Christian Diddens

List of Publications by Year
in descending order

23	914	566801 15	676716 22
papers	citations	h-index	g-index

23	23	23	711
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Droplet dissolution driven by emerging thermal gradients and Marangoni flow. Physical Review Fluids, 2022, 7, .	1.0	0
2	Marangoni Instability of a Drop in a Stably Stratified Liquid. Physical Review Letters, 2021, 126, 124502.	2.9	19
3	Competing Marangoni and Rayleigh convection in evaporating binary droplets. Journal of Fluid Mechanics, 2021, 914, .	1.4	41
4	Periodic bouncing of a plasmonic bubble in a binary liquid by competing solutal and thermal Marangoni forces. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	15
5	Marangoni instability triggered by selective evaporation of a binary liquid inside a Hele-Shaw cell. Journal of Fluid Mechanics, 2021, 923, .	1.4	7
6	Asymmetric coalescence of two droplets with different surface tensions is caused by capillary waves. Physical Review Fluids, 2021, 6, .	1.0	9
7	Rayleighâ€“Taylor instability by segregation in an evaporating multicomponent microdroplet â€“ ERRATUM. Journal of Fluid Mechanics, 2021, 908, .	1.4	4
8	Time-resolved velocity and pressure field quantification in a flow-focusing device for ultrafast microbubble production. Physical Review Fluids, 2021, 6, .	1.0	2
9	Rayleighâ€“Taylor instability by segregation in an evaporating multicomponent microdroplet. Journal of Fluid Mechanics, 2020, 899, .	1.4	15
10	Evaporating droplets on oil-wetted surfaces: Suppression of the coffee-stain effect. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16756-16763.	3.3	57
11	Microdroplet nucleation by dissolution of a multicomponent drop in a host liquid. Journal of Fluid Mechanics, 2019, 870, 217-246.	1.4	22
12	Bouncing Oil Droplet in a Stratified Liquid and its Sudden Death. Physical Review Letters, 2019, 122, 154502.	2.9	40
13	Gravitational Effect in Evaporating Binary Microdroplets. Physical Review Letters, 2019, 122, 114501.	2.9	71
14	Self-propulsion of inverse Leidenfrost drops on a cryogenic bath. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1174-1179.	3.3	48
15	Evaporation-Triggered Segregation of Sessile Binary Droplets. Physical Review Letters, 2018, 120, 224501.	2.9	63
16	Self-wrapping of an ouzo drop induced by evaporation on a superamphiphobic surface. Soft Matter, 2017, 13, 2749-2759.	1.2	47
17	Detailed finite element method modeling of evaporating multi-component droplets. Journal of Computational Physics, 2017, 340, 670-687.	1.9	58
18	Evaporating pure, binary and ternary droplets: thermal effects and axial symmetry breaking. Journal of Fluid Mechanics, 2017, 823, 470-497.	1.4	126

#	Article	IF	Citations
19	Modeling the evaporation of sessile multi-component droplets. Journal of Colloid and Interface Science, 2017, 487, 426-436.	5.0	91
20	Evaporation-triggered microdroplet nucleation and the four life phases of an evaporating Ouzo drop. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8642-8647.	3.3	138
21	Continuum modeling of particle redeposition during ion-beam erosion. European Physical Journal B, 2015, 88, 1.	0.6	10
22	Redeposition during ion-beam erosion can stabilize well-ordered nanostructures. Europhysics Letters, 2013, 104, 17010.	0.7	15
23	Continuum modeling of particle redeposition during ion-beam erosion. European Physical Journal B, 2013, 86, 1.	0.6	16