Lilianne LÃ©ger

List of Publications by Year
in descending order

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110	6,538	66343	62596
papers	citations	42	80
		h-index	g-index

111	111	111	4696
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Direct Experimental Evidence of Slip in Hexadecane: Solid Interfaces. Physical Review Letters, 2000, 85, 980-983.	7.8	523
2	Silanation of silica surfaces. A new method of constructing pure or mixed monolayers. Langmuir, 1991, 7, 1647-1651.	3.5	486
3	Liquid spreading. Reports on Progress in Physics, 1992, 55, 431-486.	20.1	442
4	Slip transition of a polymer melt under shear stress. Physical Review Letters, 1993, 70, 287-290.	7.8	356
5	Characterization of the brush regime for grafted polymer layers at the solid-liquid interface. Physical Review Letters, 1991, 66, 719-722.	7.8	203
6	Surface-Anchored Polymer Chains: Their Role in Adhesion and Friction. Advances in Polymer Science, 1999, , 185-225.	0.8	198
7	Dynamics of Entangled Polymer Chains. Annual Review of Physical Chemistry, 1982, 33, 49-61.	10.8	168
8	Reptation in entangled polymer solutions by forced Rayleigh light scattering. Macromolecules, 1981, 14, 1732-1738.	4.8	161
9	Friction and slip of a simple liquid at a solid surface. Tribology Letters, 1999, 7, 147-152.	2.6	145
10	Existence and Role of the Precursor Film in the Spreading of Polymer Liquids. Physical Review Letters, 1986, 57, 2671-2674.	7.8	144
11	Adhesion at the Solid-Elastomer Interface: Influence of the Interfacial Chains. Macromolecules, 1995, 28, 7419-7428.	4.8	141
12	Effects of the Formation of Copolymer on the Interfacial Adhesion between Semicrystalline Polymers. Macromolecules, 1996, 29, 774-782.	4.8	136
13	Effect of Plasticizers (Water and Glycerol) on the Diffusion of a Small Molecule in Iota-Carrageenan Biopolymer Films for Edible Coating Application. Biomacromolecules, 2006, 7, 2011-2019.	5.4	124
14	Self-Diffusion in Polymer Solutions: A Test for Scaling and Reptation. Physical Review Letters, 1979, 42, 1681-1684.	7.8	122
15	Friction and Slip at Simple Fluid-Solid Interfaces: The Roles of the Molecular Shape and the Solid-Liquid Interaction. Physical Review Letters, 2005, 94, .	7.8	118
16	Structures of end-grafted polymer layers: a small-angle neutron scattering study. Macromolecules, 1991, 24, 2523-2528.	4.8	117
17	Precursor Film Profiles of Spreading Liquid Drops. Physical Review Letters, 1988, 60, 2390-2393.	7.8	98
18	Wall slip in polymer melts. Journal of Physics Condensed Matter, 1997, 9, 7719-7740.	1.8	95

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19	Polymer Brushes Grafted to â€œPassivatedâ€•Silicon Substrates Using Click Chemistry. Langmuir, 2008, 24, 2732-2739.	3.5	92
20	Diffusion of large flexible polymer chains through model porous membranes. Macromolecules, 1985, 18, 2531-2537.	4.8	91
21	Enhanced Adhesion between Polypropylene and Polyamide-6:Â Role of Interfacial Nucleation of the Î²-Crystalline Form of Polypropylene. Macromolecules, 1997, 30, 2102-2109.	4.8	87
22	Building of a grafted layer. 1. Role of the concentration of free polymers in the reaction bath. Macromolecules, 1991, 24, 5158-5166.	4.8	79
23	Role of Interfacial Resistance to Shear Stress on Adhesive Peel Strength. Langmuir, 2001, 17, 6510-6517.	3.5	79
24	Adhesion Enhancement through Micropatterning at Polydimethylsiloxaneâ^'Acrylic Adhesive Interfaces. Langmuir, 2007, 23, 6966-6974.	3.5	79
25	Influence of grafting density on wall slip of a polymer melt on a polymer brush. Europhysics Letters, 1997, 38, 383-388.	2.0	76
26	Ultrathin films in wetting evidenced by x-ray reflectivity. Physical Review A, 1990, 41, 1963-1977.	2.5	70
27	Adhesion mechanisms at soft polymer interfaces. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 1425-1442.	3.4	70
28	Some remarks on JKR experiments. Journal of Adhesion Science and Technology, 1998, 12, 225-247.	2.6	68
29	Flow with slip at the wall: from simple to complex fluids. Comptes Rendus Physique, 2003, 4, 241-249.	0.9	67
30	Silica particles stabilized by long grafted polymer chains. Journal of Colloid and Interface Science, 1992, 150, 187-194.	9.4	63
31	Spreading of high molecular weight polymer melts on high-energy surfaces. Macromolecules, 1992, 25, 1267-1271.	4.8	62
32	Hydrodynamics of domain relaxation in a polymer monolayer. Physical Review E, 1995, 51, 5708-5720.	2.1	58
33	Hydrodynamic Interaction between a Spherical Particle and an Elastic Surface: A Gentle Probe for Soft Thin Films. Physical Review Letters, 2012, 108, 264501.	7.8	57
34	Effect of Nanometric-Scale Roughness on Slip at the Wall of Simple Fluids. Langmuir, 2006, 22, 6843-6850.	3.5	56
35	Adhesion energy between polymer networks and solid surfaces modified by polymer attachment. Faraday Discussions, 1994, 98, 55-65.	3.2	52
36	Adhesion Promotion Mechanisms at Isotactic Polypropylene/Polyamide 6 Interfaces:Â Role of the Copolymer Architecture. Macromolecules, 2004, 37, 6814-6822.	4.8	52

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37	Evidence for a new spreading regime between partial and total wetting. Physical Review Letters, 1991, 66, 185-188.	7.8	51
38	Sliding Friction at a Rubber/Brush Interface. Langmuir, 2004, 20, 4523-4529.	3.5	51
39	Static and dynamic behaviour of walls in nematics above a Freedericks transition. Solid State Communications, 1972, 11, 1499-1501.	1.9	50
40	Neutron Reflectometry Study of the Segment-Density Profiles in End-Grafted and Irreversibly Adsorbed Layers of Polymer in Good Solvents. Macromolecules, 2001, 34, 8694-8700.	4.8	49
41	Final Stages of Spreading of Polymer Droplets on Smooth Solid Surfaces. Europhysics Letters, 1988, 6, 431-436.	2.0	48
42	Mechanical tuning of adhesion through micro-patterning of elastic surfaces. Soft Matter, 2011, 7, 2543.	2.7	46
43	Observation of wall motions in nematics. Solid State Communications, 1972, 10, 697-700.	1.9	43
44	Unsteady-State Flow of Flexible Polymers in Porous Media. Journal of Colloid and Interface Science, 2001, 234, 269-283.	9.4	42
45	Polymer dynamics applied to PEEK matrix composite welding. Aerospace Science and Technology, 2005, 9, 233-240.	4.8	42
46	Effect of Surface Elasticity on the Rheology of Nanometric Liquids. Physical Review Letters, 2013, 111, 215701.	7.8	42
47	Effect of Dangling Chains on Adhesion Hysteresis of Silicone Elastomers, Probed by JKR Test. Langmuir, 2003, 19, 1396-1401.	3.5	41
48	The slip transition at the polymer-solid interface. Journal of Physics Condensed Matter, 1994, 6, A301-A304.	1.8	39
49	First Observation of the Undulation Mode in Birefringent Microemulsions by Quasielastic Light Scattering. Physical Review Letters, 1985, 54, 1686-1689.	7.8	37
50	Click Chemistry Grafting of Poly(ethylene glycol) Brushes to Alkyne-Functionalized Pseudobrushes. Langmuir, 2010, 26, 1304-1310.	3.5	37
51	Structure and Microdeformation of (iPP/iPP-g-MA)â”PA6 Reaction Bonded Interfaces. Macromolecules, 1998, 31, 6164-6176.	4.8	34
52	Contact Angle and Contact Angle Hysteresis Measurements Using the Capillary Bridge Technique. Langmuir, 2009, 25, 11188-11196.	3.5	34
53	Role of the Interfacial Orientation in Adhesion between Semicrystalline Polymers. Macromolecules, 2001, 34, 2932-2936.	4.8	33
54	Sliding friction at soft micropatterned elastomer interfaces. Faraday Discussions, 2012, 156, 255.	3.2	33

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55	Chemical modification of PDMS surface without impacting the viscoelasticity: Model systems for a better understanding of elastomer/elastomer adhesion and friction. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 468, 174-183.	4.7	33
56	Spreading of latex particles on a substrate. Europhysics Letters, 2002, 60, 717-723.	2.0	32
57	Capillary Bridge Formation and Breakage: A Test to Characterize Antiadhesive Surfaces. Journal of Physical Chemistry B, 2009, 113, 3769-3775.	2.6	31
58	Divergence of the bend elastic constant above a nematic to smectic a quasi second order phase transition. Physics Letters, Section A: General, Atomic and Solid State Physics, 1973, 44, 535-536.	2.1	30
59	Investigation of the slip transition at the melt polymer interface. Europhysics Letters, 1998, 43, 83-88.	2.0	30
60	Wall slip of complex fluids: Interfacial friction versus slip length. Physical Review Fluids, 2018, 3, .	2.5	28
61	Friction of Polymers: from PDMS Melts to PDMS Elastomers. ACS Macro Letters, 2018, 7, 112-115.	4.8	27
62	Spreading of non volatile liquids on smooth solid surfaces : role of long range forces. Revue De Physique AppliquÃ©e, 1988, 23, 1047-1054.	0.4	27
63	Adhesion and Deformation of a Single Latex Particle. Langmuir, 2000, 16, 6374-6376.	3.5	25
64	Molecular dynamics in grafted layers of poly(dimethylsiloxane). Journal of Chemical Physics, 2003, 118, 6052-6058.	3.0	25
65	Reptation and Tube Renewal in Entangled Polymer Solutions. Physical Review Letters, 1985, 55, 1078-1081.	7.8	24
66	The scattering by grafted polymers. Physica A: Statistical Mechanics and Its Applications, 1991, 172, 269-284.	2.6	24
67	Self-Diffusion in Chitosan Networks: From a Gelâ^'Gel Method to Fluorescence Recovery after Photobleaching by Fringe Pattern. Macromolecules, 2008, 41, 9376-9381.	4.8	24
68	Self-diffusion measurements in polymer solutions at the Î¸ temperature by forced Rayleigh light scattering. Macromolecules, 1986, 19, 2760-2765.	4.8	22
69	Direct Molecular Evidence of the Origin of Slip of Polymer Melts on Grafted Brushes. Macromolecules, 2016, 49, 2348-2353.	4.8	22
70	Molecular Control of Crack Tip Plasticity Mechanisms at a PPâ^'EPDM/PA6 Interface. Macromolecules, 2001, 34, 2702-2709.	4.8	21
71	Incidence of the molecular organization on friction at soft polymer interfaces. Soft Matter, 2011, 7, 8535.	2.7	21
72	The stickâ€“slip transition in highly entangled poly(styrene-butadiene) melts. Advances in Colloid and Interface Science, 2001, 94, 39-52.	14.7	20

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73	Quantitative Analysis of Interdigitation Kinetics between a Polymer Melt and a Polymer Brush. Macromolecules, 2013, 46, 6955-6962.	4.8	19
74	Polymerization-induced shrinkage in giant butadienic lipid vesicles. Langmuir, 1992, 8, 2595-2597.	3.5	15
75	Crystalline Orientation and Adhesion at Polypropylene/Polyamide 6 Interfaces Compatibilized with Syndiotactic Polypropyleneâ^'Polyamide 6 Diblock Copolymers. Macromolecules, 2004, 37, 6806-6813.	4.8	15
76	Cassie-Wenzelâ€“like transition in patterned soft elastomer adhesive contacts. Europhysics Letters, 2013, 101, 14001.	2.0	15
77	Characterization of glassâ€“epoxy adhesion using JKR methods and atomic force microscopy. Composites Part A: Applied Science and Manufacturing, 1999, 30, 95-109.	7.6	13
78	Interdigitation between surface-anchored polymer chains and an elastomer: Consequences for adhesion promotion. Europhysics Letters, 2004, 68, 543-549.	2.0	13
79	Friction mechanisms at polymerâ€“solid interfaces. Comptes Rendus Chimie, 2006, 9, 80-89.	0.5	13
80	Comparison of the Slip of a PDMS Melt on Weakly Adsorbing Surfaces Measured by a New Photobleaching-Based Technique. Macromolecules, 2017, 50, 5592-5598.	4.8	13
81	The study of grafted polymer layers by neutron scattering. Journal of Physics Condensed Matter, 1990, 2, SA317-SA321.	1.8	12
82	Wetting and Dewetting Transition: An Efficient Toolbox for Characterizing Low-Energy Surfaces. Langmuir, 2010, 26, 15345-15349.	3.5	12
83	Temperature-Controlled Slip of Polymer Melts on Ideal Substrates. Physical Review Letters, 2018, 121, 177802.	7.8	12
84	Adhesion evaluation for a stratified system in JKR geometry. Journal of Adhesion Science and Technology, 2001, 15, 1055-1078.	2.6	11
85	Adhesion promotion through controlled surface modifications. Macromolecular Symposia, 2000, 149, 197-206.	0.7	10
86	Nanorheology with a Conventional Rheometer: Probing the Interfacial Properties in Compatibilized Multinanolayer Polymer Films. ACS Macro Letters, 2019, 8, 1309-1315.	4.8	10
87	Reverse anisotropy of the diffusion coefficients in a polymeric nematic medium. Physical Review Letters, 1987, 59, 210-212.	7.8	9
88	Influence of grafting on the glass transition temperature of PS thin films. European Physical Journal E, 2017, 40, 11.	1.6	9
89	Diffuse Interface in Oil-in-Water Microemulsions at Low Surfactant Concentration of the Brine-Toluene- n -Butanol-Sodium Dodecyl Sulfate System. Europhysics Letters, 1987, 3, 213-220.	2.0	7
90	Formation of diblock copolymers at PP/PA6 interfaces and their role in local crystalline organization under fast heating and cooling conditions. Polymer, 2012, 53, 5138-5145.	3.8	7

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91	Synthesis of wellâ€defined poly(dimethylsiloxane) telechelics having nitrobenzoxadiazole fluorescent chainâ€ends via thiolâ€ene coupling. Journal of Polymer Science Part A, 2012, 50, 1827-1833.	2.3	7
92	Synthesis and characterization of polystyrene networks containing unattached photochromic polystyrene: preliminary results of self-diffusion measurements. Polymer, 1989, 30, 549-552.	3.8	6
93	Molecular dynamics in thin (grafted) polymer layers. Colloid and Polymer Science, 2004, 282, 946-954.	2.1	6
94	Modulation of Adhesion at Acrylic Adhesive-Silicone Elastomer Interfaces. Journal of Adhesion, 2006, 82, 919-932.	3.0	6
95	Viscoelasticity-Induced Onset of Slip at the Wall for Polymer Fluids. ACS Macro Letters, 2020, 9, 924-928.	4.8	6
96	Controlling interfacial instabilities in PP/EVOH coextruded multilayer films through the surface density of interfacial copolymers. Polymer Engineering and Science, 2020, 60, 1420-1429.	3.1	6
97	Diffuse interfacial regions between oil/water microemulsions at low surfactant concentration: phase diagram, composition, and structure investigations. The Journal of Physical Chemistry, 1987, 91, 4536-4544.	2.9	4
98	Entangled polymers. Contemporary Physics, 1988, 29, 579-595.	1.8	4
99	The spreading of drops on solid surfaces. Journal of Physics Condensed Matter, 1990, 2, SA421-SA425.	1.8	4
100	Adhesion at Poly(Butylacrylate)â€“Poly(Dimethylsiloxane) Interfaces. Journal of Adhesion, 2007, 83, 741-760.	3.0	4
101	Quantitative determination of interfacial copolymers from co-extruded films. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 529, 261-267.	4.7	4
102	Large slippage and depletion layer at the polyelectrolyte/solid interface. Soft Matter, 2019, 15, 6308-6317.	2.7	4
103	Nanotack test: adhesive behavior of single latex particles. Comptes Rendus Physique, 2000, 1, 1187-1196.	0.1	3
104	Sensing adsorption kinetics through slip velocity measurements of polymer melts. European Physical Journal E, 2018, 41, 83.	1.6	3
105	Surface anchored polymer: Role in adhesion and friction. Macromolecular Symposia, 1997, 121, 263-267.	0.7	1
106	Slip and Friction Mechanisms at Polymer Semi-Dilute Solutions/Solid Interfaces. Macromolecules, 2021, 54, 4910-4917.	4.8	1
107	Indenter du verre avec un liquide ?. , 2015, , 38-40.	0.1	1
108	Chains dynamics in entangled polymer solutions. Ferroelectrics, 1980, 30, 133-133.	0.6	0

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109	Interface entre polymÃ¨res semi-cristallins renforcÃ©es par des copolymÃ¨res diblocs. Annales De Chimie: Science Des Materiaux, 2003, 28, 29-42.	0.4	0
110	Sensing the Mechanical Properties of Supported Micro- to Nano-elastic Films. , 2014, , 575-614.		0