# Frieder Mugele

List of Publications by Year
in descending order

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|---|---|---|---|
| 237 papers | 11,332 citations | 26567 56 h-index | 37111 96 g-index |
| 258 all docs | 258 docs citations | 258 times ranked | 9905 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 TiO<sub>2</sub> 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 |

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| 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 |

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| 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 |

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| 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 |

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| 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 WO<sub>3</sub>. 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 |

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| 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 |

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|---|---|---|---|
| 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 |

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| 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 |

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|---|---|---|---|
| 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 |
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