

Suman Chakraborty

List of Publications by Year in Descending Order

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

372
papers

7,792
citations

47
h-index

62
g-index

394
ext. papers

9,019
ext. citations

3.9
avg, IF

6.92
L-index

#	Paper	IF	Citations
372	Molecular self-assembly Enables Tuning of Nanopores in Atomically Thin Graphene Membranes for Highly Selective Transport.. <i>Advanced Materials</i> , 2022 , e2108940	24	1
371	Morpho-dynamic evolution due to inertia-mediated impact of a compound drop on a deep liquid pool. <i>Physics of Fluids</i> , 2022 , 34, 032106	4.4	1
370	Numerical Study of Pool Boiling Heat Transfer From Surface With Protrusions Using Lattice Boltzmann Method. <i>Journal of Heat Transfer</i> , 2021 , 143,	1.8	1
369	Non-wetting Liquid-Infused Slippery Paper. <i>Langmuir</i> , 2021 , 37, 13627-13636	4	3
368	Fluid Dynamics in Deformable Microchannels 2021 , 145-167		
367	Transport of vascular endothelial growth factor dictates on-chip angiogenesis in tumor microenvironment. <i>Physics of Fluids</i> , 2021 , 33, 031910	4.4	2
366	Upstream events dictate interfacial slip in geometrically converging nanopores. <i>Journal of Chemical Physics</i> , 2021 , 154, 164709	3.9	0
365	Mechanistic basis of transport in unconfined swirling flows. <i>Physics of Fluids</i> , 2021 , 33, 053109	4.4	2
364	Interfacial viscosity-induced suppression of lateral migration of a surfactant laden droplet in a nonisothermal Poiseuille flow. <i>Physical Review Fluids</i> , 2021 , 6,	2.8	3
363	Efficient simulation of non-classical liquid-vapour phase-transition flows: a method of fundamental solutions. <i>Journal of Fluid Mechanics</i> , 2021 , 919,	3.7	2
362	PSA detection using label free graphene FET with coplanar electrodes based microfluidic point of care diagnostic device. <i>Talanta</i> , 2021 , 222, 121581	6.2	10
361	Steady axial electric field may lead to controllable cross-stream migration of droplets in confined oscillatory microflows. <i>Journal of Fluid Mechanics</i> , 2021 , 907,	3.7	4
360	Frugal Approach toward Developing a Biomimetic, Microfluidic Network-on-a-Chip for In Vitro Analysis of Microvascular Physiology. <i>ACS Biomaterials Science and Engineering</i> , 2021 , 7, 1263-1277	5.5	3
359	Smartphone-Enabled Paper-Based Hemoglobin Sensor for Extreme Point-of-Care Diagnostics. <i>ACS Sensors</i> , 2021 , 6, 1077-1085	9.2	11
358	Generalization of elastohydrodynamic interactions between a rigid sphere and a nearby soft wall. <i>Journal of Fluid Mechanics</i> , 2021 , 923,	3.7	1
357	Profiling a soft solid layer to passively control the conduit shape in a compliant microchannel during flow. <i>Physical Review E</i> , 2021 , 104, 015108	2.4	2
356	Electrophoretic motion of a non-uniformly charged particle in a viscoelastic medium in thin electrical double layer limit. <i>Journal of Fluid Mechanics</i> , 2021 , 924,	3.7	3

355	Ionic wind review-2020: advancement and application in thermal management. <i>Sadhana - Academy Proceedings in Engineering Sciences</i> , 2021 , 46, 1	1	
354	Reagent-free hemoglobin estimation on a spinning disc. <i>Microchemical Journal</i> , 2021 , 168, 106463	4.8	1
353	Piecewise Isothermal Nucleic Acid Testing (PINAT) for Infectious Disease Detection with Sample-to-Result Integration at the Point-of-Care. <i>ACS Sensors</i> , 2021 , 6, 3753-3764	9.2	0
352	A scalable spectral Stokes solver for simulation of time-periodic flows in complex geometries. <i>Journal of Computational Physics</i> , 2021 , 445, 110601	4.1	0
351	Substrate wettability guided oriented self assembly of Janus particles. <i>Scientific Reports</i> , 2021 , 11, 11824.9	4	4
350	Temperature-gradient-induced massive augmentation of solute dispersion in viscoelastic micro-flows. <i>Journal of Fluid Mechanics</i> , 2020 , 897,	3.7	5
349	Flow and deformation characteristics of a flexible microfluidic channel with axial gradients in wall elasticity. <i>Soft Matter</i> , 2020 , 16, 5777-5786	3.6	8
348	Inexpensive and Versatile Paper-Based Platform for 3D Culture of Liver Cells and Related Bioassays.. <i>ACS Applied Bio Materials</i> , 2020 , 3, 2522-2533	4.1	11
347	High Temperature Durability of Oleoplaned Slippery Copper Surfaces. <i>Langmuir</i> , 2020 , 36, 4135-4143	4	4
346	Confluence of channel dimensions and groove width dictates slippery hydrodynamics in grooved hydrophobic confinements. <i>Microfluidics and Nanofluidics</i> , 2020 , 24, 1	2.8	5
345	Influence of non-hydrodynamic forces on the elastic response of an ultra-thin soft coating under fluid-mediated dynamic loading. <i>Physics of Fluids</i> , 2020 , 32, 022002	4.4	8
344	Interfacial viscosity-dictated morpho-dynamics of a compound drop in linear flows. <i>Physics of Fluids</i> , 2020 , 32, 062006	4.4	6
343	Surface Nanostructure-Wettability Coupling Leads to Unique Topological Evolution Dictating Water Transport over Nanometer Scales. <i>Langmuir</i> , 2020 , 36, 8111-8122	4	2
342	Streaming potential in bio-mimetic microvessels mediated by capillary glycocalyx. <i>Microvascular Research</i> , 2020 , 132, 104039	3.7	1
341	Microfluidics on Porous Substrates Mediated by Capillarity-Driven Transport. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 3644-3654	3.9	8
340	PDMS microfluidics: A mini review. <i>Journal of Applied Polymer Science</i> , 2020 , 137, 48958	2.9	88
339	Anomalous diffusion in an electrolyte saturated paper matrix. <i>Electrophoresis</i> , 2020 , 41, 678-683	3.6	
338	Near-wall hydrodynamic slip triggers swimming state transition of micro-organisms. <i>Journal of Fluid Mechanics</i> , 2020 , 894,	3.7	4

- 337 Coriolis force-based instability of a shear-thinning microchannel flow. *Physics of Fluids*, **2020**, 32, 042001 4.4 2
- 336 Scaling laws for external fluid flow induced by controlled periodic heating of a solid boundary. *Physical Review E*, **2020**, 101, 033105 2.4
- 335 Cooperative evaporation in two-dimensional droplet arrays. *Physical Review E*, **2020**, 101, 043101 2.4 4
- 334 Shape evolution of compound droplet in combined presence of electric field and extensional flow. *Physical Review Fluids*, **2020**, 5, 2.8 7
- 333 Nano-particles in optimal concentration facilitate electrically driven dynamic spreading of a drop on a soft viscoelastic solid. *Physics of Fluids*, **2020**, 32, 112001 4.4 2
- 332 Electrically modulated dynamics of a compound droplet in a confined microfluidic environment. *Journal of Fluid Mechanics*, **2020**, 882, 3.7 12
- 331 The effect of the finite size of ions and Debye layer overspill on the screened Coulomb interactions between charged flat plates. *Electrophoresis*, **2020**, 41, 607-614 3.6 1
- 330 Reply to comments by A. Pantokratoras on ""Electrokinetically modulated peristaltic transport of power-law fluids" by Prakash Goswami, Jeevanjyoti Chakraborty, Aditya Bandopadhyay, Suman Chakraborty, *Microvascular Research* 103 (2016) 41-54", *Microvascular Research* (2019). *Microvascular Research*, **2020**, 129, 103364 3.7
- 329 On-Chip Concentration and Patterning of Biological Cells Using Interplay of Electrical and Thermal Fields. *Analytical Chemistry*, **2020**, 92, 838-844 7.8 4
- 328 A portable spinning disc for complete blood count (CBC). *Biosensors and Bioelectronics*, **2020**, 150, 111935 7.8 10
- 327 Electro-kinetically driven route for highly sensitive blood pathology on a paper-based device. *Electrophoresis*, **2020**, 41, 615-620 3.6 15
- 326 Effect of charge convection on gravitational settling of drop in uniform electric field. *Physics of Fluids*, **2020**, 32, 112013 4.4 2
- 325 Simulations of a weakly conducting droplet under the influence of an alternating electric field. *Electrophoresis*, **2020**, 41, 1953-1960 3.6 6
- 324 Phase-field modeling of multicomponent and multiphase flows in microfluidic systems: a review. *International Journal of Numerical Methods for Heat and Fluid Flow*, **2020**, ahead-of-print, 4.5 8
- 323 Universality in coalescence of polymeric fluids. *Soft Matter*, **2020**, 16, 10921-10927 3.6 10
- 322 Rapid determination of erythrocyte sedimentation rate (ESR) by an electrically driven blood droplet biosensor. *Biomicrofluidics*, **2020**, 14, 064108 3.2 1
- 321 Electric field modulated deformation dynamics of a compound drop in the presence of confined shear flow. *Physics of Fluids*, **2020**, 32, 122006 4.4 9
- 320 Mechanical stress-induced autophagic response: A cancer-enabling characteristic?. *Seminars in Cancer Biology*, **2020**, 66, 101-109 12.7 4

319	Biomimetic pulsatile flows through flexible microfluidic conduits. <i>Biomicrofluidics</i> , 2019 , 13, 014103	3.2	9
318	Air-water meniscus shape in superhydrophobic triangular microgroove is dictated by a critical pressure under dynamic conditions. <i>Physics of Fluids</i> , 2019 , 31, 102004	4.4	7
317	Confinement effect on electrically induced dynamics of a droplet in shear flow. <i>Physical Review E</i> , 2019 , 100, 033101	2.4	13
316	Electrical Power Generation from Wet Textile Mediated by Spontaneous Nanoscale Evaporation. <i>Nano Letters</i> , 2019 , 19, 7191-7200	11.5	31
315	Comparison of the quasi-steady-state heat transport in phase-change and classical Rayleigh-BBard convection for a wide range of Stefan number and Rayleigh number. <i>Physics of Fluids</i> , 2019 , 31, 096605	4.4	7
314	Directionally controlled open channel microfluidics. <i>Physics of Fluids</i> , 2019 , 31, 092003	4.4	10
313	On heat transport and energy partition in thermal convection with mixed boundary conditions. <i>Physics of Fluids</i> , 2019 , 31, 066601	4.4	7
312	Electrical switching of a surfactant coated drop in Poiseuille flow. <i>Journal of Fluid Mechanics</i> , 2019 , 870, 27-66	3.7	7
311	Compressive stress-induced autophagy promotes invasion of HeLa cells by facilitating protein turnover in vitro. <i>Experimental Cell Research</i> , 2019 , 381, 201-207	4.2	6
310	Water desalination using graphene oxide-embedded paper microfluidics. <i>Microfluidics and Nanofluidics</i> , 2019 , 23, 1	2.8	5
309	Anomalous interplay of slip, shear and wettability in nanoconfined water. <i>Nanoscale</i> , 2019 , 11, 11254-11261	7.1	12
308	Rotational instabilities in microchannel flows. <i>Physics of Fluids</i> , 2019 , 31, 054101	4.4	6
307	Interplay of Coriolis effect with rheology results in unique blood dynamics on a compact disc. <i>Analyst, The</i> , 2019 , 144, 3782-3789	5	5
306	Electrohydrodynamic interaction between droplet pairs in a confined shear flow. <i>Physics of Fluids</i> , 2019 , 31, 032005	4.4	23
305	Interfacial dynamics of immiscible binary fluids through ordered porous media: The interplay of thermal and electric fields. <i>Physics of Fluids</i> , 2019 , 31, 032002	4.4	10
304	Universal evaporation dynamics of ordered arrays of sessile droplets. <i>Journal of Fluid Mechanics</i> , 2019 , 866, 61-81	3.7	16
303	Patterned surface charges coupled with thermal gradients may create giant augmentations of solute dispersion in electro-osmosis of viscoelastic fluids. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2019 , 475, 20180522	2.4	6
302	Universal oscillatory dynamics in capillary filling. <i>Europhysics Letters</i> , 2019 , 125, 14003	1.6	4

301	Joule heating-induced particle manipulation on a microfluidic chip. <i>Biomicrofluidics</i> , 2019 , 13, 014113	3.2	11
300	Electrowetting of a nano-suspension on a soft solid. <i>Applied Physics Letters</i> , 2019 , 114, 073702	3.4	7
299	Strong rotating flow in stationary droplets in low power budget using wire electrode configuration. <i>Electrophoresis</i> , 2019 , 40, 2971-2978	3.6	4
298	Electric field-induced pinch-off of a compound droplet in Poiseuille flow. <i>Physics of Fluids</i> , 2019 , 31, 062004	4.4	21
297	New regimes of dispersion in microfluidics as mediated by travelling temperature waves. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2019 , 475, 20190382	2.4	1
296	Electrohydrodynamic settling of drop in uniform electric field: beyond Stokes flow regime. <i>Journal of Fluid Mechanics</i> , 2019 , 881, 498-523	3.7	8
295	Electrorheology of a dilute emulsion of surfactant-covered drops. <i>Journal of Fluid Mechanics</i> , 2019 , 881, 524-550	3.7	4
294	Electrokinetic Trapping of Microparticles Using Paper-and-Pencil Microfluidics. <i>Physical Review Applied</i> , 2019 , 12,	4.3	6
293	Coriolis force-driven instabilities in stratified miscible layers on a rotationally actuated microfluidic platform. <i>Physical Review Fluids</i> , 2019 , 4,	2.8	3
292	Evolution of Paper Microfluidics as an Alternate Diagnostic Platform. <i>Advanced Functional Materials and Sensors</i> , 2019 , 83-98	1.4	4
291	Fabricating Paper Based Devices Using Correction Pens. <i>Scientific Reports</i> , 2019 , 9, 1752	4.9	32
290	Activated micromotor propulsion by enzyme catalysis in a biofluid medium. <i>Applied Physics Letters</i> , 2019 , 114, 053701	3.4	4
289	Tunable adhesion and slip on a bio-mimetic sticky soft surface. <i>Soft Matter</i> , 2019 , 15, 9031-9040	3.6	7
288	A portable rotating disc as blood rheometer. <i>Biomicrofluidics</i> , 2019 , 13, 064120	3.2	2
287	Alternating Current Electrothermal Flow for Energy Efficient Thermal Management of Microprocessor Hot Spots 2019 ,		1
286	Electrokinetics with blood. <i>Electrophoresis</i> , 2019 , 40, 180-189	3.6	17
285	Frequency-induced morphology alterations in microconfined biological cells. <i>Medical and Biological Engineering and Computing</i> , 2019 , 57, 819-835	3.1	3
284	Coalescence dynamics of unequal sized drops. <i>Physics of Fluids</i> , 2019 , 31, 012105	4.4	25

283	Electrokinetics over hydrophobic surfaces. <i>Electrophoresis</i> , 2019 , 40, 616-624	3.6	5
282	On the lifetime of evaporating confined sessile droplets. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019 , 560, 78-83	5.1	7
281	Drop deformation and emulsion rheology under the combined influence of uniform electric field and linear flow. <i>Journal of Fluid Mechanics</i> , 2018 , 841, 408-433	3.7	19
280	Hydroelectric power plant on a paper strip. <i>Lab on A Chip</i> , 2018 , 18, 1560-1568	7.2	22
279	Electrically modulated capillary filling imbibition of nematic liquid crystals. <i>Physical Review E</i> , 2018 , 97, 043107	2.4	5
278	Thermophoretically driven capillary transport of nanofluid in a microchannel. <i>Advanced Powder Technology</i> , 2018 , 29, 964-971	4.6	9
277	Influence of complex interfacial rheology on the thermocapillary migration of a surfactant-laden droplet in Poiseuille flow. <i>Physics of Fluids</i> , 2018 , 30, 022103	4.4	17
276	Influence of interfacial slip on the suspension rheology of a dilute emulsion of surfactant-laden deformable drops in linear flows. <i>Physics of Fluids</i> , 2018 , 30, 032005	4.4	10
275	Hemodynamic shear stress induces protective autophagy in HeLa cells through lipid raft-mediated mechanotransduction. <i>Clinical and Experimental Metastasis</i> , 2018 , 35, 135-148	4.7	20
274	Micromechanical properties of biomedical hydrogel for application as microchannel elastomer. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018 , 77, 217-224	4.1	3
273	Electro-thermally driven transport of a non-conducting fluid in a two-layer system for MEMS and biomedical applications. <i>Journal of Applied Physics</i> , 2018 , 123, 244901	2.5	14
272	Electrohydrodynamics of confined two-dimensional liquid droplets in uniform electric field. <i>Physics of Fluids</i> , 2018 , 30, 062003	4.4	31
271	Surfactant-induced retardation in lateral migration of droplets in a microfluidic confinement. <i>Microfluidics and Nanofluidics</i> , 2018 , 22, 1	2.8	11
270	Effect of transverse temperature gradient on the migration of a deformable droplet in a Poiseuille flow. <i>Journal of Fluid Mechanics</i> , 2018 , 850, 1142-1171	3.7	6
269	Alteration in contact line dynamics of fluid-fluid interfaces in narrow confinements through competition between thermocapillary and electrothermal effects. <i>Physics of Fluids</i> , 2018 , 30, 082005	4.4	13
268	Sedimentation of a surfactant-laden drop under the influence of an electric field. <i>Journal of Fluid Mechanics</i> , 2018 , 849, 277-311	3.7	15
267	Thermally modulated cross-stream migration of a surfactant-laden deformable drop in a Poiseuille flow. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	7
266	Effect of temperature gradient on the cross-stream migration of a surfactant-laden droplet in Poiseuille flow. <i>Journal of Fluid Mechanics</i> , 2018 , 835, 170-216	3.7	16

- 265 Collective dynamics of red blood cells on an in vitro microfluidic platform. *Lab on A Chip*, **2018**, 18, 3939-3948 11
- 264 Microgroove geometry dictates slippery hydrodynamics on superhydrophobic substrates. *Physics of Fluids*, **2018**, 30, 122007 4.4 7
- 263 Nature-Inspired Bio-Microfluidic Device by Soft Lithography Technique **2018**, 1
- 262 Wettability-mediated dynamics of two-phase flow in microfluidic T-junction. *Physics of Fluids*, **2018**, 30, 122106 4.4 24
- 261 Deformation of a surfactant-laden viscoelastic droplet in a uniaxial extensional flow. *Physics of Fluids*, **2018**, 30, 122108 4.4 7
- 260 Electrothermally modulated contact line dynamics of a binary fluid in a patterned fluidic environment. *Physics of Fluids*, **2018**, 30, 092005 4.4 27
- 259 Energy-efficient generation of controlled vortices on low-voltage digital microfluidic platform. *Applied Physics Letters*, **2018**, 113, 124103 3.4 10
- 258 Formation of Blood Droplets: Influence of the Plasma Proteins. *ACS Omega*, **2018**, 3, 10967-10973 3.9 4
- 257 Small-Scale Flow with Deformable Boundaries. *Journal of the Indian Institute of Science*, **2018**, 98, 159-183.4 15
- 256 Flow-induced deformation in a microchannel with a non-Newtonian fluid. *Biomicrofluidics*, **2018**, 12, 034116 4.4 20
- 255 Electrothermally actuated moving contact line dynamics over chemically patterned surfaces with resistive heaters. *Physics of Fluids*, **2018**, 30, 062004 4.4 15
- 254 The effect of surface charge convection and shape deformation on the settling velocity of drops in nonuniform electric field. *Physics of Fluids*, **2017**, 29, 012101 4.4 20
- 253 Confinement-induced alterations in the evaporation dynamics of sessile droplets. *Soft Matter*, **2017**, 13, 969-977 3.6 16
- 252 Heat Transfer and Entropy Generation Characteristics of a Non-Newtonian Fluid Squeezed and Extruded Between Two Parallel Plates. *Journal of Heat Transfer*, **2017**, 139, 1.8 18
- 251 Influence of combined electromagnetohydrodynamics on microchannel flow with electrokinetic effect and interfacial slip. *Microfluidics and Nanofluidics*, **2017**, 21, 1 2.8 24
- 250 Electrowetting of sessile drops on soft dielectric elastomer films. *Microfluidics and Nanofluidics*, **2017**, 21, 1 2.8 8
- 249 Rapid mixing with high-throughput in a semi-active semi-passive micromixer. *Electrophoresis*, **2017**, 38, 1310-1317 3.6 52
- 248 A scaling analysis for electrohydrodynamic convection with variable thermophysical and electrical properties. *International Journal of Heat and Mass Transfer*, **2017**, 109, 215-222 4.9 18

247	Confinement effects on the rotational microflows of a viscoelastic fluid under electrical double layer phenomenon. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2017 , 244, 123-137	2.7	23
246	Migration of a surfactant-laden droplet in non-isothermal Poiseuille flow. <i>Physics of Fluids</i> , 2017 , 29, 012002	4.0	22
245	Influence of interfacial viscosity on the dielectrophoresis of drops. <i>Physics of Fluids</i> , 2017 , 29, 052002	4.4	14
244	Startup electroosmotic flow of a viscoelastic fluid characterized by Oldroyd-B model in a rectangular microchannel with symmetric and asymmetric wall zeta potentials. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2017 , 247, 41-52	2.7	10
243	Effect of nonuniform electric field on the electrohydrodynamic motion of a drop in Poiseuille flow. <i>Physics of Fluids</i> , 2017 , 29, 052006	4.4	17
242	Hydrodynamics in deformable microchannels. <i>Microfluidics and Nanofluidics</i> , 2017 , 21, 1	2.8	28
241	Effect of interfacial slip on the deformation of a viscoelastic drop in uniaxial extensional flow field. <i>Physics of Fluids</i> , 2017 , 29, 032105	4.4	9
240	Capillary transport of two immiscible fluids in presence of electroviscous retardation. <i>Electrophoresis</i> , 2017 , 38, 747-754	3.6	3
239	Solvent-mediated nonelectrostatic ion-ion interactions predicting anomalies in electrophoresis. <i>Electrophoresis</i> , 2017 , 38, 712-719	3.6	3
238	Electroosmosis of Viscoelastic Fluids: Role of Wall Depletion Layer. <i>Langmuir</i> , 2017 , 33, 12046-12055	4	24
237	Spontaneous electrorheological effect in nematic liquid crystals under Taylor-Couette flow configuration. <i>Physics of Fluids</i> , 2017 , 29, 092008	4.4	5
236	Confinement suppresses instabilities in particle-laden droplets. <i>Scientific Reports</i> , 2017 , 7, 7708	4.9	7
235	Numerical investigations of electrothermally actuated moving contact line dynamics: Effect of property contrasts. <i>Physics of Fluids</i> , 2017 , 29, 082009	4.4	12
234	Finite size effects of ionic species sensitively determine load bearing capacities of lubricated systems under combined influence of electrokinetics and surface compliance. <i>Soft Matter</i> , 2017 , 13, 6422-6429 ⁶	3.6	6
233	Cross-stream migration of a surfactant-laden deformable droplet in a Poiseuille flow. <i>Physics of Fluids</i> , 2017 , 29, 082004	4.4	16
232	Predicting <i>Escherichia coli</i> 's chemotactic drift under exponential gradient. <i>Physical Review E</i> , 2017 , 96, 032409	2.4	6
231	Universal evaporation dynamics of a confined sessile droplet. <i>Applied Physics Letters</i> , 2017 , 111, 101601	3.4	19
230	Mixing characteristics in microchannels with biomimetic superhydrophobic (Lotus leaf replica) walls. <i>Microfluidics and Nanofluidics</i> , 2017 , 21, 1	2.8	8

229	Transient electroosmosis of a Maxwell fluid in a rotating microchannel. <i>Electrophoresis</i> , 2017 , 38, 2741-2748	3.4	15
228	Electro-osmosis of nematic liquid crystals under weak anchoring and second-order surface effects. <i>Physical Review E</i> , 2017 , 96, 013114	2.4	4
227	Analysis of micromixing of non-Newtonian fluids driven by alternating current electrothermal flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2017 , 247, 123-131	2.7	43
226	Effect of uniform electric field on the drop deformation in simple shear flow and emulsion shear rheology. <i>Physics of Fluids</i> , 2017 , 29, 072109	4.4	20
225	Mimicking wettability alterations using temperature gradients for water nanodroplets. <i>Nanoscale</i> , 2017 , 9, 12509-12515	7.7	16
224	Ion-size dependent electroosmosis of viscoelastic fluids in microfluidic channels with interfacial slip. <i>Physics of Fluids</i> , 2017 , 29, 072002	4.4	22
223	An Experimental Study of the Electrohydrodynamic Characteristics of Sedimenting Drops Under Uniform Alternating Electric Fields. <i>IEEE Transactions on Industry Applications</i> , 2017 , 53, 5838-5844	4.3	5
222	Rotational electrohydrodynamics of a non-Newtonian fluid under electrical double-layer phenomenon: the role of lateral confinement. <i>Microfluidics and Nanofluidics</i> , 2017 , 21, 1	2.8	24
221	Electroosmosis over charge-modulated surfaces with finite electrical double layer thicknesses: Asymptotic and numerical investigations. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	10
220	Uniform electric-field-induced non-Newtonian rheology of a dilute suspension of deformable Newtonian drops. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	14
219	Effect of Marangoni stress on the bulk rheology of a dilute emulsion of surfactant-laden deformable droplets in linear flows. <i>Physical Review Fluids</i> , 2017 , 2,	2.8	17
218	Alternating current electrothermal modulated moving contact line dynamics of immiscible binary fluids over patterned surfaces. <i>Soft Matter</i> , 2017 , 13, 6377-6389	3.6	15
217	Paper-PDMS hybrid microchannel: a platform for rapid fluid-transport and mixing. <i>Journal of Micromechanics and Microengineering</i> , 2016 , 26, 105008	2	15
216	Droplet migration characteristics in confined oscillatory microflows. <i>Physical Review E</i> , 2016 , 93, 023106	2.4	14
215	Effect of surface charge convection and shape deformation on the dielectrophoretic motion of a liquid drop. <i>Physical Review E</i> , 2016 , 93, 043127	2.4	19
214	Oscillatory regimes of capillary imbibition of viscoelastic fluids through concentric annulus. <i>RSC Advances</i> , 2016 , 6, 60117-60125	3.7	6
213	Electrokinetics in polyelectrolyte grafted nanofluidic channels modulated by the ion partitioning effect. <i>Soft Matter</i> , 2016 , 12, 5968-78	3.6	61
212	Heat Transfer from a Hot Moving Steel Plate by Air-Atomized Spray Impingement. <i>Experimental Heat Transfer</i> , 2016 , 29, 78-96	2.4	8

211	Streaming potential-modulated capillary filling dynamics of immiscible fluids. <i>Soft Matter</i> , 2016 , 12, 2056-65	2.0	20
210	Flow dynamics of a viscoelastic fluid squeezed and extruded between two parallel plates. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2016 , 227, 56-64	2.7	20
209	Electrokinetically modulated peristaltic transport of power-law fluids. <i>Microvascular Research</i> , 2016 , 103, 41-54	3.7	63
208	SU-G-TeP3-07: On the Development of Mechano-Biological Assessment of Leukemia Cells Using Optical Tweezers. <i>Medical Physics</i> , 2016 , 43, 3675-3675	4.4	1
207	Electroosmosis-modulated peristaltic transport in microfluidic channels. <i>Physics of Fluids</i> , 2016 , 28, 052002	4.4	88
206	Effect of surfactant on motion and deformation of compound droplets in arbitrary unbounded Stokes flows. <i>Journal of Fluid Mechanics</i> , 2016 , 803, 200-249	3.7	32
205	Diffusive dynamics on paper matrix. <i>Applied Physics Letters</i> , 2016 , 109, 224101	3.4	9
204	The effect of uniform electric field on the cross-stream migration of a drop in plane Poiseuille flow. <i>Journal of Fluid Mechanics</i> , 2016 , 809, 726-774	3.7	32
203	Electroosmosis over non-uniformly charged surfaces: modified Smoluchowski slip velocity for second-order fluids. <i>Journal of Fluid Mechanics</i> , 2016 , 809, 664-690	3.7	15
202	Dielectrophoresis of a surfactant-laden viscous drop. <i>Physics of Fluids</i> , 2016 , 28, 062006	4.4	21
201	Electro-osmosis over inhomogeneously charged surfaces in presence of non-electrostatic ion-ion interactions. <i>Physics of Fluids</i> , 2016 , 28, 062007	4.4	13
200	Uniform electric-field-induced lateral migration of a sedimenting drop. <i>Journal of Fluid Mechanics</i> , 2016 , 792, 553-589	3.7	54
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