FranÃ§oise Brochard-Wyart

List of Publications by Year
in descending order

135 papers	9,817 citations	50170 46 h-index	53109 85 g-index
135 all docs	135 docs citations	135 times ranked	8120 citing authors

#	Article	IF	Citations
1	Fusion Dynamics of Hybrid Cellâ€"Microparticle Aggregates: A Jelly Pearl Model. Langmuir, 2022, , .	1.6	5
2	Inert-living matter, when cells and beads play together. Communications Physics, 2021, 4, .	2.0	4
3	Flow dynamics of 3D multicellular systems into capillaries. , 2021, , 193-223.		8
4	Actin modulates shape and mechanics of tubular membranes. Science Advances, 2020, 6, eaaz3050.	4.7	14
5	Polymeric Nanoparticles Limit the Collective Migration of Cellular Aggregates. Langmuir, 2019, 35, 7396-7404.	1.6	9
6	Spreading of Cell Aggregates on Zwitterion-Modified Chitosan Films. Langmuir, 2019, 35, 1902-1908.	1.6	2
7	A Tour of My Soft Matter Garden: From Shining Globules and Soap Bubbles to Cell Aggregates. Annual Review of Condensed Matter Physics, 2019, 10, 1-23.	5.2	1
8	Spontaneous migration of cellular aggregates from giant keratocytes to running spheroids. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12926-12931.	3.3	39
9	ALCAM shedding at the invasive front of the tumor is a marker of myometrial infiltration and promotes invasion in endometrioid endometrial cancer. Oncotarget, 2018, 9, 16648-16664.	0.8	11
10	How gluttonous cell aggregates clear substrates coated with microparticles. Scientific Reports, 2017, 7, 15729.	1.6	4
11	Reentrant wetting transition in the spreading of cellular aggregates. Soft Matter, 2017, 13, 8474-8482.	1.2	15
12	Soft matter physics: Tools and mechanical models for living cellular aggregates. Japanese Journal of Applied Physics, 2016, 55, 1102A8.	0.8	5
13	Nanostickers for cells: a model study using cellâ€"nanoparticle hybrid aggregates. Soft Matter, 2016, 12, 7902-7907.	1.2	13
14	Entangled active matter: From cells to ants. European Physical Journal: Special Topics, 2016, 225, 629-649.	1.2	35
15	Spreading of porous vesicles subjected to osmotic shocks: the role of aquaporins. Soft Matter, 2016, 12, 1601-1609.	1.2	14
16	Mechanics of Biomimetic Liposomes Encapsulating an Actin Shell. Biophysical Journal, 2015, 109, 2471-2479.	0.2	50
17	Formation of Tethers from Spreading Cellular Aggregates. Langmuir, 2015, 31, 12984-12992.	1.6	2
18	How cells flow in the spreading of cellular aggregates. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8055-8060.	3.3	72

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19	Nanopore-Based Characterization of Branched Polymers. ACS Macro Letters, 2014, 3, 194-197.	2.3	12
20	Detachment and fracture of cellular aggregates. Soft Matter, 2013, 9, 2282.	1.2	22
21	Transcellular tunnel dynamics: Control of cellular dewetting by actomyosin contractility and Iâ€BAR proteins. Biology of the Cell, 2013, 105, 109-117.	0.7	21
22	Bilayer curling and winding in a viscous fluid. Soft Matter, 2012, 8, 8517.	1.2	4
23	Active diffusion-limited aggregation of cells. Soft Matter, 2012, 8, 784-788.	1.2	34
24	Dewetting of Low-Viscosity Films at Solid/Liquid Interfaces. Langmuir, 2012, 28, 15844-15852.	1.6	17
25	Spreading dynamics of cellular aggregates confined to adhesive bands. European Physical Journal E, 2012, 35, 116.	0.7	7
26	Soft Matter Models of Developing Tissues and Tumors. Science, 2012, 338, 910-917.	6.0	230
27	Wetting transitions of cellular aggregates induced by substrate rigidity. Soft Matter, 2012, 8, 4578.	1.2	67
28	Cellular Dewetting: Opening of Macroapertures in Endothelial Cells. Physical Review Letters, 2012, 108, 218105.	2.9	29
29	Dewetting of cellular monolayers. European Physical Journal E, 2012, 35, 34.	0.7	25
30	Suction of hydrosoluble polymers into nanopores. Soft Matter, 2011, 7, 96-103.	1.2	32
31	Curling instability induced by swelling. Soft Matter, 2011, 7, 1506.	1.2	43
32	Decorating a Liquid Interface Promotes Splashing. Langmuir, 2011, 27, 9955-9960.	1.6	2
33	Nanotubes from asymmetrically decorated vesicles. Soft Matter, 2011, 7, 946-951.	1.2	2
34	Spreading dynamics and wetting transition of cellular aggregates. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7315-7320.	3.3	142
35	Mechanosensitive shivering of model tissues under controlled aspiration. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 13387-13392.	3.3	63
36	Squeezing and Detachment of Living Cells. Biophysical Journal, 2010, 99, 3555-3562.	0.2	18

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37	Aspiration of Biological Viscoelastic Drops. Physical Review Letters, 2010, 104, 218101.	2.9	215
38	Polymers in Confined Geometries. Series on Directions in Condensed Matter Physics, 2009, , 69-95.	0.1	3
39	In Memory of Pierre-Gilles de Gennes. Journal of Physical Chemistry B, 2009, 113, 3591-3592.	1.2	0
40	Role of E-Cadherin in Membrane-Cortex Interaction Probed by Nanotube Extrusion. Biophysical Journal, 2009, 96, 2457-2465.	0.2	29
41	Inkjet formation of unilamellar lipid vesicles for cell-like encapsulation. Lab on A Chip, 2009, 9, 2003.	3.1	90
42	Formation and material properties of giant liquid crystal polymersomes. Soft Matter, 2009, 5, 1870.	1.2	48
43	Bursting of sensitive polymersomes induced by curling. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7294-7298.	3.3	175
44	Nanotubes from gelly vesicles. Europhysics Letters, 2008, 82, 48002.	0.7	7
45	Specific wetting probed with biomimetic emulsion droplets. Soft Matter, 2008, 4, 2434.	1.2	29
46	Nanofluidics in cellular tubes under oscillatory extension. Europhysics Letters, 2008, 84, 18004.	0.7	8
47	The viscous catenary revisited: experiments and theory. Journal of Fluid Mechanics, 2008, 609, 87-110.	1.4	11
48	The viscous catenary: A poor man's approach. Europhysics Letters, 2007, 80, 36001.	0.7	5
49	Forced Detachment of Immersed Elastic Rubber Beads. Langmuir, 2007, 23, 9704-9712.	1.6	4
50	Tether Extrusion from Red Blood Cells: Integral Proteins Unbinding from Cytoskeleton. Biophysical Journal, 2007, 93, 1369-1379.	0.2	63
51	Pierre-Gilles de Gennes (1932â€“2007). Nature, 2007, 448, 149-149.	13.7	6
52	Naive model for stick-slip processes. European Physical Journal E, 2007, 23, 439-444.	0.7	21
53	Hydrodynamic narrowing of tubes extruded from cells. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 7660-7663.	3.3	117
54	Tube extrusion from permeabilized giant vesicles. Europhysics Letters, 2006, 75, 666-672.	0.7	9

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55	Cascade of Shocks in Inertial Liquid-Liquid Dewetting. Physical Review Letters, 2006, 96, 156101.	2.9	12
56	Vesicles surfing on a lipid bilayer: Self-induced haptotactic motion. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 12382-12387.	3.3	81
57	Dynamics of triple lines at soft interfaces. Europhysics Letters, 2005, 71, 418-424.	0.7	2
58	Wetting fibers with liposomes. Journal of Colloid and Interface Science, 2005, 285, 61-66.	5.0	7
59	Triplon Modes of Puddles. Physical Review Letters, 2005, 94, 166102.	2.9	54
60	Semiflexible Polymers Confined in Soft Tubes. Langmuir, 2005, 21, 4144-4148.	1.6	81
61	Marangoni transport in lipid nanotubes. Europhysics Letters, 2005, 70, 271-277.	0.7	53
62	Flow injection of branched polymers inside nanopores. Europhysics Letters, 2005, 72, 83-88.	0.7	55
63	Capillarity and Wetting Phenomena. , 2004, , .		2,061
64	Membrane tensiometer for heavy giant vesicles. European Physical Journal E, 2004, 15, 127-132.	0.7	11
65	Adhesion between Giant Vesicles and Supported Bilayers Decorated with Chelated E-Cadherin Fragments. Langmuir, 2004, 20, 9763-9768.	1.6	15
66	Dewetting. , 2004, , 153-190.		6
67	Enforced Detachment of Red Blood Cells Adhering to Surfaces: Statics and Dynamics. Biophysical Journal, 2004, 87, 2855-2869.	0.2	55
68	Transient pores in vesicles. Polymer International, 2003, 52, 486-493.	1.6	50
69	Giant Vesicles under Flows:Â Extrusion and Retraction of Tubes. Langmuir, 2003, 19, 575-584.	1.6	101
70	Adhesion Induced by Mobile Stickers:Â A List of Scenarios. Langmuir, 2003, 19, 7112-7119.	1.6	50
71	Cascades of Transient Pores in Giant Vesicles: Line Tension and Transport. Biophysical Journal, 2003, 84, 1734-1749.	0.2	349
72	Hydrodynamic extrusion of tubes from giant vesicles. Europhysics Letters, 2003, 64, 837-843.	0.7	37

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73	PHYSICS: How Soft Skin Wrinkles. Science, 2003, 300, 441-441.	6.0	22
74	Line Thermodynamics: Adsorption at a Membrane Edge. Physical Review Letters, 2003, 90, 128304.	2.9	83
75	Behavior of a nematic liquid near a grafted solid surface. Macromolecular Symposia, 2003, 191, 59-68.	0.4	4
76	Adhesion induced by mobile binders: Dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 7854-7859.	3.3	72
77	â€œÄŒerenkovâ€•dewetting at soft interfaces. Europhysics Letters, 2002, 57, 604-610.	0.7	16
78	Fast Dynamics of Floating Triple Lines. Langmuir, 2002, 18, 9350-9356.	1.6	17
79	Dewetting versus Rayleigh Instability inside Capillaries. Langmuir, 2002, 18, 4795-4798.	1.6	22
80	Dewetting Nucleation Centers at Soft Interfaces. Langmuir, 2001, 17, 6553-6559.	1.6	51
81	Dewetting on porous media. Europhysics Letters, 2001, 56, 414-419.	0.7	9
82	Wetting of antagonist mixtures: the `leak out' transition. International Journal of Engineering Science, 2000, 38, 1033-1047.	2.7	10
83	Transient pores in stretched vesicles: role of leak-out. Physica A: Statistical Mechanics and Its Applications, 2000, 278, 32-51.	1.2	182
84	Adhesion of soft objects on wet substrates. Journal of Physics Condensed Matter, 2000, 12, A239-A244.	0.7	7
85	Dynamics of taut DNA chains. Europhysics Letters, 1999, 47, 171-174.	0.7	30
86	Dynamics of transient pores in stretched vesicles. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 10591-10596.	3.3	336
87	Shocks in Inertial Dewetting. Physical Review Letters, 1999, 83, 1183-1186.	2.9	34
88	Application of statistical mechanics to the wetting of complex liquids. Physica A: Statistical Mechanics and Its Applications, 1999, 274, 19-29.	1.2	6
89	On the deformation of star shaped polystyrenes in flowing solutions. Macromolecular Theory and Simulations, 1999, 8, 147-150.	0.6	3
90	Dewetting at Soft Interfaces. Physical Review Letters, 1998, 80, 3296-3299.	2.9	93

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91	The Life and Death of "Bare" Viscous Bubbles. Science, 1998, 279, 1704-1707.	6.0	231
92	Polymer Chains Under Strong Flow: Stems and Flowers. MRS Bulletin, 1997, 22, 48-52.	1.7	15
93	Dewetting of Supported Viscoelastic Polymer Films:â€‰ Birth of Rims. Macromolecules, 1997, 30, 1211-1213.	2.2	142
94	Sessile Droplets at a Solid/Elastomer Interface. Langmuir, 1997, 13, 4910-4914.	1.6	33
95	Nucleation Radius and Growth of a Liquid Meniscus. Journal of Colloid and Interface Science, 1997, 190, 134-141.	5.0	22
96	Slippage of Polymer Melts on Grafted Surfaces. Macromolecules, 1996, 29, 377-382.	2.2	114
97	Injection Threshold for a Statistically Branched Polymer inside a Nanopore. Macromolecules, 1996, 29, 8379-8382.	2.2	47
98	Unwinding of Globular Polymers under Strong Flows. Macromolecules, 1996, 29, 4937-4943.	2.2	55
99	Experimental Study of the Spreading of a Viscous Droplet on a Nonviscous Liquid. Langmuir, 1996, 12, 6708-6711.	1.6	22
100	Spreading of viscous droplets on a non viscous liquid. Colloid and Polymer Science, 1996, 274, 70-72.	1.0	30
101	Polymer Chains under Strong Flows: Stems and Flowers. Turkish Journal of Physics, 1996, 20, 42-52.	0.5	0
102	Viscous Bursting of Suspended Films. Physical Review Letters, 1995, 75, 3886-3889.	2.9	182
103	Polymer Chains Under Strong Flows: Stems and Flowers. Europhysics Letters, 1995, 30, 387-392.	0.7	122
104	Normal modes of stretched polymer chains. Macromolecules, 1995, 28, 985-990.	2.2	40
105	Drag on a Tethered Chain Moving in a Polymer Melt. Journal De Physique II, 1995, 5, 491-495.	0.9	21
106	Unwinding of Polymer Chains under Forces or Flows. Europhysics Letters, 1994, 26, 511-516.	0.7	72
107	Bursting of a Liquid Film on a Liquid Substrate. Europhysics Letters, 1994, 28, 421-426.	0.7	39
108	Dewetting of a water film between a solid and a rubber. Journal of Physics Condensed Matter, 1994, 6, A9-A12.	0.7	37

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109	Slippage of an entangled polymer melt on a grafted surface. Physica A: Statistical Mechanics and Its Applications, 1994, 204, 17-39.	1.2	112
110	Dynamics of stars and linear chains dissolved in a polymer melt. Macromolecules, 1994, 27, 803-808.	2.2	26
111	Dewetting and slippage of microscopic polymer films. Macromolecules, 1994, 27, 468-471.	2.2	161
112	Wetting and Slippage of Polymer Melts on Semi-ideal Surfaces. Langmuir, 1994, 10, 1566-1572.	1.6	197
113	Spreading of a Drop between a Solid and a Viscous Polymer. Langmuir, 1994, 10, 2440-2443.	1.6	17
114	Controlled swelling of polymer brushes. Macromolecular Symposia, 1994, 79, 1-16.	0.4	2
115	Dewetting of a water film between a solid and a viscoelastic liquid. Journal De Physique II, 1994, 4, 1727-1735.	0.9	3
116	Colloid & Polymer Science. Colloid and Polymer Science, 1993, 271, 621-628.	1.0	103
117	Motions of droplets on hydrophobic model surfaces induced by thermal gradients. Langmuir, 1993, 9, 2220-2224.	1.6	242
118	Climbing of a high-molecular-weight liquid on a vertical solid surface grafted with long polymer chains. Macromolecules, 1993, 26, 5885-5889.	2.2	10
119	Deformations of One Tethered Chain in Strong Flows. Europhysics Letters, 1993, 23, 105-111.	0.7	136
120	Capillary rise of a liquid on a solid grafted with long polymer chains. Journal of Adhesion Science and Technology, 1993, 7, 495-502.	1.4	4
121	Exponential Growth of Fingering Instabilities of Spreading Films Under Horizontal Thermal Gradients. Europhysics Letters, 1992, 19, 97-102.	0.7	64
122	Dynamics of liquid rim instabilities. Langmuir, 1992, 8, 2324-2329.	1.6	99
123	Festoon instabilities of slightly volatile liquids during spreading. Journal De Physique II, 1992, 2, 1671-1676.	0.9	15
124	Spreading of â€œheavyâ€•droplets. Journal of Colloid and Interface Science, 1992, 149, 580-591.	5.0	12
125	Dynamics of partial wetting. Advances in Colloid and Interface Science, 1992, 39, 1-11.	7.0	292
126	Spreading of nonvolatile liquids in a continuum picture. Langmuir, 1991, 7, 335-338.	1.6	325

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127	Wetting of stratified solids. Advances in Colloid and Interface Science, 1991, 34, 561-582.	7.0	12
128	Spreading of â€œheavyâ€•droplets. Journal of Colloid and Interface Science, 1991, 142, 518-527.	5.0	60
129	Dynamics of dewetting. Physical Review Letters, 1991, 66, 715-718.	2.9	496
130	Hindered interdiffusion in asymmetric polymer-polymer junctions. Makromolekulare Chemie Macromolecular Symposia, 1990, 40, 167-177.	0.6	13
131	Scaling theory of molten polymers in small pores. Macromolecules, 1990, 23, 2276-2280.	2.2	30
132	Spreading of Liquids on Highly Curved Surfaces. Science, 1990, 249, 1256-1260.	6.0	106
133	Making van der Waals Films on Fibers. Europhysics Letters, 1989, 10, 335-340.	0.7	21
134	Wetting of fibers : theory and experiments. Revue De Physique AppliquÃ©e, 1988, 23, 1023-1030.	0.4	36
135	How to separate polydisperse polyelectrolytes by thermal field flow fractionation techniques. Macromolecules, 1983, 16, 149-150.	2.2	9