Pierre Joseph

List of Publications by Year
in descending order

37 papers	2,077 citations	471509 17 h-index	330143 37 g-index
39 all docs	39 docs citations	39 times ranked	2334 citing authors

#	Article	IF	Citations
1	Slippage of Water Past Superhydrophobic Carbon Nanotube Forests in Microchannels. Physical Review Letters, 2006, 97, 156104.	7.8	396
2	Achieving large slip with superhydrophobic surfaces: Scaling laws for generic geometries. Physics of Fluids, 2007, 19, .	4.0	394
3	Second-order slip laws in microchannels for helium and nitrogen. Physics of Fluids, 2003, 15, 2613-2621.	4.0	313
4	Direct measurement of the apparent slip length. Physical Review E, 2005, 71, 035303.	2.1	244
5	Osmotic Flow through Fully Permeable Nanochannels. Physical Review Letters, 2014, 112, 244501.	7.8	85
6	Rheology of complex fluids by particle image velocimetry in microchannels. Applied Physics Letters, 2006, 89, 024104.	3.3	78
7	Comparison of methods for the fabrication and the characterization of polymer self-assemblies: what are the important parameters?. Soft Matter, 2016, 12, 2166-2176.	2.7	75
8	Capillary Filling in Closed End Nanochannels. Langmuir, 2010, 26, 13251-13255.	3.5	69
9	Amplification of electro-osmotic flows by wall slippage: direct measurements on OTS-surfaces. Faraday Discussions, 2010, 146, 113.	3.2	41
10	DNA separation and enrichment using electro-hydrodynamic bidirectional flows in viscoelastic liquids. Lab on A Chip, 2016, 16, 1243-1253.	6.0	38
11	Roles of gas in capillary filling of nanoslits. Soft Matter, 2012, 8, 10738.	2.7	36
12	Simple Synthetic Molecular Hydrogels from Self-Assembling Alkylgalactonamides as Scaffold for 3D Neuronal Cell Growth. ACS Applied Materials & Interfaces, 2018, 10, 17004-17017.	8.0	30
13	Hybrid vesicles from lipids and block copolymers: Phase behavior from the micro- to the nano-scale. Colloids and Surfaces B: Biointerfaces, 2018, 168, 18-28.	5.0	28
14	Sodium chloride precipitation reaction coefficient from crystallization experiment in a microfluidic device. Journal of Crystal Growth, 2017, 463, 201-210.	1.5	26
15	Ion Transport and Precipitation Kinetics as Key Aspects of Stress Generation on Pore Walls Induced by Salt Crystallization. Physical Review Letters, 2018, 120, 034502.	7.8	24
16	Filter-less submicron hydrodynamic size sorting. Lab on A Chip, 2016, 16, 720-733.	6.0	21
17	Wet spinning and radial self-assembly of a carbohydrate low molecular weight gelator into well organized hydrogel filaments. Nanoscale, 2019, 11, 15043-15056.	5.6	21
18	Control of evaporation by geometry in capillary structures. From confined pillar arrays in a gap radial gradient to phyllotaxy-inspired geometry. Scientific Reports, 2017, 7, 15110.	3.3	18

#	Article	IF	Citations
19	Capillary Filling in Nanochannelsâ€"Modeling, Fabrication, and Experiments. Heat Transfer Engineering, 2011, 32, 624-635.	1.9	17
20	Evaporation with the formation of chains of liquidÂbridges. Journal of Fluid Mechanics, 2018, 837, 703-728.	3.4	16
21	Pore cross-talk in colloidal filtration. Scientific Reports, 2018, 8, 12460.	3.3	14
22	ÂµLAS: Sizing of expanded trinucleotide repeats with femtomolar sensitivity in less than 5â€‰minutes. Scientific Reports, 2019, 9, 23.	3.3	13
23	3D printing of a biocompatible low molecular weight supramolecular hydrogel by dimethylsulfoxide water solvent exchange. Additive Manufacturing, 2020, 33, 101162.	3.0	11
24	Fabrication and Experimental Characterization of Nanochannels. Journal of Heat Transfer, 2012, 134, .	2.1	10
25	Microfluidics for minute DNA sample analysis: open challenges for genetic testing of cell-free circulating DNA in blood plasma. Micro and Nano Engineering, 2018, 1, 25-32.	2.9	8
26	Microfluidic characterization of biomimetic membrane mechanics with an on-chip micropipette. Micro and Nano Engineering, 2020, 8, 100064.	2.9	8
27	Wet spinning of a library of carbohydrate low molecular weight gels. Journal of Colloid and Interface Science, 2021, 603, 333-343.	9.4	8
28	Transport of nano-objects in narrow channels: influence of Brownian diffusion, confinement and particle nature. Journal of Physics Condensed Matter, 2018, 30, 234001.	1.8	6
29	Hydrogen Silsesquioxaneâ€Based Nanofluidics. Advanced Materials Interfaces, 2017, 4, 1601155.	3.7	5
30	Microstructure of the near-wall layer of filtration-induced colloidal assembly. Soft Matter, 2020, 16, 9726-9737.	2.7	5
31	Quasi-static drainage in a network of nanoslits of non-uniform depth designed by grayscale laser lithography. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	4
32	3-D process modelling of ancient storm-dominated deposits by an event-based approach: Application to Pleistocene-to-modern Gulf of Lions deposits. Marine Geology, 2013, 335, 177-199.	2.1	3
33	Nanofluidic fluorescence microscopy with integrated concentration gradient generation for one-shot parallel kinetic assays. Sensors and Actuators B: Chemical, 2018, 274, 338-342.	7.8	3
34	Multifunctional nanoassemblies target bacterial lipopolysaccharides for enhanced antimicrobial DNA delivery. Colloids and Surfaces B: Biointerfaces, 2020, 195, 111266.	5.0	3
35	Microbubbles for optofluidics: controlled defects in bubble crystals. Microfluidics and Nanofluidics, 2014, 17, 549-560.	2.2	2
36	Direct observation of pore collapse and tensile stress generation on pore walls due to salt crystallization in a PDMS channel. Soft Matter, 2019, 15, 4562-4569.	2.7	2

#	Article	IF	Citations
37	Accelerated Transport of Particles in Confined Channels with a High Roughness Amplitude. Langmuir, 2018, 34, 1394-1399.	3.5	1