Arnaud Saint-jalmes

List of Publications by Year
in descending order

90 papers	4,017 citations	159358 30 h-index	128067 60 g-index
101 all docs	101 docs citations	101 times ranked	2960 citing authors

#	Article	IF	Citations
1	Physical chemistry in foam drainage and coarsening. Soft Matter, 2006, 2, 836.	1.2	310
2	Photomanipulation of a Droplet by the Chromocapillary Effect. Angewandte Chemie - International Edition, 2009, 48, 9281-9284.	7.2	223
3	On the origin of the remarkable stability of aqueous foams stabilised by nanoparticles: link with microscopic surface properties. Soft Matter, 2008, 4, 1531.	1.2	202
4	The science of foaming. Advances in Colloid and Interface Science, 2015, 222, 228-259.	7.0	190
5	Smart Foams: Switching Reversibly between Ultrastable and Unstable Foams. Angewandte Chemie - International Edition, 2011, 50, 8264-8269.	7.2	163
6	Vanishing elasticity for wet foams: Equivalence with emulsions and role of polydispersity. Journal of Rheology, 1999, 43, 1411-1422.	1.3	151
7	Differences between protein and surfactant foams: Microscopic properties, stability and coarsening. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 263, 219-225.	2.3	146
8	Scattering optics of foam. Applied Optics, 2001, 40, 4210.	2.1	123
9	Time evolution of aqueous foams: drainage and coarsening. Journal of Physics Condensed Matter, 2002, 14, 9397-9412.	0.7	114
10	Quantitative description of foam drainage: Transitions with surface mobility. European Physical Journal E, 2004, 15, 53-60.	0.7	104
11	Surfactant foams doped with laponite: unusual behaviors induced by aging and confinement. Soft Matter, 2009, 5, 4975.	1.2	97
12	Responsive Aqueous Foams. ChemPhysChem, 2015, 16, 66-75.	1.0	95
13	Dual gas and oil dispersions in water: production and stability of foamulsion. Soft Matter, 2012, 8, 699-706.	1.2	86
14	Electrical conductivity of dispersions: from dry foams to dilute suspensions. Journal of Physics Condensed Matter, 2005, 17, 6301-6305.	0.7	84
15	Non-aqueous foams: Current understanding on the formation and stability mechanisms. Advances in Colloid and Interface Science, 2017, 247, 454-464.	7.0	82
16	Marangoni Flow of Soluble Amphiphiles. Physical Review Letters, 2014, 112, .	2.9	80
17	Responsive self-assemblies based on fatty acids. Current Opinion in Colloid and Interface Science, 2014, 19, 471-479.	3.4	79
18	Uniform foam production by turbulent mixing: new results on free drainage vs. liquid content. European Physical Journal B, 1999, 12, 67-73.	0.6	72

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19	Oscillatory rheology of aqueous foams: surfactant, liquid fraction, experimental protocol and aging effects. Soft Matter, 2009, 5, 1937.	1.2	71
20	Smart Nonaqueous Foams from Lipid-Based Oleogel. Langmuir, 2015, 31, 13501-13510.	1.6	68
21	Development of Casein Microgels from Cross-Linking of Casein Micelles by Genipin. Langmuir, 2014, 30, 10167-10175.	1.6	67
22	Aqueous foam slip and shear regimes determined by rheometry and multiple light scattering. Journal of Rheology, 2008, 52, 1091-1111.	1.3	65
23	Viscosity effects in foam drainage: Newtonian and non-newtonian foaming fluids. European Physical Journal E, 2006, 19, 195-202.	0.7	62
24	Protein and surfactant foams: linear rheology and dilatancy effect. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2005, 263, 121-128.	2.3	53
25	Free drainage of aqueous foams: Container shape effects on capillarity and vertical gradients. Europhysics Letters, 2000, 50, 695-701.	0.7	49
26	Buckling in a solid Langmuir monolayer: light scattering measurements and elastic model. European Physical Journal B, 1998, 2, 489-494.	0.6	43
27	Strong Improvement of Interfacial Properties Can Result from Slight Structural Modifications of Proteins: The Case of Native and Dry-Heated Lysozyme. Langmuir, 2011, 27, 14947-14957.	1.6	40
28	Instabilities in a Liquid-Fluidized Bed of Gas Bubbles. Physical Review Letters, 2000, 84, 3001-3004.	2.9	39
29	Light induced flows opposing drainage in foams and thin-films using photosurfactants. Soft Matter, 2013, 9, 7054.	1.2	35
30	Propagation of ultrasound in aqueous foams: bubble size dependence and resonance effects. Soft Matter, 2013, 9, 1194-1202.	1.2	30
31	Bubble motion measurements during foam drainage and coarsening. Journal of Colloid and Interface Science, 2006, 300, 735-743.	5.0	29
32	Recent Advances in Understanding and Use of Oleofoams. Frontiers in Sustainable Food Systems, 2020, 4, .	1.8	29
33	Solutions of surfactant oligomers: a model system for tuning foam stability by the surfactant structure. Soft Matter, 2010, 6, 2271.	1.2	28
34	Buckling of a Bidimensional Solid. Europhysics Letters, 1994, 28, 565-571.	0.7	27
35	Diffusive Liquid Propagation in Porous and Elastic Materials: The Case of Foams under Microgravity Conditions. Physical Review Letters, 2007, 98, 058303.	2.9	27
36	Dynamics of poly-nipam chains in competition with surfactants at liquid interfaces: from thermoresponsive interfacial rheology to foams. Soft Matter, 2013, 9, 1344-1353.	1.2	24

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37	Soluble surfactant spreading: How the amphiphilicity sets the Marangoni hydrodynamics. Physical Review E, 2016, 93, 013107.	0.8	23
38	Gradual disaggregation of the casein micelle improves its emulsifying capacity and decreases the stability of dairy emulsions. Food Hydrocolloids, 2017, 63, 189-200.	5.6	22
39	Design of responsive foams with an adjustable temperature threshold of destabilization. Soft Matter, 2018, 14, 2578-2581.	1.2	22
40	Fluid dynamics of rivulet flow between plates. Physics of Fluids, 2007, 19, .	1.6	21
41	Aqueous foam drainage. Role of the rheology of the foaming fluid. European Physical Journal Special Topics, 2001, 11, Pr6-275-Pr6-280.	0.2	20
42	A Systematic and Quantitative Study of the Link between Foam Slipping and Interfacial Viscoelasticity. Langmuir, 2009, 25, 13412-13418.	1.6	20
43	Contact angle and surface tension of water on a hexagonal boron nitride monolayer: a methodological investigation. Molecular Simulation, 2019, 45, 454-461.	0.9	20
44	Development of an aqueous two-phase emulsion using hydrophobized whey proteins and erythritol. Food Hydrocolloids, 2019, 93, 351-360.	5.6	18
45	Effect of cosurfactant on the free-drainage regime of aqueous foams. Journal of Colloid and Interface Science, 2005, 292, 544-547.	5.0	16
46	Interfacial properties, film dynamics and bulk rheology: A multi-scale approach to dairy protein foams. Journal of Colloid and Interface Science, 2019, 542, 222-232.	5.0	16
47	Skin layer stratification in drying droplets of dairy colloids. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 620, 126560.	2.3	16
48	How foams unstable on Earth behave in microgravity?. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 457, 392-396.	2.3	15
49	Morphological Transition in Fatty Acid Self-Assemblies: A Process Driven by the Interplay between the Chain-Melting and Surface-Melting Process of the Hydrogen Bonds. Langmuir, 2017, 33, 12943-12951.	1.6	15
50	Yielding and flow of solutions of thermoresponsive surfactant tubes: tuning macroscopic rheology by supramolecular assemblies. Soft Matter, 2014, 10, 3622.	1.2	14
51	Two-mode dynamics in dispersed systems: the case of particle-stabilized foams studied by diffusing wave spectroscopy. Physical Chemistry Chemical Physics, 2011, 13, 3064-3072.	1.3	13
52	Swelling of a single foam film under slipping. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 304, 72-76.	2.3	12
53	Controlling Foam Stability with the Ratio of Myristic Acid to Choline Hydroxide. Langmuir, 2018, 34, 11076-11085.	1.6	12
54	Investigating acoustic-induced deformations in a foam using multiple light scattering. Physical Review E, 2010, 82, 021409.	0.8	10

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55	Foam stability in microgravity. Journal of Physics: Conference Series, 2011, 327, 012024.	0.3	10
56	Surface Tension and Compression Modulus Anisotropies of a Phospholipid Monolayer Spread on Water and on Formamide. Journal of Physical Chemistry B, 1998, 102, 5810-5815.	1.2	9
57	Disjoining Pressures and Ordering in Thin Liquid Films Containing Charged Diblock Copolymers Adsorbed at the Interfaces. Langmuir, 2002, 18, 2103-2110.	1.6	9
58	Experiments and simulations of liquid imbibition in aqueous foams under microgravity. Microgravity Science and Technology, 2006, 18, 108-111.	0.7	9
59	Foam experiments in parabolic flights: Development of an ISS facility and capillary drainage experiments. Microgravity Science and Technology, 2006, 18, 22-30.	0.7	9
60	Probing the dynamics of particles in an aging dispersion using diffusing wave spectroscopy. Soft Matter, 2012, 8, 7683.	1.2	9
61	Sound propagation in liquid foams: Unraveling the balance between physical and chemical parameters. Physical Review E, 2015, 91, 042311.	0.8	9
62	How foam stability against drainage is affected by conditions of prior whey protein powder storage and dry-heating: A multidimensional experimental approach. Journal of Food Engineering, 2019, 242, 153-162.	2.7	9
63	Self-Propulsion of a Volatile Drop on the Surface of an Immiscible Liquid Bath. Physical Review Letters, 2021, 127, 144501.	2.9	9
64	The Acoustics of Liquid Foams. Current Opinion in Colloid and Interface Science, 2020, 50, 101391.	3.4	8
65	Boron Effect on Sugarâ€Based Organogelators. Chemistry - A European Journal, 2020, 26, 13927-13934.	1.7	8
66	Rayleigh-Taylor-like instability in a foam film. Physical Review Fluids, 2019, 4, .	1.0	8
67	Structure of bidimensional phospholipidic crystallites on formamide determined by X-ray diffraction. Chemical Physics Letters, 1995, 240, 234-238.	1.2	7
68	Enhanced interfacial deformation in a Marangoni flow: A measure of the dynamical surface tension. Physical Review Fluids, 2018, 3, .	1.0	7
69	Thermodynamics of binary gas adsorption in nanopores. Physical Chemistry Chemical Physics, 2016, 18, 24361-24369.	1.3	6
70	Microphotonics for monitoring the supramolecular thermoresponsive behavior of fatty acid surfactant solutions. Optics Communications, 2020, 468, 125773.	1.0	6
71	Influence of bubble size and thermal dissipation on compressive wave attenuation in liquid foams. Europhysics Letters, 2015, 112, 34001.	0.7	5
72	Stability of a directional Marangoni flow. Soft Matter, 2020, 16, 8933-8939.	1.2	5

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73	Reply to the Comment by S. J. Cox and D. Weaire on "Free drainage of aqueous foams: Container shape effects on capillarity and vertical gradients". Europhysics Letters, 2001, 55, 447-448.	0.7	4
74	Foams and emulsions in space. Europhysics News, 2008, 39, 26-28.	0.1	4
75	Blast wave attenuation in liquid foams: role of gas and evidence of an optimal bubble size. Soft Matter, 2016, 12, 8015-8024.	1.2	4
76	Water/oil/water thin films: construction and applications. , 2001, , 1-4.		4
77	Titelbild: Photomanipulation of a Droplet by the Chromocapillary Effect (Angew. Chem. 49/2009). Angewandte Chemie, 2009, 121, 9361-9361.	1.6	3
78	Phospholipidic Monolayers on Formamide. Journal De Physique II, 1995, 5, 313-322.	0.9	3
79	Non linear elasticity of foam films made of SDS/dodecanol mixtures. Soft Matter, 2022, 18, 2046-2053.	1.2	2
80	Berichtigung: Smart Foams: Switching Reversibly between Ultrastable and Unstable Foams. Angewandte Chemie, 2011, 123, 12030-12030.	1.6	1
81	Shaving foam: A complex system for acoustic wave propagation. Proceedings of Meetings on Acoustics, 2013, , .	0.3	1
82	Probing acoustics of liquid foams by optical diffusive wave spectroscopy. Proceedings of Meetings on Acoustics, 2013, , .	0.3	1
83	Synchronized diffusive-wave spectroscopy: Principle and application to sound propagation in aqueous foams. Physical Review E, 2016, 93, 032611.	0.8	1
84	Cover Picture: Photomanipulation of a Droplet by the Chromocapillary Effect (Angew. Chem. Int. Ed.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	7.2	0
85	Les acides gras hydroxylÃ©s : agro-tensioactifs aux propriÃ©tÃ©s moussantes originales. Oleagineux Corps Gras Lipides, 2013, 20, 8-15.	0.2	0
86	Foam Formation Techniques. , 2018, , 199-212.		0
87	Fundamentals of Foam Formation. , 2018, , 185-198.		0
88	About monitoring the dynamics of phase transition in food and biology by micro-photonics: detecting soft-matter process. , 2020, , .		0
89	Poster: Thermal active drops. , 0, , .		0
90	Coarsening and rheology of casein and surfactant foams. Special Publication - Royal Society of Chemistry, 0, , 273-283.	0.0	0