Benoit Scheid

List of Publications by Year
in descending order

96 papers	2,233 citations	236612 25 h-index	243296 44 g-index
102 all docs	102 docs citations	102 times ranked	1391 citing authors

#	Article	IF	Citations
1	Falling Liquid Films. Applied Mathematical Sciences (Switzerland), 2012, , .	0.4	201
2	Wave patterns in film flows: modelling and three-dimensional waves. Journal of Fluid Mechanics, 2006, 562, 183.	1.4	120
3	Thermocapillary long waves in a liquid film flow. Part 1. Low-dimensional formulation. Journal of Fluid Mechanics, 2005, 538, 199.	1.4	100
4	Validity domain of the Benney equation including the Marangoni effect for closed and open flows. Journal of Fluid Mechanics, 2005, 527, 303-335.	1.4	95
5	On the instability of a falling film due to localized heating. Journal of Fluid Mechanics, 2003, 475, 1-19.	1.4	93
6	Thermocapillary long waves in a liquid film flow. Part 2. Linear stability and nonlinear waves. Journal of Fluid Mechanics, 2005, 538, 223.	1.4	89
7	Nonlinear evolution of nonuniformly heated falling liquid films. Physics of Fluids, 2002, 14, 4130-4151.	1.6	84
8	Heated falling films. Journal of Fluid Mechanics, 2007, 592, 295-334.	1.4	78
9	Heat transfer and rivulet structures formation in a falling thin liquid film locally heated. International Journal of Thermal Sciences, 2002, 41, 664-672.	2.6	75
10	A major secretory defect of tumour-infiltrating T lymphocytes due to galectin impairing LFA-1-mediated synapse completion. Nature Communications, 2016, 7, 12242.	5.8	63
11	The role of surface rheology in liquid film formation. Europhysics Letters, 2010, 90, 24002.	0.7	58
12	Antibubble Dynamics: The Drainage of an Air Film with Viscous Interfaces. Physical Review Letters, 2012, 109, 264502.	2.9	50
13	Surfactant-induced rigidity of interfaces: a unified approach to free and dip-coated films. Soft Matter, 2015, 11, 2758-2770.	1.2	45
14	Deformation of the Free Surface in a Moving Locally-Heated Thin Liquid Layer. Fluid Dynamics, 2001, 36, 521-528.	0.2	38
15	Microfluidic droplet generation based on non-embedded co-flow-focusing using 3D printed nozzle. Scientific Reports, 2020, 10, 21616.	1.6	38
16	Concentration Gradients in Material Sciences: Methods to Design and Biomedical Applications. Advanced Functional Materials, 2021, 31, 2009005.	7.8	38
17	Interaction of three-dimensional hydrodynamic and thermocapillary instabilities in film flows. Physical Review E, 2008, 78, 066311.	0.8	37
18	On the thickness of soap films: an alternative to Frankel's law. Journal of Fluid Mechanics, 2008, 602, 119-127.	1.4	36

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19	Three-dimensional flow structures in laminar falling liquid films. Journal of Fluid Mechanics, 2014, 743, 75-123.	1.4	31
20	Hydrodynamic waves in films flowing under an inclined plane. Physical Review Fluids, 2017, 2, .	1.0	31
21	Plate Coating: Influence of Concentrated Surfactants on the Film Thickness. Langmuir, 2012, 28, 3821-3830.	1.6	30
22	Microgravity investigations of instability and mixing flux in frontal displacement of fluids. Microgravity Science and Technology, 2004, 15, 35-51.	0.7	29
23	Experimental study of dispersion and miscible viscous fingering of initially circular samples in Hele-Shaw cells. Physics of Fluids, 2010, 22, .	1.6	29
24	Controlling the lifetime of antibubbles. Advances in Colloid and Interface Science, 2019, 270, 73-86.	7.0	29
25	Critical inclination for absolute/convective instability transition in inverted falling films. Physics of Fluids, 2016, 28, 044107.	1.6	28
26	Continuous-Flow Tubular Crystallization To Discriminate between Two Competing Crystal Polymorphs. 1. Cooling Crystallization. Crystal Growth and Design, 2018, 18, 6431-6439.	1.4	26
27	Phase diagram for the onset of circulating waves and flow reversal in inclined falling films. Journal of Fluid Mechanics, 2015, 763, 322-351.	1.4	25
28	Onset of thermal ripples at the interface of an evaporating liquid under a flow of inert gas. Experiments in Fluids, 2012, 52, 1107-1119.	1.1	24
29	Low Kapitza falling liquid films. Chemical Engineering Science, 2017, 170, 122-138.	1.9	24
30	Dynamics of falling films on the outside of aÂvertical rotating cylinder: waves, rivulets andÂdripping transitions. Journal of Fluid Mechanics, 2017, 832, 189-211.	1.4	24
31	Bubble dynamics in microchannels: inertial and capillary migration forces. Journal of Fluid Mechanics, 2018, 842, 215-247.	1.4	24
32	Influence of Soluble Surfactants and Deformation on the Dynamics of Centered Bubbles in Cylindrical Microchannels. Langmuir, 2018, 34, 10048-10062.	1.6	24
33	Experimental investigations of liquid falling films flowing under an inclined planar substrate. Physical Review Fluids, 2018, 3, .	1.0	24
34	Natural break-up and satellite formation regimes of surfactant-laden liquid threads. Journal of Fluid Mechanics, 2020, 883, .	1.4	23
35	Dewetting of Thin Liquid Films Surrounding Air Bubbles in Microchannels. Langmuir, 2018, 34, 1363-1370.	1.6	22
36	The break-up of free films pulled out of a pure liquid bath. Journal of Fluid Mechanics, 2017, 811, 499-524.	1.4	21

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37	Prediction of two-dimensional dripping onset of a liquid film under an inclined plane. International Journal of Multiphase Flow, 2018, 104, 286-293.	1.6	19
38	Three-dimensional Rayleighâ€“Taylor instability under a unidirectional curved substrate. Journal of Fluid Mechanics, 2018, 837, 19-47.	1.4	19
39	On the (de)stabilization of draw resonance due to cooling. Journal of Fluid Mechanics, 2009, 636, 155-176.	1.4	18
40	Gas dissolution in antibubble dynamics. Soft Matter, 2014, 10, 7096-7102.	1.2	18
41	Lifetime of Surface Bubbles in Surfactant Solutions. Langmuir, 2020, 36, 7749-7764.	1.6	17
42	Adaptive stitching for meso-scale printing with two-photon lithography. Additive Manufacturing, 2018, 21, 589-597.	1.7	16
43	Experimental investigation of thermal structures in regular three-dimensional falling films. European Physical Journal: Special Topics, 2015, 224, 355-368.	1.2	14
44	Bubbly flow and gasâ€“liquid mass transfer in square and circular microchannels for stress-free and rigid interfaces: dissolution model. Microfluidics and Nanofluidics, 2015, 19, 899-911.	1.0	14
45	Continuous-Flow Tubular Crystallization To Discriminate between Two Competing Crystal Polymorphs. 2. Antisolvent Crystallization. Crystal Growth and Design, 2018, 18, 6440-6447.	1.4	14
46	Bubbly flow and gasâ€“liquid mass transfer in square and circular microchannels for stress-free and rigid interfaces: CFD analysis. Microfluidics and Nanofluidics, 2015, 19, 523-545.	1.0	13
47	Hydrogen peroxide concentration by pervaporation of a ternary liquid solution in microfluidics. Lab on A Chip, 2015, 15, 504-511.	3.1	13
48	Combined influence of inertia, gravity, and surface tension on the linear stability of Newtonian fiber spinning. Physical Review Fluids, 2017, 2, .	1.0	13
49	Effect of nonuniform wall heating on the three-dimensional secondary instability of falling films. Acta Mechanica, 2002, 156, 79-91.	1.1	12
50	Lateral shaping and stability of a stretching viscous sheet. European Physical Journal B, 2009, 68, 487-494.	0.6	12
51	Spontaneous channeling of solitary pulses in heated-film flows. Europhysics Letters, 2008, 84, 64002.	0.7	11
52	Mass transfer around bubbles flowing in cylindrical microchannels. Journal of Fluid Mechanics, 2019, 869, 110-142.	1.4	11
53	Bubbles determine the amount of alcohol in Mezcal. Scientific Reports, 2020, 10, 11014.	1.6	11
54	Effect of buoyancy on the motion of long bubbles in horizontal tubes. Physical Review Fluids, 2017, 2, .	1.0	11

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55	On the stabilizing effects of neck-in, gravity, and inertia in Newtonian film casting. Physics of Fluids, 2016, 28, .	1.6	10
56	The coupling of in-flow reaction with continuous flow seedless tubular crystallization. Reaction Chemistry and Engineering, 2019, 4, 516-522.	1.9	10
57	Steady flows of a laterally heated ferrofluid layer: Influence of inclined strong magnetic field and gravity level. Physics of Fluids, 2006, 18, 093602.	1.6	8
58	Thermocapillary-assisted pulling of contact-free liquid films. Physics of Fluids, 2012, 24, 032107.	1.6	8
59	WaveMaker: The three-dimensional wave simulation tool for falling liquid films. SoftwareX, 2018, 7, 211-216.	1.2	8
60	The creation and testing of a fully continuous tubular crystallization device suited for incorporation into flow chemistry setups. Journal of Flow Chemistry, 2019, 9, 237-249.	1.2	8
61	Newtonian pizza: spinning a viscous sheet. Journal of Fluid Mechanics, 2010, 659, 1-23.	1.4	7
62	Thermocapillary-assisted pulling of thin films: Application to molten metals. Applied Physics Letters, 2010, 97, .	1.5	7
63	A practical method to characterize proton exchange membrane fuel cell catalyst layer topography: Application to two coating techniques and two carbon supports. Thin Solid Films, 2020, 695, 137751.	0.8	7
64	Hydrodynamic-driven morphogenesis of karst draperies: spatio-temporal analysis of the two-dimensional impulse response. Journal of Fluid Mechanics, 2021, 910, .	1.4	7
65	Dynamics of the jet wiping process via integral models. Journal of Fluid Mechanics, 2021, 911, .	1.4	7
66	On the effect of flow restrictions on the nucleation behavior of molecules in tubular flow Nucleators. Journal of Flow Chemistry, 2020, 10, 241-249.	1.2	7
67	On the thickness of soap films: an alternative to Frankel's law â€“ CORRIGENDUM. Journal of Fluid Mechanics, 2009, 630, 443-443.	1.4	6
68	Practical mapping of the draw resonance instability in film casting of Newtonian fluids. European Journal of Mechanics, B/Fluids, 2015, 52, 68-75.	1.2	6
69	On the effect of electrostatic surface forces on dielectric falling films. Journal of Fluid Mechanics, 2021, 906, .	1.4	6
70	Statics and dynamics of a viscous ligament drawn out of a pure-liquid bath. Journal of Fluid Mechanics, 2021, 922, .	1.4	6
71	Bubble dynamics in microchannels: inertial and capillary migration forces â€“ CORRIGENDUM. Journal of Fluid Mechanics, 2018, 855, 1242-1245.	1.4	5
72	Effect of insoluble surfactants on a thermocapillary flow. Physics of Fluids, 2021, 33, .	1.6	5

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73	Continuous separation, with microfluidics, of the components of a ternary mixture: from vacuum to purge gas pervaporation. Microfluidics and Nanofluidics, 2017, 21, 1.	1.0	4
74	Delayed bubble entrapment during the drop impact on a bounded liquid bath. AIP Advances, 2019, 9, .	0.6	4
75	An alternative choice of the boundary condition for the arbitrary Lagrangian-Eulerian method. Journal of Computational Physics, 2021, 443, 110494.	1.9	4
76	Some advances in lubrication-type theories. European Physical Journal: Special Topics, 2007, 146, 377-389.	1.2	3
77	Influence of the inlet velocity profile on the flow stability in a symmetric channel expansion. Journal of Fluid Mechanics, 2021, 909, .	1.4	3
78	How to measure the thickness of a lubrication film in a pancake bubble with a single snapshot?. Applied Physics Letters, 2018, 113, .	1.5	2
79	Two-dimensional modelling of transient capillary driven damped micro-oscillations and self-alignment of objects in microassembly. Journal of Fluid Mechanics, 2021, 910, .	1.4	2
80	Dip-coating flow in the presence of two immiscible liquids. Journal of Fluid Mechanics, 2021, 922, .	1.4	2
81	Spanwise structuring and rivulet formation in suspended falling liquid films. Physical Review Fluids, 2021, 6, .	1.0	2
82	Isothermal Case: Three-Dimensional Flow. Applied Mathematical Sciences (Switzerland), 2012, , 277-308.	0.4	1
83	Isothermal Case: Two-Dimensional Flow. Applied Mathematical Sciences (Switzerland), 2012, , 193-275.	0.4	1
84	Rivulet Structures in Falling Liquid Films. Understanding Complex Systems, 2013, , 435-441.	0.3	1
85	Zero overlap stitching of microlens arrays with two-photon polymerisation. , 2018, , .		1
86	Linear stability analysis of nonisothermal glass fiber drawing. Physical Review Fluids, 2022, 7, .	1.0	1
87	Gravity Level Influence on a Laterally Heated Ferrofluid Submitted to an Oblique Strong Magnetic Field. Zeitschrift Fur Physikalische Chemie, 2006, 220, 199-208.	1.4	0
88	Flow and Heat Transfer: Formulation. Applied Mathematical Sciences (Switzerland), 2012, , 21-38.	0.4	0
89	Modeling Methodologies for Moderate Reynolds Number Flows. Applied Mathematical Sciences (Switzerland), 2012, , 145-192.	0.4	0
90	Nonisothermal Case: Two- and Three-Dimensional Flow. Applied Mathematical Sciences (Switzerland), 2012, , 309-350.	0.4	0

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91	Primary Instability. Applied Mathematical Sciences (Switzerland), 2012, , 39-64.	0.4	0
92	Twoâ€dimensional modeling of an absorbing falling film in its development zone. AICHE Journal, 2017, 63, 4370-4378.	1.8	0
93	Hydrodynamic-driven morphogenesis of karst draperies: spatio-temporal analysis of the two-dimensional impulse response â€“ CORRIGENDUM. Journal of Fluid Mechanics, 2021, 926, .	1.4	0
94	Methodologies for Low-Reynolds Number Flows. Applied Mathematical Sciences (Switzerland), 2012, , 95-144.	0.4	0
95	Open Questions and Suggestions for Further Research. Applied Mathematical Sciences (Switzerland), 2012, , 351-355.	0.4	0
96	Boundary Layer Approximation. Applied Mathematical Sciences (Switzerland), 2012, , 65-93.	0.4	0