	3.1	2
525	Reciprocal theorem for calculating the flow rate–pressure drop relation for complex fluids in narrow geometries. *Physical Review Fluids*, **2021**, 6,	2.8	3
524	Evaporation of multiple droplets. *Journal of Fluid Mechanics*, **2021**, 927,	3.7	2
523	Evidence for biosurfactant-induced flow in corners and bacterial spreading in unsaturated porous media. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	3
522	Membrane science emerging as a convergent scientific field with molecular origins and understanding, and global impact. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	1
521	Confinement size determines the architecture of Ran-induced microtubule networks. *Soft Matter*, **2021**, 17, 5921-5931	3.6	0
520	A hydrodynamic instability drives protein droplet formation on microtubules to nucleate branches.. *Nature Physics*, **2021**, 17, 493-498	16.2	12

519	4D imaging reveals mechanisms of clay-carbon protection and release. *Nature Communications*, **2021**, 12, 622	17.4	13
518	Formation, Rupture, and Healing of an Annular Viscous Film. *Physical Review Letters*, **2020**, 124, 224501	7.4	1
517	Symmetrization of Thin Freestanding Liquid Films via a Capillary-Driven Flow. *Physical Review Letters*, **2020**, 124, 184502	7.4	5
516	Cell position fates and collective fountain flow in bacterial biofilms revealed by light-sheet microscopy. *Science*, **2020**, 369, 71-77	33.3	45
515	Silver-Based Self-Powered pH-Sensitive Pump and Sensor. *Langmuir*, **2020**, 36, 7948-7955	4	2
514	Stability of force-driven shear flows in nonequilibrium molecular simulations with periodic boundaries. *Journal of Chemical Physics*, **2020**, 152, 214113	3.9	
513	Nonuniform growth and surface friction determine bacterial biofilm morphology on soft substrates. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 7622-7632	11.5	32
512	Rotation of a submerged finite cylinder moving down a soft incline. *Soft Matter*, **2020**, 16, 4000-4007	3.6	3
511	Diffusiophoresis in Multivalent Electrolytes. *Langmuir*, **2020**, 36, 7014-7020	4	17
510	Chemically controlled shape-morphing of elastic sheets. *Materials Horizons*, **2020**, 7, 2314-2327	14.4	5
509	Diffusiophoresis: from dilute to concentrated electrolytes. *Soft Matter*, **2020**, 16, 6975-6984	3.6	15
508	Flexible fibers in shear flow approach attracting periodic solutions. *Physical Review E*, **2020**, 101, 023104	2.4	8
507	Harnessing elasticity to generate self-oscillation via an electrohydrodynamic instability. *Journal of Fluid Mechanics*, **2020**, 888,	3.7	7
506	Marangoni-driven film climbing on a draining pre-wetted film. *Journal of Fluid Mechanics*, **2020**, 886,	3.7	3
505	Influence of Salt on the Viscosity of Polyelectrolyte Solutions. *Physical Review Letters*, **2020**, 124, 177801	7.4	9
504	Particle motion nearby rough surfaces. *Physical Review Fluids*, **2020**, 5,	2.8	6
503	Stretching and break-up of saliva filaments during speech: A route for pathogen aerosolization and its potential mitigation. *Physical Review Fluids*, **2020**, 5,	2.8	29
502	Towards improved social distancing guidelines: Space and time dependence of virus transmission from speech-driven aerosol transport between two individuals. *Physical Review Fluids*, **2020**, 5,	2.8	25

501	The transition state and regulation of γ-TuRC-mediated microtubule nucleation revealed by single molecule microscopy. *ELife*, **2020**, 9,	8.9	21
500	Rotating tensiometer for the measurement of the elastic modulus of deformable particles. *Physical Review Fluids*, **2020**, 5,	2.8	1
499	Regime Map and Triple Point in Selective Withdrawal. *Physical Review Letters*, **2020**, 125, 264502	7.4	1
498	Start-up flow in shallow deformable microchannels. *Journal of Fluid Mechanics*, **2020**, 885,	3.7	12
497	Speech can produce jet-like transport relevant to asymptomatic spreading of virus. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 25237-25245	11.5	93
496	Free-Surface Liquid Lithium Flow Modeling and Stability Analysis for Fusion Applications. *Journal of Fusion Energy*, **2020**, 39, 455-461	1.6	
495	CO-leakage-driven diffusiophoresis causes spontaneous accumulation of charged materials in channel flow. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 25985-25990	11.5	2
494	Self-Propelled Supracolloidal Fibers from Multifunctional Polymer Surfactants and Droplets. *Macromolecular Rapid Communications*, **2020**, 41, e2000334	4.8	3
493	Thermodynamics of Electrical Double Layers with Electrostatic Correlations. *Journal of Physical Chemistry C*, **2020**, 124, 26830-26842	3.8	2
492	Self-Similar Draining near a Vertical Edge. *Physical Review Letters*, **2020**, 125, 064502	7.4	3
491	A new wrinkle on liquid sheets: Turning the mechanism of viscous bubble collapse upside down. *Science*, **2020**, 369, 685-688	33.3	21
490	Charging Dynamics of Overlapping Double Layers in a Cylindrical Nanopore. *Physical Review Letters*, **2020**, 125, 076001	7.4	20
489	Ions in an AC Electric Field: Strong Long-Range Repulsion between Oppositely Charged Surfaces. *Physical Review Letters*, **2020**, 125, 056001	7.4	7
488	Ionic Layering and Overcharging in Electrical Double Layers in a Poisson-Boltzmann Model. *Physical Review Letters*, **2020**, 125, 188004	7.4	8
487	Phase synchronization of fluid-fluid interfaces as hydrodynamically coupled oscillators. *Nature Communications*, **2020**, 11, 5221	17.4	4
486	Mechanical instability and interfacial energy drive biofilm morphogenesis. *ELife*, **2019**, 8,	8.9	33
485	The effects of a horizontal magnetic field on the Rayleigh–Taylor instability. *Nuclear Materials and Energy*, **2019**, 18, 175-181	2.1	7
484	Design Of An Optofluidic Device For The Measurement Of The Elastic Modulus Of Deformable Particles. *EPJ Web of Conferences*, **2019**, 215, 14003	0.3	

483	Quantifying Dynamics in Phase-Separated Condensates Using Fluorescence Recovery after Photobleaching. *Biophysical Journal*, **2019**, 117, 1285-1300	2.9	90
482	The reciprocal theorem in fluid dynamics and transport phenomena. *Journal of Fluid Mechanics*, **2019**, 879,	3.7	40
481	Characterization of surface-solute interactions by diffusioosmosis. *Soft Matter*, **2019**, 15, 1582-1596	3.6	13
480	Design of a microfluidic device for the measurement of the elastic modulus of deformable particles. *Soft Matter*, **2019**, 15, 880-889	3.6	8
479	Submicron aerosols of liquid fuels: Method of production, experimental characterization and a semi-empirical model. *Applied Energy*, **2019**, 235, 1651-1663	10.7	5
478	Pressure-driven flow across a hyperelastic porous membrane. *Journal of Fluid Mechanics*, **2019**, 871, 742-754	3.7	5
477	Restoring universality to the pinch-off of a bubble. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 13780-13784	11.5	11
476	Microfluidic-based transcriptomics reveal force-independent bacterial rheosensing. *Nature Microbiology*, **2019**, 4, 1274-1281	26.6	23
475	Particle entrainment in dead-end pores by diffusiophoresis. *Soft Matter*, **2019**, 15, 3879-3885	3.6	22
474	Identification of a Molecular Latch that Regulates Staphylococcal Virulence. *Cell Chemical Biology*, **2019**, 26, 548-558.e4	8.2	10
473	Representative subsampling of sedimenting blood. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2019**, 475, 20190223	2.4	0
472	Chemotaxis in shear flow: Similarity solutions of the steady-state chemoattractant and bacterial distributions. *AICHE Journal*, **2019**, 65, e16713	3.6	0
471	Inertial gravity current produced by the drainage of a cylindrical reservoir from an outer or inner edge. *Journal of Fluid Mechanics*, **2019**, 874, 185-209	3.7	4
470	Rapid Spreading of a Droplet on a Thin Soap Film. *Langmuir*, **2019**, 35, 14855-14860	4	5
469	Dynamics of long gas bubbles rising in a vertical tube in a cocurrent liquid flow. *Physical Review Fluids*, **2019**, 4,	2.8	12
468	Fountain mixing in a filling box at low Reynolds numbers. *Physical Review Fluids*, **2019**, 4,	2.8	7
467	Diffusiophoretic and diffusioosmotic velocities for mixtures of valence-asymmetric electrolytes. *Physical Review Fluids*, **2019**, 4,	2.8	27
466	Propulsion driven by self-oscillation via an electrohydrodynamic instability. *Physical Review Fluids*, **2019**, 4,	2.8	12

465	Effect of streamwise cross-sectional variation on liquid retention in liquid-infused substrates under an external flow. *Physical Review Fluids*, **2019**, 4,	2.8	2
464	Pattern formation in oil-in-water emulsions exposed to a salt gradient. *Physical Review Fluids*, **2019**, 4,	2.8	1
463	Role of extensional rheology on droplet bouncing. *Physical Review Fluids*, **2019**, 4,	2.8	13
462	Deposition-on-contact regime and the effect of donor-acceptor distance during laser-induced forward transfer of viscoelastic liquids. *Optical Materials Express*, **2019**, 9, 2738	2.6	6
461	Spatiotemporal organization of branched microtubule networks. *ELife*, **2019**, 8,	8.9	29
460	Autophoresis of two adsorbing/desorbing particles in an electrolyte solution. *Journal of Fluid Mechanics*, **2019**, 865, 440-459	3.7	7
459	Backflow from a model fracture network: an asymptotic investigation. *Journal of Fluid Mechanics*, **2019**, 864, 899-924	3.7	4
458	Diffusion of multiple electrolytes cannot be treated independently: model predictions with experimental validation. *Soft Matter*, **2019**, 15, 9965-9973	3.6	13
457	A quantitative study of the effect of flow on the photopolymerization of fibers. *Soft Matter*, **2019**, 15, 9553-9564	3.6	3
456	Diffusiophoresis in ionic surfactants: effect of micelle formation. *Soft Matter*, **2019**, 15, 278-288	3.6	9
455	Flow rate□pressure drop relation for deformable shallow microfluidic channels. *Journal of Fluid Mechanics*, **2018**, 841, 267-286	3.7	43
454	Viscoplastic Matrix Materials for Embedded 3D Printing. *ACS Applied Materials & Interfaces*, **2018**, 10, 23353-23361	9.5	97
453	Suppressing viscous fingering in structured porous media. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 4833-4838	11.5	66
452	Impulsively Induced Jets from Viscoelastic Films for High-Resolution Printing. *Physical Review Letters*, **2018**, 120, 074501	7.4	31
451	Healing capillary films. *Journal of Fluid Mechanics*, **2018**, 838, 404-434	3.7	13
450	Impact of diversity of morphological characteristics and Reynolds number on local hemodynamics in basilar aneurysms. *AICHE Journal*, **2018**, 64, 2792-2802	3.6	1
449	Dewetting of Thin Liquid Films Surrounding Air Bubbles in Microchannels. *Langmuir*, **2018**, 34, 1363-1370	4	16
448	Flow past finite cylinders of constant curvature. *Journal of Fluid Mechanics*, **2018**, 837, 896-915	3.7	5

447	Cleaning by Surfactant Gradients: Particulate Removal from Porous Materials and the Significance of Rinsing in Laundry Detergency. *Physical Review Applied*, **2018**, 9,	4.3	30
446	Diffusiophoresis of a charged drop. *Journal of Fluid Mechanics*, **2018**, 852, 37-59	3.7	27
445	Visualization of Surfactant Dynamics to and along Oil-Water Interfaces Using Solvatochromic Fluorescent Surfactants. *Langmuir*, **2018**, 34, 10512-10522	4	5
444	Foam-driven fracture. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 8082-8086	11.5	9
443	Invisible Anchors Trap Particles in Branching Junctions. *Physical Review Letters*, **2018**, 121, 054502	7.4	12
442	Direct measurement of selective evaporation of binary mixture droplets by dissolving materials. *Journal of Fluid Mechanics*, **2018**, 850, 769-783	3.7	24
441	Separation of particles by size from a suspension using the motion of a confined bubble. *Applied Physics Letters*, **2018**, 112, 181604	3.4	12
440	Flow-induced phase separation of active particles is controlled by boundary conditions. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 5403-5408	11.5	48
439	Dynamic switching enables efficient bacterial colonization in flow. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 5438-5443	11.5	9
438	Rotation of a low-Reynolds-number watermill: theory and simulations. *Journal of Fluid Mechanics*, **2018**, 849, 57-75	3.7	1
437	Verticalization of bacterial biofilms. *Nature Physics*, **2018**, 14, 954-960	16.2	52
436	Universality in the nonlinear leveling of capillary films. *Physical Review Fluids*, **2018**, 3,	2.8	7
435	Reciprocal theorem for the prediction of the normal force induced on a particle translating parallel to an elastic membrane. *Physical Review Fluids*, **2018**, 3,	2.8	13
434	Dynamics of viscous backflow from a model fracture network. *Journal of Fluid Mechanics*, **2018**, 836, 828-849	3.7	8
433	Laser-induced forward transfer from healing silver paste films. *Applied Physics Letters*, **2018**, 113, 221601	3.4	8
432	Bacterial Biofilm Material Properties Enable Removal and Transfer by Capillary Peeling. *Advanced Materials*, **2018**, 30, e1804153	24	34
431	Time-dependent motion of a confined bubble in a tube: transition between two steady states. *Journal of Fluid Mechanics*, **2018**, 857,	3.7	7
430	Cell Membranes Resist Flow. *Cell*, **2018**, 175, 1769-1779.e13	56.2	140

429	Uniform Coating of Self-Assembled Noniridescent Colloidal Nanostructures using the Marangoni Effect and Polymers. *Physical Review Applied*, **2018**, 10,	4.3	8
428	Membrane-induced hydroelastic migration of a particle surfing its own wave. *Nature Physics*, **2018**, 14, 1211-1215	16.2	21
427	Building Supracolloidal Fibers from Zwitterion-Stabilized Adhesive Emulsions. *Advanced Functional Materials*, **2018**, 28, 1804325	15.6	10
426	Diffusiophoresis in narrow channel flows. *Journal of Fluid Mechanics*, **2018**, 854, 420-448	3.7	22
425	Electrical Double Layers: Effects of Asymmetry in Electrolyte Valence on Steric Effects, Dielectric Decrement, and Ion-Ion Correlations. *Langmuir*, **2018**, 34, 11971-11985	4	38
424	Dynamic regimes of electrified liquid filaments. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 6159-6164	11.5	20
423	Salt type and concentration affect the viscoelasticity of polyelectrolyte solutions. *Applied Physics Letters*, **2018**, 112, 203701	3.4	16
422	Bubble-Driven Detachment of Bacteria from Confined Microgeometries. *Environmental Science & Technology*, **2017**, 51, 1340-1347	10.3	32
421	Vortex breakdown, linear global instability and sensitivity of pipe bifurcation flows. *Journal of Fluid Mechanics*, **2017**, 815, 257-294	3.7	16
420	Oil-Impregnated Nanoporous Oxide Layer for Corrosion Protection with Self-Healing. *Advanced Functional Materials*, **2017**, 27, 1606040	15.6	69
419	Entry and exit flows in curved pipes. *Journal of Fluid Mechanics*, **2017**, 815, 570-591	3.7	3
418	Sinking a Granular Raft. *Physical Review Letters*, **2017**, 118, 108001	7.4	11
417	Farming and public goods production in populations. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 2289-2294	11.5	14
416	Membraneless water filtration using CO. *Nature Communications*, **2017**, 8, 15181	17.4	56
415	Formation of sea ice bridges in narrow straits in response to wind and water stresses. *Journal of Geophysical Research: Oceans*, **2017**, 122, 5588-5610	3.3	9
414	Diffusiophoretic manipulation of particles in a drop deposited on a hydrogel. *Soft Matter*, **2017**, 13, 5122-5129	3.5	7
413	Low-Cost Zeta Potentiometry Using Solute Gradients. *Advanced Materials*, **2017**, 29, 1701516	24	35
412	Surface-attached molecules control Staphylococcus aureus quorum sensing and biofilm development. *Nature Microbiology*, **2017**, 2, 17080	26.6	64

411	Spontaneous formation of aligned DNA nanowires by capillarity-induced skin folding. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 6233-6237	11.5	18
410	High-speed axial-scanning wide-field microscopy for volumetric particle tracking velocimetry. *Experiments in Fluids*, **2017**, 58, 1	2.5	7
409	Wind-Driven Formation of Ice Bridges in Straits. *Physical Review Letters*, **2017**, 118, 128701	7.4	3
408	Hydrodynamic force on a sphere normal to an obstacle due to a non-uniform flow. *Journal of Fluid Mechanics*, **2017**, 818, 407-434	3.7	10
407	The influence of capillary effects on the drainage of a viscous gravity current into a deep porous medium. *Journal of Fluid Mechanics*, **2017**, 817, 514-559	3.7	10
406	Armoring confined bubbles in the flow of colloidal suspensions. *Soft Matter*, **2017**, 13, 2857-2865	3.6	14
405	Failure mechanisms of air entrainment in drop impact on lubricated surfaces. *Soft Matter*, **2017**, 13, 2402-2409	3.6	18
404	Extended lubrication theory: improved estimates of flow in channels with variable geometry. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2017**, 473, 20170234	2.4	13
403	Water-Based Peeling of Thin Hydrophobic Films. *Physical Review Letters*, **2017**, 119, 154502	7.4	23
402	Shape of the growing front of biofilms. *New Journal of Physics*, **2017**, 19, 125007	2.9	16
401	Motion of a Free-Settling Spherical Particle Driven by a Laser-Induced Bubble. *Physical Review Letters*, **2017**, 119, 084501	7.4	36
400	Inertial gravity currents produced by fluid drainage from an edge. *Journal of Fluid Mechanics*, **2017**, 827, 640-663	3.7	8
399	Flow-induced gelation of microfiber suspensions. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, E8557-E8564	11.5	37
398	Extracellular-matrix-mediated osmotic pressure drives Vibrio cholerae biofilm expansion and cheater exclusion. *Nature Communications*, **2017**, 8, 327	17.4	75
397	Spatial gene drives and pushed genetic waves. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 8452-8457	11.5	37
396	Effect of Hydrodynamic Interactions on Reaction Rates in Membranes. *Biophysical Journal*, **2017**, 113, 440-447	2.9	5
395	Solutal Marangoni flows of miscible liquids drive transport without surface contamination. *Nature Physics*, **2017**, 13, 1105-1110	16.2	54
394	Hygromorphic actuator from a metal oxide film driven by a nano-capillary forest structure. *NPG Asia Materials*, **2017**, 9, e417-e417	10.3	6

393	Laboratory layered latte. *Nature Communications*, **2017**, 8, 1960	17.4	14
392	Accumulation of Colloidal Particles in Flow Junctions Induced by Fluid Flow and Diffusiophoresis. *Physical Review X*, **2017**, 7,	9.1	22
391	Diffusiophoresis in one-dimensional solute gradients. *Soft Matter*, **2017**, 13, 9015-9023	3.6	26
390	Microfluidic chest cavities reveal that transmural pressure controls the rate of lung development. *Development (Cambridge)*, **2017**, 144, 4328-4335	6.6	58
389	Protocol to perform pressurized blister tests on thin elastic films. *European Physical Journal E*, **2017** , 40, 64	1.5	4
388	Force generation by groups of migrating bacteria. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 7266-7271	11.5	26
387	Long-wave dynamics of an elastic sheet lubricated by a thin liquid film on a wetting substrate. *Physical Review Fluids*, **2017**, 2,	2.8	4
386	Flow of a gravity current in a porous medium accounting for drainage from a permeable substrate and an edge. *Physical Review Fluids*, **2017**, 2,	2.8	7
385	Rotation of an immersed cylinder sliding near a thin elastic coating. *Physical Review Fluids*, **2017**, 2,	2.8	27
384	Undulations on the surface of elongated bubbles in confined gas-liquid flows. *Physical Review Fluids* , **2017**, 2,	2.8	22
383	Effect of buoyancy on the motion of long bubbles in horizontal tubes. *Physical Review Fluids*, **2017**, 2,	2.8	8
382	Drop impact on a flexible fiber. *Soft Matter*, **2016**, 12, 200-8	3.6	41
381	Vortex-Breakdown-Induced Particle Capture in Branching Junctions. *Physical Review Letters*, **2016**, 117, 084501	7.4	26
380	Vibrio cholerae biofilm growth program and architecture revealed by single-cell live imaging. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E5337-43	11.5	100
379	Flow regime analysis for geologic CO2 sequestration and other subsurface fluid injections. *International Journal of Greenhouse Gas Control*, **2016**, 53, 284-291	4.2	16
378	Surfactant- and Aqueous-Foam-Driven Oil Extraction from Micropatterned Surfaces. *Langmuir*, **2016**, 32, 13149-13158	4	2
377	Oscillatory Marangoni flows with inertia. *Journal of Fluid Mechanics*, **2016**, 803, 94-118	3.7	1
376	Effect of the Polydispersity of a Colloidal Drop on Drying Induced Stress as Measured by the Buckling of a Floating Sheet. *Physical Review Letters*, **2016**, 116, 238001	7.4	11

375	Role of the Membrane for Mechanosensing by Tethered Channels. *Physical Review Letters*, **2016**, 116, 258101	7.4	11
374	Liquid Imbibition in Ceramic-Coated Carbon Nanotube Films. *Langmuir*, **2016**, 32, 12686-12692	4	10
373	Local and global consequences of flow on bacterial quorum sensing. *Nature Microbiology*, **2016**, 1, 15005	26.6	94
372	Biophysical characterization of organelle-based RNA/protein liquid phases using microfluidics. *Soft Matter*, **2016**, 12, 9142-9150	3.6	38
371	Point-source imbibition into dry aqueous foams. *Europhysics Letters*, **2016**, 113, 44002	1.6	7
370	The dynamics of interacting folds under biaxial compressive stresses. *Soft Matter*, **2016**, 12, 3502-6	3.6	7
369	Controlled Uniform Coating from the Interplay of Marangoni Flows and Surface-Adsorbed Macromolecules. *Physical Review Letters*, **2016**, 116, 124501	7.4	177
368	Bénard-Marangoni instability driven by moisture absorption. *Europhysics Letters*, **2016**, 113, 24002	1.6	15
367	Architectural transitions in Vibrio cholerae biofilms at single-cell resolution. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E2066-72	11.5	119
366	Size-dependent control of colloid transport via solute gradients in dead-end channels. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 257-61	11.5	125
365	Drop morphologies on flexible fibers: influence of elastocapillary effects. *Soft Matter*, **2016**, 13, 134-140	3.6	8
364	Motion of a hot particle in viscous fluids. *Physical Review Fluids*, **2016**, 1,	2.8	19
363	Crossover from shear-driven to thermally activated drainage of liquid-infused microscale capillaries. *Physical Review Fluids*, **2016**, 1,	2.8	12
362	Effect of viscosity ratio on the shear-driven failure of liquid-infused surfaces. *Physical Review Fluids*, **2016**, 1,	2.8	61
361	A Scalable Platform for Functional Nanomaterials via Bubble-Bursting. *Advanced Materials*, **2016**, 28, 4047-52	24	16
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