

Theneyur Narayanaswamy Banuprasad

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9065138/publications.pdf>

Version: 2024-02-01

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	PDMS microfluidics: A mini review. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48958.	2.6	239
2	Capillarity-driven blood plasma separation on paper-based devices. <i>Analyst, The</i> , 2015, 140, 6473-6476.	3.5	80
3	Electrokinetically modulated peristaltic transport of power-law fluids. <i>Microvascular Research</i> , 2016, 103, 41-54.	2.5	80
4	Mass flow-rate control through time periodic electro-osmotic flows in circular microchannels. <i>Physics of Fluids</i> , 2008, 20, .	4.0	71
5	Semi-analytical solutions for electroosmotic flows with interfacial slip in microchannels of complex cross-sectional shapes. <i>Microfluidics and Nanofluidics</i> , 2011, 11, 255-267.	2.2	68
6	Uniform electric-field-induced lateral migration of a sedimenting drop. <i>Journal of Fluid Mechanics</i> , 2016, 792, 553-589.	3.4	66
7	Rapid mixing with high-throughput in a semi-active semi-passive micromixer. <i>Electrophoresis</i> , 2017, 38, 1310-1317.	2.4	66
8	Fast Transport of Water Droplets over a Thermo-Switchable Surface Using Rewritable Wettability Gradient. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 28046-28054.	8.0	65
9	Generalized Model for Time Periodic Electroosmotic Flows with Overlapping Electrical Double Layers. <i>Langmuir</i> , 2007, 23, 12421-12428.	3.5	62
10	An enthalpy-source based lattice Boltzmann model for conduction dominated phase change of pure substances. <i>International Journal of Thermal Sciences</i> , 2008, 47, 552-559.	4.9	62
11	Thermodynamics of premixed combustion in a heat recirculating micro combustor. <i>Energy</i> , 2014, 68, 510-518.	8.8	62
12	Steric effect and slip-modulated energy transfer in narrow fluidic channels with finite aspect ratios. <i>Electrophoresis</i> , 2010, 31, 843-849.	2.4	61
13	Double layer overlap in ac electroosmosis. <i>European Journal of Mechanics, B/Fluids</i> , 2008, 27, 297-308.	2.5	60
14	Steric-effect-induced enhancement of electrical-double-layer overlapping phenomena. <i>Physical Review E</i> , 2011, 84, 012501.	2.1	60
15	Electro-osmosis of superimposed fluids in the presence of modulated charged surfaces in narrow confinements. <i>Journal of Fluid Mechanics</i> , 2015, 776, 390-429.	3.4	60
16	Towards a generalized representation of surface effects on pressure-driven liquid flow in microchannels. <i>Applied Physics Letters</i> , 2007, 90, 034108.	3.3	56
17	Order Parameter Modeling of Fluid Dynamics in Narrow Confinements Subjected to Hydrophobic Interactions. <i>Physical Review Letters</i> , 2007, 99, 094504.	7.8	56
18	Modelling of turbulent molten pool convection in laser welding of a copper-nickel dissimilar couple. <i>International Journal of Heat and Mass Transfer</i> , 2007, 50, 1805-1822.	4.8	54

#	ARTICLE	IF	CITATIONS
19	Transverse electrodes for improved DNA hybridization in microchannels. <i>AIChE Journal</i> , 2007, 53, 1086-1099.	3.6	53
20	Effects of entrance region transport processes on free convection slip flow in vertical microchannels with isothermally heated walls. <i>International Journal of Heat and Mass Transfer</i> , 2007, 50, 1248-1254.	4.8	52
21	A novel modeling and simulation technique of photo-thermal interactions between lasers and living biological tissues undergoing multiple changes in phase. <i>Computers in Biology and Medicine</i> , 2005, 35, 447-462.	7.0	51
22	Redefining electrical double layer thickness in narrow confinements: Effect of solvent polarization. <i>Physical Review E</i> , 2012, 85, 051508.	2.1	51
23	Analytical solutions for the rate of DNA hybridization in a microchannel in the presence of pressure-driven and electroosmotic flows. <i>Sensors and Actuators B: Chemical</i> , 2006, 114, 957-963.	7.8	50
24	Anomalous mixing behaviour in rotationally actuated microfluidic devices. <i>Lab on A Chip</i> , 2011, 11, 2823.	6.0	44
25	Effect of interfacial slip on the cross-stream migration of a drop in an unbounded Poiseuille flow. <i>Physical Review E</i> , 2015, 92, 023002.	2.1	33
26	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.	3.4	29
27	Controlled microbubble generation on a compact disk. <i>Applied Physics Letters</i> , 2010, 97, 234103.	3.3	28
28	Effect of hematocrit on blood dynamics on a compact disc platform. <i>Analyst, The</i> , 2015, 140, 1432-1437.	3.5	22
29	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.	4.0	22
30	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.	3.4	21
31	Cross-stream migration of a surfactant-laden deformable droplet in a Poiseuille flow. <i>Physics of Fluids</i> , 2017, 29, .	4.0	18
32	Electrical switching of a surfactant coated drop in Poiseuille flow. <i>Journal of Fluid Mechanics</i> , 2019, 870, 27-66.	3.4	18
33	Surfactant-induced retardation in lateral migration of droplets in a microfluidic confinement. <i>Microfluidics and Nanofluidics</i> , 2018, 22, 1.	2.2	15
34	Haemoglobin content modulated deformation dynamics of red blood cells on a compact disc. <i>Lab on A Chip</i> , 2015, 15, 4571-4577.	6.0	13
35	Electrohydrodynamic settling of drop in uniform electric field: beyond Stokes flow regime. <i>Journal of Fluid Mechanics</i> , 2019, 881, 498-523.	3.4	13
36	Tunable adhesion and slip on a bio-mimetic sticky soft surface. <i>Soft Matter</i> , 2019, 15, 9031-9040.	2.7	13

#	ARTICLE	IF	CITATIONS
37	Rotational instabilities in microchannel flows. <i>Physics of Fluids</i> , 2019, 31, .	4.0	11
38	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, .	3.4	10
39	Deformation of a surfactant-laden viscoelastic droplet in a uniaxial extensional flow. <i>Physics of Fluids</i> , 2018, 30, 122108.	4.0	9
40	Interfacial viscosity-induced suppression of lateral migration of a surfactant laden droplet in a nonisothermal Poiseuille flow. <i>Physical Review Fluids</i> , 2021, 6, .	2.5	9
41	Thermally modulated cross-stream migration of a surfactant-laden deformable drop in a Poiseuille flow. <i>Physical Review Fluids</i> , 2018, 3, .	2.5	9
42	Coriolis force-driven instabilities in stratified miscible layers on a rotationally actuated microfluidic platform. <i>Physical Review Fluids</i> , 2019, 4, .	2.5	3
43	Fabricating Antipathogenic Interfaces via Nanoscale Topographies Inspired from Snake Skin. <i>ACS Applied Bio Materials</i> , 2022, 5, 862-872.	4.6	3
44	Coriolis force-based instability of a shear-thinning microchannel flow. <i>Physics of Fluids</i> , 2020, 32, .	4.0	2