Theneyur Narayanaswamy Banuprasad

List of Publications by Year
in descending order

44 papers	1,930 citations	201674 27 h-index	243625 44 g-index
44 all docs	44 docs citations	44 times ranked	1437 citing authors

#	Article	IF	Citations
1	Fabricating Antipathogenic Interfaces via Nanoscale Topographies Inspired from Snake Skin. ACS Applied Bio Materials, 2022, 5, 862-872.	4.6	3
2	Steady axial electric field may lead to controllable cross-stream migration of droplets in confined oscillatory microflows. Journal of Fluid Mechanics, 2021, 907, .	3.4	10
3	Interfacial viscosity-induced suppression of lateral migration of a surfactant laden droplet in a nonisothermal Poiseuille flow. Physical Review Fluids, 2021, 6, .	2.5	9
4	PDMS microfluidics: A mini review. Journal of Applied Polymer Science, 2020, 137, 48958.	2.6	239
5	Coriolis force-based instability of a shear-thinning microchannel flow. Physics of Fluids, 2020, 32, .	4.0	2
6	Electrohydrodynamic settling of drop in uniform electric field: beyond Stokes flow regime. Journal of Fluid Mechanics, 2019, 881, 498-523.	3.4	13
7	Electrical switching of a surfactant coated drop in Poiseuille flow. Journal of Fluid Mechanics, 2019, 870, 27-66.	3.4	18
8	Rotational instabilities in microchannel flows. Physics of Fluids, 2019, 31, .	4.0	11
9	Tunable adhesion and slip on a bio-mimetic sticky soft surface. Soft Matter, 2019, 15, 9031-9040.	2.7	13
10	Coriolis force-driven instabilities in stratified miscible layers on a rotationally actuated microfluidic platform. Physical Review Fluids, 2019, 4, .	2.5	3
11	Drop deformation and emulsion rheology under the combined influence of uniform electric field and linear flow. Journal of Fluid Mechanics, 2018, 841, 408-433.	3.4	29
12	Influence of complex interfacial rheology on the thermocapillary migration of a surfactant-laden droplet in Poiseuille flow. Physics of Fluids, 2018, 30, 022103.	4.0	22
13	Effect of temperature gradient on the cross-stream migration of a surfactant-laden droplet in Poiseuille flow. Journal of Fluid Mechanics, 2018, 835, 170-216.	3.4	21
14	Deformation of a surfactant-laden viscoelastic droplet in a uniaxial extensional flow. Physics of Fluids, 2018, 30, 122108.	4.0	9
15	Surfactant-induced retardation in lateral migration of droplets in a microfluidic confinement. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	15
16	Thermally modulated cross-stream migration of a surfactant-laden deformable drop in a Poiseuille flow. Physical Review Fluids, 2018, 3, .	2.5	9
17	Rapid mixing with highâ€throughput in a semiâ€active semiâ€passive micromixer. Electrophoresis, 2017, 38, 1310-1317.	2.4	66
18	Cross-stream migration of a surfactant-laden deformable droplet in a Poiseuille flow. Physics of Fluids, 2017, 29, .	4.0	18

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19	Fast Transport of Water Droplets over a Thermo-Switchable Surface Using Rewritable Wettability Gradient. ACS Applied Materials & Interfaces, 2017, 9, 28046-28054.	8.0	65
20	Uniform electric-field-induced lateral migration of a sedimenting drop. Journal of Fluid Mechanics, 2016, 792, 553-589.	3.4	66
21	Electrokinetically modulated peristaltic transport of power-law fluids. Microvascular Research, 2016, 103, 41-54.	2.5	80
22	Electro-osmosis of superimposed fluids in the presence of modulated charged surfaces in narrow confinements. Journal of Fluid Mechanics, 2015, 776, 390-429.	3.4	60
23	Effect of interfacial slip on the cross-stream migration of a drop in an unbounded Poiseuille flow. Physical Review E, 2015, 92, 023002.	2.1	33
24	Effect of hematocrit on blood dynamics on a compact disc platform. Analyst, The, 2015, 140, 1432-1437.	3.5	22
25	Capillarity-driven blood plasma separation on paper-based devices. Analyst, The, 2015, 140, 6473-6476.	3.5	80
26	Haemoglobin content modulated deformation dynamics of red blood cells on a compact disc. Lab on A Chip, 2015, 15, 4571-4577.	6.0	13
27	Thermodynamics of premixed combustion in a heat recirculating micro combustor. Energy, 2014, 68, 510-518.	8.8	62
28	Redefining electrical double layer thickness in narrow confinements: Effect of solvent polarization. Physical Review E, 2012, 85, 051508.	2.1	51
29	Anomalous mixing behaviour in rotationally actuated microfluidic devices. Lab on A Chip, 2011, 11, 2823.	6.0	44
30	Semi-analytical solutions for electroosmotic flows with interfacial slip in microchannels of complex cross-sectional shapes. Microfluidics and Nanofluidics, 2011, 11, 255-267.	2.2	68
31	Steric-effect-induced enhancement of electrical-double-layer overlapping phenomena. Physical Review E, 2011, 84, 012501.	2.1	60
32	Steric effect and slipâ€modulated energy transfer in narrow fluidic channels with finite aspect ratios. Electrophoresis, 2010, 31, 843-849.	2.4	61
33	Controlled microbubble generation on a compact disk. Applied Physics Letters, 2010, 97, 234103.	3.3	28
34	An enthalpy-source based lattice Boltzmann model for conduction dominated phase change of pure substances. International Journal of Thermal Sciences, 2008, 47, 552-559.	4.9	62
35	Double layer overlap in ac electroosmosis. European Journal of Mechanics, B/Fluids, 2008, 27, 297-308.	2.5	60
36	Mass flow-rate control through time periodic electro-osmotic flows in circular microchannels. Physics of Fluids, 2008, 20, .	4.0	71

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37	Towards a generalized representation of surface effects on pressure-driven liquid flow in microchannels. Applied Physics Letters, 2007, 90, 034108.	3.3	56
38	Generalized Model for Time Periodic Electroosmotic Flows with Overlapping Electrical Double Layers. Langmuir, 2007, 23, 12421-12428.	3.5	62
39	Order Parameter Modeling of Fluid Dynamics in Narrow Confinements Subjected to Hydrophobic Interactions. Physical Review Letters, 2007, 99, 094504.	7.8	56
40	Transverse electrodes for improved DNA hybridization in microchannels. AICHE Journal, 2007, 53, 1086-1099.	3.6	53
41	Effects of entrance region transport processes on free convection slip flow in vertical microchannels with isothermally heated walls. International Journal of Heat and Mass Transfer, 2007, 50, 1248-1254.	4.8	52
42	Modelling of turbulent molten pool convection in laser welding of a copperâ€“nickel dissimilar couple. International Journal of Heat and Mass Transfer, 2007, 50, 1805-1822.	4.8	54
43	Analytical solutions for the rate of DNA hybridization in a microchannel in the presence of pressure-driven and electroosmotic flows. Sensors and Actuators B: Chemical, 2006, 114, 957-963.	7.8	50
44	A novel modeling and simulation technique of photoâ€“thermal interactions between lasers and living biological tissues undergoing multiple changes in phase. Computers in Biology and Medicine, 2005, 35, 447-462.	7.0	51