

Nilanjan Mondal

List of Publications by Year in descending order

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32
papers

1,642
citations

236925

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414414

32
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all docs

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docs citations

32
times ranked

1189
citing authors

#	ARTICLE	IF	CITATIONS
1	Morpho-dynamic evolution due to inertia-mediated impact of a compound drop on a deep liquid pool. <i>Physics of Fluids</i> , 2022, 34, .	4.0	7
2	Upstream events dictate interfacial slip in geometrically converging nanopores. <i>Journal of Chemical Physics</i> , 2021, 154, 164709.	3.0	9
3	Mechanistic basis of transport in unconfined swirling flows. <i>Physics of Fluids</i> , 2021, 33, 053109.	4.0	3
4	Topology and transport in generalized helical flows. <i>Physics of Fluids</i> , 2021, 33, 117106.	4.0	6
5	Electric field modulated deformation dynamics of a compound drop in the presence of confined shear flow. <i>Physics of Fluids</i> , 2020, 32, .	4.0	13
6	Interfacial viscosity-dictated morpho-dynamics of a compound drop in linear flows. <i>Physics of Fluids</i> , 2020, 32, 062006.	4.0	10
7	PDMS microfluidics: A mini review. <i>Journal of Applied Polymer Science</i> , 2020, 137, 48958.	2.6	239
8	Electric field-induced pinch-off of a compound droplet in Poiseuille flow. <i>Physics of Fluids</i> , 2019, 31, .	4.0	30
9	Anomalous interplay of slip, shear and wettability in nanoconfined water. <i>Nanoscale</i> , 2019, 11, 11254-11261.	5.6	26
10	Rapid mixing with high-throughput in a semi-active semi-passive micromixer. <i>Electrophoresis</i> , 2017, 38, 1310-1317.	2.4	66
11	Uniform electric-field-induced lateral migration of a sedimenting drop. <i>Journal of Fluid Mechanics</i> , 2016, 792, 553-589.	3.4	66
12	Rapid capillary filling via ion-water interactions over the nanoscale. <i>Nanoscale</i> , 2016, 8, 6535-6541.	5.6	15
13	Capillarity-driven blood plasma separation on paper-based devices. <i>Analyst</i> , 2015, 140, 6473-6476.	3.5	80
14	Slippery to Sticky Transition of Hydrophobic Nanochannels. <i>Nano Letters</i> , 2015, 15, 7497-7502.	9.1	38
15	Thermodynamics of premixed combustion in a heat recirculating micro combustor. <i>Energy</i> , 2014, 68, 510-518.	8.8	62
16	Redefining electrical double layer thickness in narrow confinements: Effect of solvent polarization. <i>Physical Review E</i> , 2012, 85, 051508.	2.1	51
17	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
18	Steric-effect-induced enhancement of electrical-double-layer overlapping phenomena. <i>Physical Review E</i> , 2011, 84, 012501.	2.1	60

#	ARTICLE	IF	CITATIONS
19	Analytical Solution for Thermally Fully Developed Combined Electroosmotic and Pressure-Driven Flows in Narrow Confinements With Thick Electrical Double Layers. <i>Journal of Heat Transfer</i> , 2011, 133, .	2.1	65
20	Predicting microscale gas flows and rarefaction effects through extended Navier–Stokes–Fourier equations from phoretic transport considerations. <i>Microfluidics and Nanofluidics</i> , 2010, 9, 831-846.	2.2	48
21	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
22	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
23	Double layer overlap in ac electroosmosis. <i>European Journal of Mechanics, B/Fluids</i> , 2008, 27, 297-308.	2.5	60
24	Anomalous Electrical Conductivity of Nanoscale Colloidal Suspensions. <i>ACS Nano</i> , 2008, 2, 2029-2036.	14.6	56
25	Mass flow-rate control through time periodic electro-osmotic flows in circular microchannels. <i>Physics of Fluids</i> , 2008, 20, .	4.0	71
26	Generalized Model for Time Periodic Electroosmotic Flows with Overlapping Electrical Double Layers. <i>Langmuir</i> , 2007, 23, 12421-12428.	3.5	62
27	Order Parameter Modeling of Fluid Dynamics in Narrow Confinements Subjected to Hydrophobic Interactions. <i>Physical Review Letters</i> , 2007, 99, 094504.	7.8	56
28	Derivations of extended Navier-Stokes equations from upscaled molecular transport considerations for compressible ideal gas flows: Towards extended constitutive forms. <i>Physics of Fluids</i> , 2007, 19, .	4.0	46
29	Transverse electrodes for improved DNA hybridization in microchannels. <i>AIChE Journal</i> , 2007, 53, 1086-1099.	3.6	53
30	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
31	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
32	Numerical Investigation on Role of Bottom Gas Stirring in Controlling Thermal Stratification in Steel Ladles. <i>ISIJ International</i> , 2004, 44, 537-546.	1.4	51