FrÃ©dÃ©ric Doumenc

List of Publications by Year
in descending order

34 papers	711 citations	566801 15 h-index	525886 27 g-index
35 all docs	35 docs citations	35 times ranked	683 citing authors

#	Article	IF	Citations
1	Condensation-induced self-patterning of a thin clayey layer. Europhysics Letters, 2022, 138, 13001.	0.7	1
2	Role of solutal free convection on interdiffusion in a horizontal microfluidic channel. Physical Review Fluids, 2021, 6, .	1.0	2
3	Buoyancy-driven dispersion in confined drying of liquid binary mixtures. Physical Review Fluids, 2020, 5, .	1.0	12
4	Humidity-insensitive water evaporation from molecular complex fluids. Physical Review E, 2017, 96, 032612.	0.8	10
5	Role of Vapor Mass Transfer in Flow Coating of Colloidal Dispersions in the Evaporative Regime. Langmuir, 2017, 33, 14078-14086.	1.6	7
6	Modeling Flow Coating of Colloidal Dispersions in the Evaporative Regime: Prediction of Deposit Thickness. Langmuir, 2016, 32, 13657-13668.	1.6	16
7	Numerical simulation of dip-coating in the evaporative regime. European Physical Journal E, 2016, 39, 19.	0.7	15
8	Surface deformation and film corrugation during drying of polymer solutions induced by Marangoni phenomena. International Journal of Heat and Mass Transfer, 2015, 89, 1083-1094.	2.5	23
9	Can hydrodynamic contact line paradox be solved by evaporationâ€“condensation?. Journal of Colloid and Interface Science, 2015, 460, 329-338.	5.0	24
10	Numerical simulation of an evaporative meniscus on a moving substrate. European Physical Journal: Special Topics, 2013, 219, 25-31.	1.2	3
11	Numerical simulation of complex fluid drying in a Hele-Shaw cell. European Physical Journal: Special Topics, 2013, 219, 51-57.	1.2	5
12	Self-assembly in drying complex fluid at low capillary number. Chemical Engineering and Processing: Process Intensification, 2013, 68, 64-68.	1.8	7
13	Free convection in drying binary mixtures: Solutal versus thermal instabilities. International Journal of Heat and Mass Transfer, 2013, 63, 336-350.	2.5	20
14	Self-patterning induced by a solutal Marangoni effect in a receding drying meniscus. Europhysics Letters, 2013, 103, 14001.	0.7	33
15	Transient Rayleigh-BÃ©nard-Marangoni solutal convection. Physics of Fluids, 2012, 24, .	1.6	22
16	Sorption Isotherm, Glass Transition, and Diffusion Coefficient of Polyacrylamide/Water Solutions. Journal of Chemical & Engineering Data, 2012, 57, 776-783.	1.0	7
17	A model coupling the liquid and gas phases for a totally wetting evaporative meniscus. European Physical Journal: Special Topics, 2011, 197, 281-293.	1.2	12
18	Simulation of transient Rayleighâ€“BÃ©nardâ€“Marangoni convection induced by evaporation. International Journal of Heat and Mass Transfer, 2010, 53, 656-664.	2.5	24

#	Article	IF	Citations
19	Drying of a Solution in a Meniscus: A Model Coupling the Liquid and the Gas Phases. Langmuir, 2010, 26, 13959-13967.	1.6	59
20	Transient Rayleighâ€“BÃ©nardâ€“Marangoni convection due to evaporation: a linear non-normal stability analysis. Journal of Fluid Mechanics, 2010, 648, 521-539.	1.4	76
21	Drying of Colloidal Suspensions and Polymer Solutions near the Contact Line: Deposit Thickness at Low Capillary Number. Langmuir, 2010, 26, 2288-2293.	1.6	42
22	Stickâˆ’Slip Patterning at Low Capillary Numbers for an Evaporating Colloidal Suspension. Langmuir, 2010, 26, 10758-10763.	1.6	104
23	Pattern formation during the drying of a colloidal suspension. European Physical Journal: Special Topics, 2009, 166, 29-32.	1.2	22
24	Experimental characterization of buoyancy- and surface tension-driven convection during the drying of a polymer solution. International Journal of Heat and Mass Transfer, 2008, 51, 4228-4237.	2.5	58
25	Physical aging of glassy PMMA/toluene films: Influence of drying/swelling history. European Physical Journal E, 2008, 27, 3-11.	0.7	16
26	Aging in PMMAâˆ•Toluene Films. AIP Conference Proceedings, 2008, , .	0.3	0
27	Aging and history effects in solvent-induced glass transition of polymer films. Europhysics Letters, 2006, 76, 630-636.	0.7	12
28	Estimation of the characteristic times of solvent diffusion and polymer relaxation in glassy polymer films by a set inversion method. Inverse Problems in Science and Engineering, 2006, 14, 747-765.	1.2	1
29	Coupling between mass diffusion and film temperature evolution in gravimetric experiments. Polymer, 2005, 46, 3708-3719.	1.8	9
30	Mutual Diffusion Coefficient and Vaporâˆ’Liquid Equilibrium Data for the System Polyisobutylene + Toluene. Journal of Chemical & Engineering Data, 2005, 50, 983-988.	1.0	12
31	Analysis of the solvent diffusion in glassy polymer films using a set inversion method. Polymer, 2003, 44, 377-387.	1.8	14
32	Mutual Diffusion in PMMA/PnBMA Copolymer Films:Â Influence of the Solvent-Induced Glass Transition. Macromolecules, 2003, 36, 5157-5164.	2.2	20
33	Estimating polymer/solvent diffusion coefficient by optimization procedure. AICHE Journal, 2001, 47, 984-993.	1.8	7
34	Homogeneous and heterogeneous reactions of the n-C5H11O, n-C5H10OH and OOC5H10OH radicals in oxygen. Analytical steady state solution by use of the Laplace transform. Journal of the Chemical Society, Faraday Transactions, 1998, 94, 2323-2335.	1.7	14