Frieder Mugele

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/9011912/publications.pdf

Version: 2024-02-01

237	11,332	30551	42259
papers	citations	56 h-index	96 g-index

258	258	258	11395
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Roughness induced rotational slowdown near the colloidal glass transition. Journal of Colloid and Interface Science, 2022, 607, 1709-1716.	5.0	7
2	Correlation between Electrostatic and Hydration Forces on Silica and Gibbsite Surfaces: An Atomic Force Microscopy Study. Langmuir, 2022, 38, 914-926.	1.6	24
3	Effects of Fluid Aging and Reservoir Temperature on Waterflooding in 2.5D Glass Micromodels. Energy & Fuels, 2022, 36, 1388-1401.	2.5	6
4	Absence of anomalous underscreening in highly concentrated aqueous electrolytes confined between smooth silica surfaces. Journal of Colloid and Interface Science, 2022, 622, 819-827.	5.0	15
5	Formation and Stability of Heterogeneous Organoâ€“Ionic Surface Layers on Geological Carbonates. Energy & Fuels, 2022, 36, 7414-7433.	2.5	6
6	Artificial Diagenesis of Carbonates: Temperature-Dependent Inorganic and Organic Modifications in Reservoir Mimetic Fluids. SPE Journal, 2021, 26, 3222-3236.	1.7	5
7	In-situ observation of reactive wettability alteration using algorithm-improved confocal Raman microscopy. Journal of Colloid and Interface Science, 2021, 584, 551-560.	5.0	10
8	Electrowettingâ€Assisted Generation of Ultrastable High Charge Densities in Composite Silicon Oxideâ€“Fluoropolymer Electret Samples for Electric Nanogenerators. Advanced Functional Materials, 2021, 31, 2007872.	7.8	11
9	A Model Configuration For Studying Stationary Grease Bleed In Rolling Bearings. Tribology Transactions, 2021, 64, 1127-1137.	1.1	5
10	Ultrasensitive Detection and In Situ Imaging of Analytes on Graphene Oxide Analogues Using Enhanced Raman Spectroscopy. Analytical Chemistry, 2021, 93, 12966-12972.	3.2	1
11	Towards enhanced oil recovery: Effects of ionic valency and pH on the adsorption of hydrolyzed polyacrylamide at model surfaces using QCM-D. Applied Surface Science, 2021, 560, 149995.	3.1	10
12	Response of crude oil deposited organic layers to brines of different salinity: An atomic force microscopy study on carbonate surfaces. Fuel, 2021, 302, 121129.	3.4	3
13	Electrowettingâ€Controlled Dropwise Condensation with Patterned Electrodes: Physical Principles, Modeling, and Application Perspectives. Advanced Materials Interfaces, 2021, 8, 2001317.	1.9	10
14	Facetâ€Dependent Surface Charge and Hydration of Semiconducting Nanoparticles at Variable pH. Advanced Materials, 2021, 33, e2106229.	11.1	33
15	Nonmonotonic Coupled Dissolutionâ€Precipitation Reactions at the Mineralâ€“Water Interface. Advanced Functional Materials, 2021, 31, 2106396.	7.8	5
16	Interlayer Cation-Controlled Adsorption of Carbon Dioxide in Anhydrous Montmorillonite Clay. Journal of Physical Chemistry C, 2021, 125, 27159-27169.	1.5	12
17	Nonmonotonic Coupled Dissolutionâ€Precipitation Reactions at the Mineralâ€Water Interface (Adv.) Tj ETQq1 1 0.784314 rgBT /Ove	7.8	0
18	Wetting ridge assisted programmed magnetic actuation of droplets on ferrofluid-infused surface. Nature Communications, 2021, 12, 7136.	5.8	51

#	Article	IF	Citations
19	Facetâ€Dependent Surface Charge and Hydration of Semiconducting Nanoparticles at Variable pH (Adv.) Tj ETQq1 1 0.784314 rgBT /Ov	11.1	0
20	Electrically Controlled Localized Charge Trapping at Amorphous Fluoropolymerâ€“Electrolyte Interfaces. Small, 2020, 16, e1905726.	5.2	41
21	Algorithm-improved high-speed and non-invasive confocal Raman imaging of 2D materials. National Science Review, 2020, 7, 620-628.	4.6	20
22	Energy Harvesting from Drops Impacting onto Charged Surfaces. Physical Review Letters, 2020, 125, 078301.	2.9	104
23	Artificial Diagenesis of Carbonates: Temperature Dependent Inorganic and Organic Modifications in Reservoir Mimetic Fluids. , 2020, , .		2
24	Chargeâ€Trappingâ€Based Electricity Generation: Charge Trappingâ€Based Electricity Generator (CTEG): An Ultrarobust and High Efficiency Nanogenerator for Energy Harvesting from Water Droplets (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5	11.0	3
25	Optical measurements of oil release from calcite packed beds in microfluidic channels. Microfluidics and Nanofluidics, 2020, 24, 1.	1.0	6
26	Spherical probes for simultaneous measurement of rotational and translational diffusion in 3 dimensions. Journal of Colloid and Interface Science, 2020, 576, 322-329.	5.0	10
27	Charge Trappingâ€Based Electricity Generator (CTEG): An Ultrarobust and High Efficiency Nanogenerator for Energy Harvesting from Water Droplets. Advanced Materials, 2020, 32, e2001699.	11.1	99
28	Electroviscous effects on the squeezing flow of thin electrolyte solution films. Journal of Fluid Mechanics, 2020, 888, .	1.4	8
29	Electrochemically Induced Changes in TiO₂ and Carbon Films Studied with QCM-D. ACS Applied Energy Materials, 2020, 3, 1775-1783.	2.5	7
30	Mineral Interfaces and Oil Recovery: A Microscopic View on Surface Reconstruction, Organic Modification, and Wettability Alteration of Carbonates. Energy & Fuels, 2020, 34, 5611-5622.	2.5	13
31	Aging brine-dependent deposition of crude oil components onto mica substrates, and its consequences for wettability. Fuel, 2020, 274, 117856.	3.4	6
32	Characterizing the fluidâ€“matrix affinity in an organogel from the growth dynamics of oil stains on blotting paper. Soft Matter, 2020, 16, 4200-4209.	1.2	9
33	Slippery when wet: mobility regimes of confined drops in electrowetting. Soft Matter, 2019, 15, 7063-7070.	1.2	11
34	Combined microfluidicsâ€“confocal Raman microscopy platform for studying enhanced oil recovery mechanisms. Journal of Raman Spectroscopy, 2019, 50, 996-1007.	1.2	7
35	Soft electrowetting. Soft Matter, 2019, 15, 6469-6475.	1.2	12
36	Droplet motion electrically controlled. Nature, 2019, 572, 445-446.	13.7	6

#	Article	IF	Citations
37	Wetting of Mineral Surfaces by Fatty-Acid-Laden Oil and Brine: Carbonate Effect at Elevated Temperature. Energy & Fuels, 2019, 33, 9446-9456.	2.5	10
38	Large-Area High-Contrast Hydrophobic/Hydrophilic Patterned Surface for Robust Electrowetting Devices. ACS Applied Nano Materials, 2019, 2, 1018-1026.	2.4	10
39	Response to â€œComment on â€˜How to make sticky surfaces slippery: Contact angle hysteresis in electrowetting with alternating voltageâ€™â€•[Appl. Phys. Lett. 114, 116101 (2019)]. Applied Physics Letters, 2019, 114, 116102.	1.5	1
40	Device for rheometry, impedance spectroscopy, and electrochemistry on fluid electrodes. Review of Scientific Instruments, 2019, 90, 025112.	0.6	2
41	Ion-Specific and pH-Dependent Hydration of Micaâ€“Electrolyte Interfaces. Langmuir, 2019, 35, 5737-5745.	1.6	49
42	X-ray Photoelectron Spectroscopy with Electrical Modulation Can Be Used to Probe Electrical Properties of Liquids and Their Interfaces at Different Stages. Langmuir, 2019, 35, 16989-16999.	1.6	7
43	Behaviour of flexible superhydrophobic striped surfaces during (electro-)wetting of a sessile drop. Soft Matter, 2019, 15, 9840-9848.	1.2	9
44	A method for reversible control over nano-roughness of colloidal particles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2019, 560, 50-58.	2.3	12
45	Design and wavefront characterization of an electrically tunable aspherical optofluidic lens. Optics Express, 2019, 27, 17601.	1.7	14
46	Salinity-dependent contact angle alteration in oil/brine/silicate systems: The effect of temperature. Journal of Petroleum Science and Engineering, 2018, 165, 1040-1048.	2.1	16
47	pH-Dependence in facet-selective photo-deposition of metals and metal oxides on semiconductor particles. Journal of Materials Chemistry A, 2018, 6, 7500-7508.	5.2	26
48	Electroviscous Dissipation in Aqueous Electrolyte Films with Overlapping Electric Double Layers. Journal of Physical Chemistry B, 2018, 122, 933-946.	1.2	16
49	Numerical study of submicroparticle acoustophoresis using higher-order modes in a rectangular microchannel. Journal of Sound and Vibration, 2018, 415, 169-183.	2.1	3
50	Controlling shedding characteristics of condensate drops using electrowetting. Applied Physics Letters, 2018, 113, .	1.5	27
51	Bubble formation in catalyst pores; curse or blessing?. Reaction Chemistry and Engineering, 2018, 3, 826-833.	1.9	8
52	Cationic Hofmeister Series of Wettability Alteration in Micaâ€“Waterâ€“Alkane Systems. Langmuir, 2018, 34, 13574-13583.	1.6	10
53	Breath Figures under Electrowetting: Electrically Controlled Evolution of Drop Condensation Patterns. Physical Review Letters, 2018, 120, 214502.	2.9	45
54	Contact angle hysteresis and oil film lubrication in electrowetting with two immiscible liquids. Applied Physics Letters, 2018, 112, 203703.	1.5	27

#	Article	IF	Citations
55	Mechanical History Dependence in Carbon Black Suspensions for Flow Batteries: A Rheo-Impedance Study. Langmuir, 2017, 33, 1629-1638.	1.6	69
56	Spontaneous electrification of fluoropolymerâ€“water interfaces probed by electrowetting. Faraday Discussions, 2017, 199, 29-47.	1.6	38
57	Eâ€MALDI: optimized conditions during electrowettingâ€enhanced drop drying for MALDIâ€MS. Journal of Mass Spectrometry, 2017, 52, 405-410.	0.7	4
58	Jumping drops on hydrophobic surfaces, controlling energy transfer by timed electric actuation. Soft Matter, 2017, 13, 4856-4863.	1.2	14
59	Salinity-Dependent Contact Angle Alteration in Oil/Brine/Silicate Systems: the Critical Role of Divalent Cations. Langmuir, 2017, 33, 3349-3357.	1.6	87
60	Impact of surface defects on the surface charge of gibbsite nanoparticles. Nanoscale, 2017, 9, 4721-4729.	2.8	27
61	Roadmap for optofluidics. Journal of Optics (United Kingdom), 2017, 19, 093003.	1.0	78
62	Nanotribology and voltage-controlled friction: general discussion. Faraday Discussions, 2017, 199, 349-376.	1.6	0
63	Electrovariable nanoplasmonics: general discussion. Faraday Discussions, 2017, 199, 603-613.	1.6	1
64	Electroactuators: from understanding to micro-robotics and energy conversion: general discussion. Faraday Discussions, 2017, 199, 525-545.	1.6	2
65	Influence of electrochemical cycling on the rheo-impedance of anolytes for Li-based Semi Solid Flow Batteries. Electrochimica Acta, 2017, 251, 388-395.	2.6	19
66	Probing the Surface Charge on the Basal Planes of Kaolinite Particles with High-Resolution Atomic Force Microscopy. Langmuir, 2017, 33, 14226-14237.	1.6	65
67	Electrotunable wetting, and micro- and nanofluidics: general discussion. Faraday Discussions, 2017, 199, 195-237.	1.6	2
68	Aberration control in adaptive optics: a numerical study of arbitrarily deformable liquid lenses. Optics Express, 2017, 25, 6700.	1.7	20
69	Recent Developments in Optofluidic Lens Technology. Micromachines, 2016, 7, 102.	1.4	56
70	Design of a hybrid advective-diffusive microfluidic system with ellipsometric detection for studying adsorption. Biomicrofluidics, 2016, 10, 034113.	1.2	1
71	e-MALDI: An Electrowetting-Enhanced Drop Drying Method for MALDI Mass Spectrometry. Analytical Chemistry, 2016, 88, 4669-4675.	3.2	56
72	Facile synthesis, characterization and catalytic activity of nanoporous supports loaded with monometallic and bimetallic nanoparticles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 491, 57-61.	2.3	1

#	Article	IF	Citations
73	Surfactant induced autophobing. Soft Matter, 2016, 12, 4562-4571.	1.2	28
74	Numerical simulation of astigmatic liquid lenses tuned by a stripe electrode. Optics Express, 2016, 24, 4210.	1.7	17
75	Electrode-assisted trapping and release of droplets on hydrophilic patches in a hydrophobic microchannel. Microfluidics and Nanofluidics, 2016, 20, 1.	1.0	12
76	Analytic model for the electrowetting properties of oil-water-solid systems. Physical Review E, 2016, 93, 042606.	0.8	8
77	Insights From Ion Adsorption and Contact-Angle Alteration at Mineral Surfaces for Low-Salinity Waterflooding. SPE Journal, 2016, 21, 1204-1213.	1.7	39
78	Numerical analysis of electrically tunable aspherical optofluidic lenses. Optics Express, 2016, 24, 14672.	1.7	12
79	Ion effects in the adsorption of carboxylate on oxide surfaces, studied with quartz crystal microbalance. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 494, 30-38.	2.3	24
80	Atomic structure and surface defects at mineral-water interfaces probed by in situ atomic force microscopy. Nanoscale, 2016, 8, 8220-8227.	2.8	30
81	Characterization of the surface charge distribution on kaolinite particles using high resolution atomic force microscopy. Geochimica Et Cosmochimica Acta, 2016, 175, 100-112.	1.6	70
82	Apparent wall-slip of colloidal hard-sphere suspensions in microchannel flow. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 491, 50-56.	2.3	12
83	Dynamics of colloids confined in microcylinders. Soft Matter, 2016, 12, 1621-1630.	1.2	5
84	Charge inversion and colloidal stability of carbon black in battery electrolyte solutions. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 489, 461-468.	2.3	39
85	Bouncing on thin air: how squeeze forces in the air film during non-wetting droplet bouncing lead to momentum transfer and dissipation. Journal of Fluid Mechanics, 2015, 776, 531-567.	1.4	29
86	Amplitude modulation atomic force microscopy, is acoustic driving in liquid quantitatively reliable?. Nanotechnology, 2015, 26, 385703.	1.3	14
87	Stability Limits of Capillary Bridges: How Contact Angle Hysteresis Affects Morphology Transitions of Liquid Microstructures. Physical Review Letters, 2015, 114, 234501.	2.9	20
88	Droplet Manipulations in Two Phase Flow Microfluidics. Micromachines, 2015, 6, 1768-1793.	1.4	59
89	Interfacial Assembly of Surfactant-Decorated Nanoparticles: On the Rheological Description of a Colloidal 2D Glass. Langmuir, 2015, 31, 6289-6297.	1.6	59
90	In-chip direct laser writing of a centimeter-scale acoustic micromixer. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2015, 14, 1.	1.0	17

#	Article	IF	Citations
91	Superamphiphobic Surfaces. , 2015, , 57-69.		4
92	Ion adsorption-induced wetting transition in oil-water-mineral systems. Scientific Reports, 2015, 5, 10519.	1.6	119
93	Air cushioning in droplet impact. I. Dynamics of thin films studied by dual wavelength reflection interference microscopy. Physics of Fluids, 2015, 27, .	1.6	46
94	Detection of ion adsorption at solidâ€“liquid interfaces using internal reflection ellipsometry. Sensors and Actuators B: Chemical, 2015, 210, 649-655.	4.0	25
95	Hard and soft colloids at fluid interfaces: Adsorption, interactions, assembly & rheology. Advances in Colloid and Interface Science, 2015, 222, 215-227.	7.0	172
96	Effects of shear and walls on the diffusion of colloids in microchannels. Physical Review E, 2015, 91, 052305.	0.8	14
97	Numerical investigation of dynamic effects for sliding drops on wetting defects. Physical Review E, 2015, 91, 023013.	0.8	13
98	On the shape of a droplet in a wedge: new insight from electrowetting. Soft Matter, 2015, 11, 7717-7721.	1.2	34
99	Air cushioning in droplet impact. II. Experimental characterization of the air film evolution. Physics of Fluids, 2015, 27, .	1.6	57
100	A numerical technique to simulate display pixels based on electrowetting. Microfluidics and Nanofluidics, 2015, 19, 465-482.	1.0	47
101	Measuring Advection and Diffusion of Colloids in Shear Flow. Langmuir, 2015, 31, 5689-5700.	1.6	14
102	Imaging local acoustic pressure in microchannels. Applied Optics, 2015, 54, 6482.	2.1	12
103	High-throughput sorting of drops in microfluidic chips using electric capacitance. Biomicrofluidics, 2015, 9, 044116.	1.2	13
104	Extracting local surface charges and charge regulation behavior from atomic force microscopy measurements at heterogeneous solid-electrolyte interfaces. Nanoscale, 2015, 7, 16298-16311.	2.8	63
105	Wettability-independent bouncing on flat surfaces mediated by thin air films. Nature Physics, 2015, 11, 48-53.	6.5	197
106	Sorptionâ€Determined Deposition of Platinum on Wellâ€Defined Platelike WO₃. Angewandte Chemie - International Edition, 2014, 53, 12476-12479.	7.2	37
107	Trapping of drops by wetting defects. Nature Communications, 2014, 5, 3559.	5.8	84
108	Electrostatic potential wells for on-demand drop manipulation in microchannels. Lab on A Chip, 2014, 14, 883.	3.1	42

#	Article	IF	Citations
109	Equation of state and adsorption dynamics of soft microgel particles at an airâ€“water interface. Soft Matter, 2014, 10, 7045-7050.	1.2	58
110	Encased cantilevers for low-noise force and mass sensing in liquids. , 2014, , .		8
111	Optofluidic lens with tunable focal length and asphericity. Scientific Reports, 2014, 4, 6378.	1.6	85
112	Direct observation of ionic structure at solid-liquid interfaces: a deep look into the Stern Layer. Scientific Reports, 2014, 4, 4956.	1.6	160
113	Sample preconcentration inside sessile droplets using electrowetting. Biomicrofluidics, 2013, 7, 44102.	1.2	18
114	Stability and interactions in mixed monolayers of fatty acid derivatives on Artificial Sea Water. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 433, 200-211.	2.3	22
115	Salt Dependent Stability of Stearic Acid Langmuirâ€“Blodgett Films Exposed to Aqueous Electrolytes. Langmuir, 2013, 29, 5150-5159.	1.6	35
116	Atomic force microscopy of confined liquids using the thermal bending fluctuations of the cantilever. Physical Review E, 2013, 87, 062406.	0.8	17
117	Electrically Tunable Wetting Defects Characterized by a Simple Capillary Force Sensor. Langmuir, 2013, 29, 9944-9949.	1.6	37
118	Electrowetting-driven oscillating drops sandwiched between two substrates. Physical Review E, 2013, 88, 053015.	0.8	28
119	Stickâ€“Slip to Sliding Transition of Dynamic Contact Lines under AC Electrowetting. Langmuir, 2013, 29, 15116-15121.	1.6	17
120	High speed adaptive liquid microlens array. Optics Express, 2012, 20, 18180.	1.7	67
121	Non-monotonic variation of viscous dissipation in confined liquid films: A reconciliation. Europhysics Letters, 2012, 97, 46001.	0.7	16
122	Say goodbye to coffee stains. Physics World, 2012, 25, 33-37.	0.0	9
123	Shaken not stirred â€”On internal flow patterns in oscillating sessile drops. Europhysics Letters, 2012, 98, 34003.	0.7	29
124	Can Confinement-Induced Variations in the Viscous Dissipation be Measured?. Tribology Letters, 2012, 48, 1-9.	1.2	13
125	Use of electrowetting to measure dynamic interfacial tensions of a microdrop. Lab on A Chip, 2012, 12, 2832.	3.1	8
126	Buoyant Droplets on Functional Fibers. Langmuir, 2012, 28, 13300-13306.	1.6	29

#	Article	IF	Citations
127	Control of evaporating complex fluids through electrowetting. Soft Matter, 2012, 8, 10614.	1.2	59
128	Stability of stearic acid monolayers on Artificial Sea Water. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 407, 38-48.	2.3	49
129	Dynamics of Collapse of Air Films in Drop Impact. Physical Review Letters, 2012, 108, 074505.	2.9	121
130	Unobtrusive graphene coatings. Nature Materials, 2012, 11, 182-183.	13.3	22
131	Influence of Cationic Composition and pH on the Formation of Metal Stearates at Oilâ€“Water Interfaces. Langmuir, 2011, 27, 8738-8747.	1.6	25
132	Colloidal Dynamics Near a Particle-Covered Surface. Langmuir, 2011, 27, 12297-12303.	1.6	17
133	Electrically assisted drop sliding on inclined planes. Applied Physics Letters, 2011, 98, .	1.5	47
134	Controlling flow patterns in oscillating sessile drops by breaking azimuthal symmetry. Applied Physics Letters, 2011, 99, .	1.5	26
135	Capillary Stokes drift: a new driving mechanism for mixing in AC-electrowetting. Lab on A Chip, 2011, 11, 2011.	3.1	75
136	Suppressing the coffee stain effect: how to control colloidal self-assembly in evaporating drops using electrowetting. Soft Matter, 2011, 7, 4954.	1.2	252
137	Electrowetting driven optical switch and tunable aperture. Optics Express, 2011, 19, 15525.	1.7	122
138	Drops on functional fibers: from barrels to clamshells and back. Soft Matter, 2011, 7, 5138.	1.2	90
139	Confinement-dependent damping in a layered liquid. Journal of Physics Condensed Matter, 2011, 23, 112206.	0.7	11
140	Interfacial tension measurements with microfluidic tapered channels. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 389, 38-42.	2.3	27
141	Electric-fieldâ€“driven instabilities on superhydrophobic surfaces. Europhysics Letters, 2011, 93, 56001.	0.7	34
142	Electrical Switching of Wetting States on Superhydrophobic Surfaces: A Route Towards Reversible Cassie-to-Wenzel Transitions. Physical Review Letters, 2011, 106, 014501.	2.9	137
143	A microfluidic platform for on-demand formation and merging of microdroplets using electric control. Biomicrofluidics, 2011, 5, 11101.	1.2	45
144	Electrostatic interaction forces in aqueous salt solutions of variable concentration and valency. Nanotechnology, 2011, 22, 305706.	1.3	65

#	Article	IF	Citations
145	Droplets Formation and Merging in Two-Phase Flow Microfluidics. International Journal of Molecular Sciences, 2011, 12, 2572-2597.	1.8	246
146	Small Amplitude Atomic Force Spectroscopy. Nanoscience and Technology, 2011, , 39-58.	1.5	1
147	Fundamentals of Electrowetting and Applications in Microsystems. , 2011, , 85-125.		6
148	10.1063/1.3533362.1. , 2011, , .		0
149	Do Epitaxy and Temperature Affect Oscillatory Solvation Forces?. Langmuir, 2010, 26, 13245-13250.	1.6	13
150	Electrowetting: A versatile tool for drop manipulation, generation, and characterization. Advances in Colloid and Interface Science, 2010, 161, 115-123.	7.0	75
151	Capillarity-driven dynamics of waterâ€“alcohol mixtures in nanofluidic channels. Microfluidics and Nanofluidics, 2010, 9, 123-129.	1.0	47
152	A simple method to determine the surface charge in microfluidic channels. Electrophoresis, 2010, 31, 563-569.	1.3	14
153	Electrothermally driven flows in ac electrowetting. Physical Review E, 2010, 81, 015303.	0.8	61
154	Instability of Confined Water Films between Elastic Surfaces. Langmuir, 2010, 26, 3280-3285.	1.6	7
155	Anisotropic and Hindered Diffusion of Colloidal Particles in a Closed Cylinder. Langmuir, 2010, 26, 16722-16729.	1.6	56
156	Aging in dense suspensions of soft thermosensitive microgel particles studied with particle-tracking microrheology. Physical Review E, 2010, 81, 011404.	0.8	24
157	Dissipation and oscillatory solvation forces in confined liquids studied by small-amplitude atomic force spectroscopy. Nanotechnology, 2010, 21, 325703.	1.3	53
158	On the Shape of Surface Nanobubbles. Langmuir, 2010, 26, 260-268.	1.6	147
159	Microscopic shape and contact angle measurement at a superhydrophobic surface. Faraday Discussions, 2010, 146, 49.	1.6	47
160	A hybrid microfluidic chip with electrowetting functionality using ultraviolet (UV)-curable polymer. Lab on A Chip, 2010, 10, 1550.	3.1	33
161	Influence of confinement by smooth and rough walls on particle dynamics in dense hard-sphere suspensions. Physical Review E, 2009, 80, 061403.	0.8	51
162	Mapping of spatiotemporal heterogeneous particle dynamics in living cells. Physical Review E, 2009, 79, 051910.	0.8	35

#	Article	IF	Citations
163	To merge or not to merge .... Nature, 2009, 461, 356-356.	13.7	11
164	Fundamental challenges in electrowetting: from equilibrium shapes to contact angle saturation and drop dynamics. Soft Matter, 2009, 5, 3377.	1.2	229
165	Hydrodynamic resistance of single confined moving drops in rectangular microchannels. Lab on A Chip, 2009, 9, 982-990.	3.1	125
166	Microfluidic valves with integrated structured elastomeric membranes for reversible fluidic entrapment and in situ channel functionalization. Lab on A Chip, 2009, 9, 1461.	3.1	7
167	Microfluidics as a functional tool for cell mechanics. Biomicrofluidics, 2009, 3, 012006.	1.2	90
168	Electrowetting of Complex Fluids: Perspectives for Rheometry on Chip. Langmuir, 2009, 25, 1245-1252.	1.6	17
169	On the origins of the universal dynamics of endogenous granules in mammalian cells. MCB Molecular and Cellular Biomechanics, 2009, 6, 191-201.	0.3	1
170	Electrowetting --A versatile tool for controlling microdrop generation. European Physical Journal E, 2008, 26, 91-96.	0.7	42
171	Electrowetting-Based Microdrop Tensiometer. Langmuir, 2008, 24, 10549-10551.	1.6	67
172	Phase Selection in Capillary Breakup in AC Electric Fields. Langmuir, 2008, 24, 11847-11850.	1.6	8
173	Age-dependent Relaxation Times of Soft Colloidal Suspensions with Tunable Glassiness. AIP Conference Proceedings, 2008, , .	0.3	0
174	Electrowetting-enhanced microfluidic device for drop generation. Applied Physics Letters, 2008, 93, .	1.5	44
175	Geometry-controlled droplet generation in head-on microfluidic devices. Applied Physics Letters, 2008, 93, .	1.5	35
176	Atomic force microscopy cantilever dynamics in liquid in the presence of tip sample interaction. Applied Physics Letters, 2008, 93, .	1.5	19
177	How to make sticky surfaces slippery: Contact angle hysteresis in electrowetting with alternating voltage. Applied Physics Letters, 2008, 92, .	1.5	177
178	Glass Transition and Aging in Dense Suspensions of Thermosensitive Microgel Particles. Physical Review Letters, 2008, 101, 238301.	2.9	76
179	Direct Observation of a Nonequilibrium Electro-Osmotic Instability. Physical Review Letters, 2008, 101, 236101.	2.9	260
180	Electrowetting-controlled droplet generation in a microfluidic flow-focusing device. Journal of Physics Condensed Matter, 2007, 19, 462101.	0.7	37

#	Article	IF	Citations
181	Nanometer-Resolved Collective Micromeniscus Oscillations through Optical Diffraction. Physical Review Letters, 2007, 99, 214501.	2.9	27
182	Rheological properties of aging thermosensitive suspensions. Physical Review E, 2007, 76, 021404.	0.8	32
183	Marangoni flow on an inkjet nozzle plate. Applied Physics Letters, 2007, 91, 204102.	1.5	32
184	Scaling of interface displacement in a microfluidic comparator. Applied Physics Letters, 2007, 90, 114109.	1.5	22
185	Equilibrium drop surface profiles in electric fields. Journal of Physics Condensed Matter, 2007, 19, 375112.	0.7	114
186	Self-Excited Drop Oscillations in Electrowetting. Langmuir, 2007, 23, 5173-5179.	1.6	33
187	Fragmentation and Erosion of Two-Dimensional Aggregates in Shear Flow. Langmuir, 2007, 23, 2352-2361.	1.6	35
188	Micromachined Fabryâ"PÃ©rot Interferometer with Embedded Nanochannels for Nanoscale Fluid Dynamics. Nano Letters, 2007, 7, 345-350.	4.5	60
189	Fabrication, mechanical testing and application of high-pressure glass microreactor chips. Chemical Engineering Journal, 2007, 131, 163-170.	6.6	117
190	Volume phase transition of â€œsmartâ€•microgels in bulk solution and adsorbed at an interface: A combined AFM, dynamic light, and small angle neutron scattering study. Polymer, 2007, 48, 245-254.	1.8	115
191	Restructuring and Break-Up of Two-Dimensional Aggregates in Shear Flow. Langmuir, 2006, 22, 4959-4967.	1.6	28
192	Microrheology of Aggregated Emulsion Droplet Networks, Studied with AFMâ"CSLM. Langmuir, 2006, 22, 560-574.	1.6	11
193	Linear viscoelastic properties of aging suspensions. Europhysics Letters, 2006, 76, 74-80.	0.7	46
194	Electrical-fieldâ€"induced curvature increase on a drop of conducting liquid. Europhysics Letters, 2006, 74, 103-109.	0.7	19
195	Microfluidic mixing through electrowetting-induced droplet oscillations. Applied Physics Letters, 2006, 88, 204106.	1.5	192
196	Electrical Discharge in Capillary Breakup: Controlling the Charge of a Droplet. Physical Review Letters, 2006, 96, 016106.	2.9	38
197	Electrowetting-Induced Oil Film Entrapment and Instability. Physical Review Letters, 2006, 97, 167801.	2.9	73
198	Electrowetting: a convenient way to switchable wettability patterns. Journal of Physics Condensed Matter, 2005, 17, S559-S576.	0.7	73

#	Article	IF	Citations
199	Mechanical properties of molecularly thin lubricant layers: experimental methods and procedures. Journal of Physics Condensed Matter, 2005, 17, S319-S332.	0.7	6
200	Finite conductivity effects and apparent contact angle saturation in AC electrowetting. Materials Research Society Symposia Proceedings, 2005, 899, 1.	0.1	10
201	Mechanical properties of wet granular materials. Journal of Physics Condensed Matter, 2005, 17, S477-S502.	0.7	94
202	Nanofluidics: Molecularly thin lubricant layers under confinement. Molecular Simulation, 2005, 31, 489-494.	0.9	15
203	Capillary Forces between Spherical Particles Floating at a Liquidâ"Liquid Interface. Langmuir, 2005, 21, 11190-11200.	1.6	85
204	Electrowetting: from basics to applications. Journal of Physics Condensed Matter, 2005, 17, R705-R774.	0.7	1,650
205	Electrowetting-induced morphological transitions of fluid microstructures. Journal of Applied Physics, 2004, 95, 2918-2920.	1.1	42
206	Squeeze-out and wear: fundamental principles and applications. Journal of Physics Condensed Matter, 2004, 16, R295-R355.	0.7	73
207	Droplets profiles and wetting transitions in electric fields. Physica A: Statistical Mechanics and Its Applications, 2004, 339, 72-79.	1.2	16
208	Capillary Bridges in Electric Fields. Langmuir, 2004, 20, 6770-6777.	1.6	26
209	Wetting, Confinement, and Drainage of Liquids. ACS Symposium Series, 2004, , 123-130.	0.5	0
210	Trends in Microfluidics with Complex Fluids. ChemPhysChem, 2003, 4, 1291-1298.	1.0	78
211	Nanofluidics: Viscous Dissipation in Layered Liquid Films. Physical Review Letters, 2003, 91, 166104.	2.9	98
212	Interface Profiles near Three-Phase Contact Lines in Electric Fields. Physical Review Letters, 2003, 91, 086101.	2.9	138
213	Mixing and Condensation in a Wet Granular Medium. Physical Review Letters, 2003, 90, 168702.	2.9	47
214	Dynamics of squeeze-out: Theory and experiments. Journal of Chemical Physics, 2003, 118, 11160-11167.	1.2	12
215	Self-excited oscillatory dynamics of capillary bridges in electric fields. Applied Physics Letters, 2003, 82, 4187-4189.	1.5	31
216	Collapse of molecularly thin lubricant layers between elastic substrates. Journal of Physics Condensed Matter, 2003, 15, S321-S330.	0.7	15

#	Article	IF	Citations
217	Nonlocal Dynamics of Spontaneous Imbibition Fronts. Physical Review Letters, 2002, 89, 104503.	2.9	46
218	Capillarity at the nanoscale: an AFM view. Journal of Adhesion Science and Technology, 2002, 16, 951-964.	1.4	56
219	Impact of Line Tension on the Equilibrium Shape of Liquid Droplets on Patterned Substrates. Langmuir, 2002, 18, 9771-9777.	1.6	38
220	Electrostatic stabilization of fluid microstructures. Applied Physics Letters, 2002, 81, 2303-2305.	1.5	113
221	Two-dimensional observation of drainage and layering transitions in confined liquids. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2002, 206, 105-113.	2.3	12
222	Capillary forces in tapping mode atomic force microscopy. Physical Review B, 2002, 66, .	1.1	260
223	Frictional Properties of Straight-Chain Alcohols and the Dynamics of Layering Transitions. Tribology Letters, 2002, 12, 123-129.	1.2	15
224	AFM Imaging of Liquid Structures: From Droplet Profiles to Molecular Interactions. , 2002, , 337-347.		2
225	Frictional properties of thin chain alcohol films. Journal of Chemical Physics, 2001, 114, 1831-1836.	1.2	20
226	Boundary lubrication: â€‚Dynamics of squeeze-out. Physical Review E, 2001, 63, 055103.	0.8	21
227	Dynamics of Layering Transitions in Confined Liquids. Physical Review Letters, 2000, 84, 5796-5799.	2.9	53
228	Structure of Confined Films of Chain Alcoholsâ€. Journal of Physical Chemistry B, 2000, 104, 3140-3144.	1.2	40
229	The influence of tipâ€“sample interaction on step fluctuations on Ag(111). Surface Science, 1998, 400, 80-86.	0.8	20
230	STM investigation of the island growth of gold on WS2 and WSe2. Surface Science, 1998, 402-404, 409-412.	0.8	20
231	New design of a variable-temperature ultrahigh vacuum scanning tunneling microscope. Review of Scientific Instruments, 1998, 69, 1765-1769.	0.6	12
232	Step roughness on Ag(111) investigated by STM: a systematic study of tip influence. Surface Science, 1997, 377-379, 62-65.	0.8	8
233	A simple, ultrahigh vacuum compatible scanning tunneling microscope for use at variable temperatures. Review of Scientific Instruments, 1996, 67, 2557-2559.	0.6	20
234	On the structure of thin4He films on solid hydrogen. Journal of Low Temperature Physics, 1994, 96, 177-184.	0.6	7

#	Article	IF	Citations
235	Wigner crystallization of two-dimensional electron systems on solid H2-films. European Physical Journal Special Topics, 1993, 03, C2-45-C2-48.	0.2	0
236	Possible correlation effects of surface state electrons on a solid hydrogen film. Journal of Low Temperature Physics, 1992, 89, 743-746.	0.6	2
237	Reappraisal of Unrealised & amp; Novel Thermal Control Issues For Applications In Future Spacecraft. , 0, , .		4