Jean-baptiste Salmon

List of Publications by Year
in descending order

68 papers	2,539 citations	159358 30 h-index	197535 49 g-index
68 all docs	68 docs citations	68 times ranked	2622 citing authors

#	Article	IF	Citations
1	Velocity Profiles in Shear-Banding Wormlike Micelles. Physical Review Letters, 2003, 90, 228303.	2.9	198
2	Microfluidic crystallization. Lab on A Chip, 2009, 9, 24-34.	3.1	151
3	Viscosimeter on a Microfluidic Chip. Langmuir, 2006, 22, 6438-6445.	1.6	116
4	Microfluidic Droplet Method for Nucleation Kinetics Measurements. Langmuir, 2009, 25, 1836-1841.	1.6	92
5	A microfluidic device based on droplet storage for screening solubility diagrams. Lab on A Chip, 2007, 7, 829.	3.1	89
6	Gold Nanooctahedra with Tunable Size and Microfluidic-Induced 3D Assembly for Highly Uniform SERS-Active Supercrystals. Chemistry of Materials, 2015, 27, 8310-8317.	3.2	85
7	Shear banding in a lyotropic lamellar phase. I. Time-averaged velocity profiles. Physical Review E, 2003, 68, 051503.	0.8	84
8	Nonlocal Effects in Flows of Wormlike Micellar Solutions. Physical Review Letters, 2008, 100, 038301.	2.9	77
9	A microfluidic device for investigating crystal nucleation kinetics. Journal of Crystal Growth, 2007, 303, 622-628.	0.7	75
10	Towards local rheology of emulsions under Couette flow using Dynamic Light Scattering. European Physical Journal E, 2003, 10, 209-221.	0.7	74
11	In situ Raman imaging of interdiffusion in a microchannel. Applied Physics Letters, 2005, 86, 094106.	1.5	71
12	X-ray microfocussing combined with microfluidics for on-chip X-ray scattering measurements. Lab on A Chip, 2006, 6, 494.	3.1	69
13	Hierarchical self-assembly of a bulk metamaterial enables isotropic magnetic permeability at optical frequencies. Materials Horizons, 2016, 3, 596-601.	6.4	61
14	An Approach To Extract Rate Constants from Reactionâ^'Diffusion Dynamics in a Microchannel. Analytical Chemistry, 2005, 77, 3417-3424.	3.2	54
15	Dynamical behavior of a complex fluid near an out-of-equilibrium transition: Approaching simple rheological chaos. Physical Review E, 2002, 66, 031505.	0.8	53
16	Transverse transport of solutes between co-flowing pressure-driven streams for microfluidic studies of diffusion/reaction processes. Journal of Applied Physics, 2007, 101, 074902.	1.1	51
17	Chemical Reaction Imaging within Microfluidic Devices Using Confocal Raman Spectroscopy:â€‰ The Case of Water and Deuterium Oxide as a Model System. Analytical Chemistry, 2008, 80, 1689-1695.	3.2	50
18	Shear banding in a lyotropic lamellar phase. II. Temporal fluctuations. Physical Review E, 2003, 68, 051504.	0.8	48

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19	Microfluidics with on-line dynamic light scattering for size measurements. Lab on A Chip, 2009, 9, 3289.	3.1	44
20	Microfluidic-assisted growth of colloidal crystals. Soft Matter, 2012, 8, 3526.	1.2	44
21	Dynamics and rheology under continuous shear flow studied by x-ray photon correlation spectroscopy. New Journal of Physics, 2010, 12, 035023.	1.2	41
22	Dynamics of unidirectional drying of colloidal dispersions. Soft Matter, 2014, 10, 4151.	1.2	40
23	Resonant isotropic optical magnetism of plasmonic nanoclusters in visible light. Physical Review B, 2015, 92, .	1.1	40
24	A microfluidic cell for studying the formation of regenerated silk by synchrotron radiation small- and wide-angle X-ray scattering. Biomicrofluidics, 2008, 2, 24104.	1.2	37
25	Evaporation of solutions and colloidal dispersions in confined droplets. Physical Review E, 2011, 84, 031406.	0.8	37
26	Interdiffusion of liquids of different viscosities in a microchannel. New Journal of Physics, 2009, 11, 075015.	1.2	36
27	Microfluidic screening of potassium nitrate polymorphism. Journal of Crystal Growth, 2008, 310, 3121-3124.	0.7	35
28	In situphoto-patterning of pressure-resistant hydrogel membranes with controlled permeabilities in PEGDA microfluidic channels. Lab on A Chip, 2018, 18, 1075-1083.	3.1	35
29	Microfluidic-Induced Growth and Shape-Up of Three-Dimensional Extended Arrays of Densely Packed Nanoparticles. ACS Nano, 2013, 7, 6465-6477.	7.3	34
30	A microfluidic device for both on-chip dialysis protein crystallization and in situ X-ray diffraction. Lab on A Chip, 2020, 20, 296-310.	3.1	34
31	An optical fiber based interferometer to measure velocity profiles in sheared complex fluids. EPJ Applied Physics, 2003, 22, 143-154.	0.3	31
32	A spatio-temporal study of rheo-oscillations in a sheared lamellar phase using ultrasound. European Physical Journal E, 2004, 13, 197-212.	0.7	31
33	Observation of Droplet Size Oscillations in a Two-Phase Fluid under Shear Flow. Physical Review Letters, 2004, 92, 018305.	2.9	30
34	Influence of the Formulation Process in Electrostatic Assembly of Nanoparticles and Macromolecules in Aqueous Solution: The Interaction Pathway. Journal of Physical Chemistry C, 2010, 114, 16373-16381.	1.5	28
35	Solutal Convection in Confined Geometries: Enhancement of Colloidal Transport. Physical Review Letters, 2012, 108, 198303.	2.9	28
36	Drying dynamics of a charged colloidal dispersion in a confined drop. Physical Review Fluids, 2016, 1, .	1.0	28

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37	Time-resolved microfocused small-angle X-ray scattering investigation of the microfluidic concentration of charged nanoparticles. European Physical Journal E, 2011, 34, 58.	0.7	27
38	Synthesis of Size-Monodisperse Spherical Ag@SiO2 Nanoparticles and 3-D Assembly Assisted by Microfluidics. Langmuir, 2013, 29, 1790-1795.	1.6	24
39	Steady and out-of-equilibrium phase diagram of a complex fluid at the nanolitre scale: combining microevaporation, confocal Raman imaging and small angle X-ray scattering. Lab on A Chip, 2013, 13, 910.	3.1	23
40	Bulk optical metamaterials assembled by microfluidic evaporation. Optical Materials Express, 2013, 3, 1792.	1.6	23
41	Microfluidic Evaporation, Pervaporation, and Osmosis: From Passive Pumping to Solute Concentration. Chemical Reviews, 2022, 122, 6938-6985.	23.0	23
42	Inhomogeneous flows in sheared complex fluids. Rheologica Acta, 2004, 43, 408-416.	1.1	20
43	Synthesis of a Conductive Copolymer and Phase Diagram of Its Suspension with Single-Walled Carbon Nanotubes by Microfluidic Technology. Macromolecules, 2015, 48, 7473-7480.	2.2	20
44	Microfluidic dialysis using photo-patterned hydrogel membranes in PDMS chips. Lab on A Chip, 2020, 20, 2383-2393.	3.1	19
45	Application of microevaporators to dynamic exploration of the phase diagram. Journal of Applied Physics, 2010, 107, 084905.	1.1	18
46	Microevaporators with accumulators for the screening of phase diagrams of aqueous solutions. Applied Physics Letters, 2009, 95, .	1.5	17
47	Solidification of a Charged Colloidal Dispersion Investigated Using Microfluidic Pervaporation. Langmuir, 2015, 31, 7943-7952.	1.6	16
48	Modeling Flow Coating of Colloidal Dispersions in the Evaporative Regime: Prediction of Deposit Thickness. Langmuir, 2016, 32, 13657-13668.	1.6	16
49	Steady microfluidic measurements of mutual diffusion coefficients of liquid binary mixtures. AICHE Journal, 2018, 64, 358-366.	1.8	16
50	Engineering polymer MEMS using combined microfluidic pervaporation and micro-molding. Microsystems and Nanoengineering, 2018, 4, 15.	3.4	16
51	Drying with no concentration gradient in large microfluidic droplets. Soft Matter, 2015, 11, 3637-3642.	1.2	15
52	Confined drying of a complex fluid drop: phase diagram, activity, and mutual diffusion coefficient. Soft Matter, 2012, 8, 5923.	1.2	14
53	Drying-induced stresses before solidification in colloidal dispersions: in situ measurements. Soft Matter, 2019, 15, 2768-2781.	1.2	14
54	Collective diffusion coefficient of a charged colloidal dispersion: interferometric measurements in a drying drop. Soft Matter, 2020, 16, 8213-8225.	1.2	13

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55	Fabrication of microscale materials with programmable composition gradients. Lab on A Chip, 2016, 16, 1234-1242.	3.1	12
56	Buoyancy-driven dispersion in confined drying of liquid binary mixtures. Physical Review Fluids, 2020, 5, .	1.0	12
57	Humidity-insensitive water evaporation from molecular complex fluids. Physical Review E, 2017, 96, 032612.	0.8	10
58	Microfluidics for kinetic inspection of phase diagrams. Comptes Rendus Chimie, 2009, 12, 258-269.	0.2	7
59	Role of Vapor Mass Transfer in Flow Coating of Colloidal Dispersions in the Evaporative Regime. Langmuir, 2017, 33, 14078-14086.	1.6	7
60	Microfluidic free interface diffusion: Measurement of diffusion coefficients and evidence of interfacial-driven transport phenomena. Physics of Fluids, 2022, 34, .	1.6	6
61	Investigation of the dynamics of growth of polymer materials obtained by combined pervaporation and micro-moulding. Soft Matter, 2016, 12, 1810-1819.	1.2	5
62	Easy-to-Use Osmosis-Based Microfluidic Chip for Protein Crystallization: Application to a Monoclonal Antibody. Crystal Growth and Design, 2021, 21, 3469-3476.	1.4	4
63	Microfluidic osmotic compression of a charge-stabilized colloidal dispersion: Equation of state and collective diffusion coefficient. Physical Review E, 2021, 104, L062601.	0.8	4
64	Experimental evidence of exciton-plasmon coupling in densely packed dye doped core-shell nanoparticles obtained via microfluidic technique. Journal of Applied Physics, 2014, 116, .	1.1	3
65	Role of solutal free convection on interdiffusion in a horizontal microfluidic channel. Physical Review Fluids, 2021, 6, .	1.0	2
66	Development of online separation and surfactant quantification in effluents from an enhanced oil recovery (EOR) experiment. Journal of Petroleum Science and Engineering, 2022, 208, 109696.	2.1	2
67	Crystallization of Proteins on Chip by Microdialysis for In Situ X-ray Diffraction Studies. Journal of Visualized Experiments, 2021, , .	0.2	0
68	10.1063/5.0092280.1. , 2022, , .		0