

# Christian Diddens

## List of Publications by Year in descending order

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Version: 2024-02-01

23  
papers

914  
citations

566801

15  
h-index

676716

22  
g-index

23  
all docs

23  
docs citations

23  
times ranked

711  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Evaporating pure, binary and ternary droplets: thermal effects and axial symmetry breaking. Journal of Fluid Mechanics, 2017, 823, 470-497.	1.4	126
3	Modeling the evaporation of sessile multi-component droplets. Journal of Colloid and Interface Science, 2017, 487, 426-436.	5.0	91
4	Gravitational Effect in Evaporating Binary Microdroplets. Physical Review Letters, 2019, 122, 114501.	2.9	71
5	Evaporation-Triggered Segregation of Sessile Binary Droplets. Physical Review Letters, 2018, 120, 224501.	2.9	63
6	Detailed finite element method modeling of evaporating multi-component droplets. Journal of Computational Physics, 2017, 340, 670-687.	1.9	58
7	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
8	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
9	Self-wrapping of an ouzo drop induced by evaporation on a superamphiphobic surface. Soft Matter, 2017, 13, 2749-2759.	1.2	47
10	Competing Marangoni and Rayleigh convection in evaporating binary droplets. Journal of Fluid Mechanics, 2021, 914, .	1.4	41
11	Bouncing Oil Droplet in a Stratified Liquid and its Sudden Death. Physical Review Letters, 2019, 122, 154502.	2.9	40
12	Microdroplet nucleation by dissolution of a multicomponent drop in a host liquid. Journal of Fluid Mechanics, 2019, 870, 217-246.	1.4	22
13	Marangoni Instability of a Drop in a Stably Stratified Liquid. Physical Review Letters, 2021, 126, 124502.	2.9	19
14	Continuum modeling of particle redeposition during ion-beam erosion. European Physical Journal B, 2013, 86, 1.	0.6	16
15	Redeposition during ion-beam erosion can stabilize well-ordered nanostructures. Europhysics Letters, 2013, 104, 17010.	0.7	15
16	Rayleigh-Taylor instability by segregation in an evaporating multicomponent microdroplet. Journal of Fluid Mechanics, 2020, 899, .	1.4	15
17	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
18	Continuum modeling of particle redeposition during ion-beam erosion. European Physical Journal B, 2015, 88, 1.	0.6	10

#	ARTICLE	IF	CITATIONS
19	Asymmetric coalescence of two droplets with different surface tensions is caused by capillary waves. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	9
20	Marangoni instability triggered by selective evaporation of a binary liquid inside a Hele-Shaw cell. <i>Journal of Fluid Mechanics</i> , 2021, 923, .	1.4	7
21	Rayleigh–Taylor instability by segregation in an evaporating multicomponent microdroplet “ ERRATUM. <i>Journal of Fluid Mechanics</i> , 2021, 908, .	1.4	4
22	Time-resolved velocity and pressure field quantification in a flow-focusing device for ultrafast microbubble production. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	2
23	Droplet dissolution driven by emerging thermal gradients and Marangoni flow. <i>Physical Review Fluids</i> , 2022, 7, .	1.0	0