Edward Bormashenko

List of Publications by Year
in descending order

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298	9,714	41627	56606
papers	citations	51 h-index	87 g-index

343	343	343	7932
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Three scenarios of freezing of liquid marbles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 636, 128125.	2.3	5
2	Rotating Minimal Thermodynamic Systems. Entropy, 2022, 24, 168.	1.1	0
3	Shannon (Information) Measures of Symmetry for 1D and 2D Shapes and Patterns. Applied Sciences (Switzerland), 2022, 12, 1127.	1.3	3
4	On the universality of shapes of the freezing water droplets. Colloids and Interface Science Communications, 2022, 47, 100590.	2.0	16
5	Magnetic Entropic Forces Emerging in the System of Elementary Magnets Exposed to the Magnetic Field. Entropy, 2022, 24, 299.	1.1	1
6	Thermophoretic levitation of solid particles at atmospheric pressure. Advanced Powder Technology, 2022, 33, 103497.	2.0	4
7	Effect of asymmetric cooling of sessile droplets on orientation of the freezing tip. Journal of Colloid and Interface Science, 2022, 620, 179-186.	5.0	14
8	Branched droplet clusters and the Kramers theorem. Physical Review E, 2022, 105, .	0.8	0
9	A hierarchical levitating cluster containing transforming small aggregates of water droplets. Microfluidics and Nanofluidics, 2022, 26, .	1.0	2
10	From Chaos to Ordering: New Studies in the Shannon Entropy of 2D Patterns. Entropy, 2022, 24, 802.	1.1	2
11	Levitating clusters of fluorinated fumed silica nanoparticles enable manufacture of liquid marbles: Co-occurrence of interfacial, thermal and electrostatic events. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2022, 649, 129453.	2.3	2
12	Hierarchical liquid marbles formed using floating hydrophobic powder and levitating water droplets. Journal of Colloid and Interface Science, 2022, 626, 466-474.	5.0	2
13	Quantification of ordering in active light driven colloids. Journal of Colloid and Interface Science, 2021, 586, 866-875.	5.0	10
14	Interfacial Crystallization within Janus Saline Marbles. Journal of Physical Chemistry C, 2021, 125, 1414-1420.	1.5	6
15	Survival of Virus Particles in Water Droplets: Hydrophobic Forces and Landauerâ€™s Principle. Entropy, 2021, 23, 181.	1.1	13
16	Topology of eeg wave fronts. Cognitive Neurodynamics, 2021, 15, 887-896.	2.3	0
17	Bioinspired oxygen selective membrane for Znâ€“air batteries. Journal of Materials Science, 2021, 56, 9382-9394.	1.7	8
18	Nervous Activity of the Brain in Five Dimensions. Biophysica, 2021, 1, 38-47.	0.6	1

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19	Robust icephobic coating based on the spiky fluorinated Al2O3 particles. Scientific Reports, 2021, 11, 5394.	1.6	17
20	Oscillatory Reversible Osmotic Growth of Sessile Saline Droplets on a Floating Polydimethylsiloxane Membrane. Fluids, 2021, 6, 232.	0.8	2
21	Osmotic evolution of composite liquid marbles. Journal of Colloid and Interface Science, 2021, 592, 167-173.	5.0	5
22	Manufacturing, Properties, and Application of Nanosized Superhydrophobic Spherical Silicon Dioxide Particles as a Functional Additive to Fire Extinguishing Powders. Industrial & Engineering Chemistry Research, 2021, 60, 11905-11914.	1.8	9
23	Cold plasma hydrophilization of soy protein isolate and milk protein concentrate enables manufacturing of surfactant-free water suspensions. Part I: Hydrophilization of food powders using cold plasma. Innovative Food Science and Emerging Technologies, 2021, 72, 102759.	2.7	21
24	Voronoi Entropy vs. Continuous Measure of Symmetry of the Penrose Tiling: Part I. Analysis of the Voronoi Diagrams. Symmetry, 2021, 13, 1659.	1.1	8
25	Interfacial crystallization at the intersection of thermodynamic and geometry. Advances in Colloid and Interface Science, 2021, 296, 102510.	7.0	6
26	Vertical oscillations of droplets in small droplet clusters. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2021, 628, 127271.	2.3	3
27	Continuous Symmetry Measure vs Voronoi Entropy of Droplet Clusters. Journal of Physical Chemistry C, 2021, 125, 2431-2436.	1.5	18
28	Directional Droplet Transport Mediated by Circular Groove Arrays. Part II: Theory of Effect. Langmuir, 2021, 37, 1948-1953.	1.6	18
29	Investigation of the Impact of Cold Plasma Treatment on the Chemical Composition and Wettability of Medical Grade Polyvinylchloride. Applied Sciences (Switzerland), 2021, 11, 300.	1.3	6
30	Informational Measure of Symmetry vs. Voronoi Entropy and Continuous Measure of Entropy of the Penrose Tiling. Part II of the â€œVoronoi Entropy vs. Continuous Measure of Symmetry of the Penrose Tilingâ€• Symmetry, 2021, 13, 2146.	1.1	5
31	Thermal conditions for the formation of self-assembled cluster of droplets over the water surface. Journal of Physics: Conference Series, 2021, 2116, 012038.	0.3	1
32	Variational framework for defining contact angles: a general thermodynamic approach. Journal of Adhesion Science and Technology, 2020, 34, 219-230.	1.4	12
33	Entropy, Information, and Symmetry: Ordered is Symmetrical. Entropy, 2020, 22, 11.	1.1	10
34	Faceted and Circular Droplet Spreading on Hierarchical Superhydrophobic Surfaces. Langmuir, 2020, 36, 534-539.	1.6	19
35	Modeling Evaporation of Water Droplets as Applied to Survival of Airborne Viruses. Atmosphere, 2020, 11, 965.	1.0	26
36	Interfacial Crystallization within Liquid Marbles. Condensed Matter, 2020, 5, 62.	0.8	9

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37	Directional Droplet Transport Mediated by Circular Groove Arrays. Part I: Experimental Findings. Langmuir, 2020, 36, 9608-9615.	1.6	30
38	Stable cluster of identical water droplets formed under the infrared irradiation: Experimental study and theoretical modeling. International Journal of Heat and Mass Transfer, 2020, 161, 120255.	2.5	22
39	Study of wetting of the animal retinas by Water and organic liquids and its Implications for ophthalmology. Colloids and Surfaces B: Biointerfaces, 2020, 195, 111265.	2.5	5
40	Soft lithography with liquid marbles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 607, 125488.	2.3	2
41	Spiral Thermal Waves Generated by Self-Propelled Camphor Boats. Condensed Matter, 2020, 5, 51.	0.8	2
42	Breath Figures. , 2020, , .		9
43	Impact of Surfactants on the Formation and Properties of Droplet Clusters. Langmuir, 2020, 36, 11154-11160.	1.6	9
44	Negative Effective Mass in Plasmonic Systems II: Elucidating the Optical and Acoustical Branches of Vibrations and the Possibility of Anti-Resonance Propagation. Materials, 2020, 13, 3512.	1.3	7
45	What Is Temperature? Modern Outlook on the Concept of Temperature. Entropy, 2020, 22, 1366.	1.1	4
46	Symmetry of small clusters of levitating water droplets. Physical Chemistry Chemical Physics, 2020, 22, 12239-12244.	1.3	9
47	Composite Liquid Marbles as a Macroscopic Model System Representing Shedding of Enveloped Viruses. Journal of Physical Chemistry Letters, 2020, 11, 4279-4285.	2.1	13
48	Effects of Atmospheric Plasma Corona Discharges on Soil Bacteria Viability. Microorganisms, 2020, 8, 704.	1.6	9
49	Magnetic field induced motion of water droplets and bubbles on the lubricant coated surface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 597, 124773.	2.3	12
50	Effect of external electric field on dynamics of levitating water droplets. International Journal of Thermal Sciences, 2020, 153, 106375.	2.6	25
51	Entropy, Information, and Symmetry; Ordered Is Symmetrical, II: System of Spins in the Magnetic Field. Entropy, 2020, 22, 235.	1.1	7
52	Informational Reinterpretation of the Mechanics Notions and Laws. Entropy, 2020, 22, 631.	1.1	4
53	Effect of thermal properties of a substrate on formation of self-arranged surface structures on evaporated polymer films. International Journal of Heat and Mass Transfer, 2020, 158, 120053.	2.5	8
54	Cherenkov-Like Surface Thermal Waves Emerging from Self-Propulsion of a Liquid Marble. Journal of Physical Chemistry B, 2020, 124, 695-699.	1.2	6

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55	Clustering and self-organization in small-scale natural and artificial systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190443.	1.6	13
56	Liquid Marble-Induced Dewetting. Journal of Physical Chemistry C, 2020, 124, 9345-9349.	1.5	8
57	Negative Effective Mass in Plasmonic Systems. Materials, 2020, 13, 1890.	1.3	8
58	Manufacture and properties of composite liquid marbles. Journal of Colloid and Interface Science, 2020, 575, 35-41.	5.0	30
59	Introducing Chemical Functionalities to Microporous Surfaces: Strategies. , 2020, , 149-168.		3
60	Applications of the Porous Structures Obtained with the Breath-Figures Self-Assembly. , 2020, , 207-228.		0
61	Methodologies Involved in Manufacturing Self-Assembled Breath-Figures Patterns: Drop-Casting and Spin- and Dip-Coating â€“ Characterization of Microporous Surfaces. , 2020, , 111-148.		1
62	Introduction to Micropatterned Surfaces. , 2020, , 1-11.		0
63	From Planar Surfaces to 3D Porous Interfaces. , 2020, , 189-206.		0
64	Breath-Figures Formation: Physical Aspects. , 2020, , 13-49.		1
65	Polymers Employed and Role of the Molecular Characteristics on the BFs Formation. , 2020, , 51-110.		0
66	Pre-germination plasma treatment of seeds does not alter cotyledon DNA structure, nor phenotype and phenology of tomato and pepper plants. Biochemical and Biophysical Research Communications, 2019, 519, 512-517.	1.0	15
67	Self-Arranged Levitating Droplet Clusters: A Reversible Transition from Hexagonal to Chain Structure. Langmuir, 2019, 35, 15330-15334.	1.6	13
68	The Landauer Principle: Re-Formulation of the Second Thermodynamics Law or a Step to Great Unification?. Entropy, 2019, 21, 918.	1.1	19
69	Mini-Generator of Electrical Power Exploiting the Marangoni Flow Inspired Self-Propulsion. ACS Omega, 2019, 4, 15265-15268.	1.6	25
70	Oscillatory Motion of a Droplet Cluster. Journal of Physical Chemistry C, 2019, 123, 23572-23576.	1.5	13
71	Formation of Hierarchical Porous Films with Breath-Figures Self-Assembly Performed on Oil-Lubricated Substrates. Materials, 2019, 12, 3051.	1.3	8
72	Motion of the liquid on the surface of Leidenfrost droplets and the hairy ball theorem. Surface Innovations, 2019, 7, 101-103.	1.4	9

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73	Symmetry and Shannon Measure of Ordering: Paradoxes of Voronoi Tessellation. Entropy, 2019, 21, 452.	1.1	8
74	Droplet clusters: nature-inspired biological reactors and aerosols. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20190121.	1.6	25
75	Moses effect: physics and applications. Advances in Colloid and Interface Science, 2019, 269, 1-6.	7.0	34
76	The Moses effect enables remote control of self-propulsion of a diamagnetic rotator. Surface Innovations, 2019, 7, 244-248.	1.4	2
77	Is the Voronoi Entropy a True Entropy? Comments on â€œEntropy, Shannonâ€™s Measure of Information and Boltzmannâ€™s H-Theoremâ€, Entropy 2017, 19, 48. Entropy, 2019, 21, 251.	1.1	7
78	Study of the displacement of floating diamagnetic bodies by a magnetic field. Surface Innovations, 2019, 7, 194-202.	1.4	14
79	Biofilm grown on wood waste pretreated with cold low-pressure nitrogen plasma: Utilization for toluene remediation. International Biodeterioration and Biodegradation, 2019, 139, 62-69.	1.9	29
80	Physics of pre-wetted, lubricated and impregnated surfaces: a review. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180264.	1.6	8
81	Generalization of the Landauer Principle for Computing Devices Based on Many-Valued Logic. Entropy, 2019, 21, 1150.	1.1	8
82	Apparent contact angles for reactive wetting of smooth, rough, and heterogeneous surfaces calculated from the variational principles. Journal of Colloid and Interface Science, 2019, 537, 597-603.	5.0	29
83	On relative contribution of electrostatic and aerodynamic effects to dynamics of a levitating droplet cluster. International Journal of Heat and Mass Transfer, 2019, 133, 712-717.	2.5	24
84	Spatial scales of living cells and their energetic and informational capacity. European Biophysics Journal, 2018, 47, 515-521.	1.2	10
85	Wetting of flat gradient surfaces. Journal of Colloid and Interface Science, 2018, 515, 264-267.	5.0	10
86	Magnetic Field Inspired Contact Angle Hysteresis Drives Floating Polyolefin Rafts. Colloids and Interface Science Communications, 2018, 22, 38-41.	2.0	13
87	Toward an Understanding of Magnetic Displacement of Floating Diamagnetic Bodies, I: Experimental Findings. Langmuir, 2018, 34, 6388-6395.	1.6	18
88	Drop-wise and film-wise water condensation processes occurring on metallic micro-scaled surfaces. Applied Surface Science, 2018, 444, 604-609.	3.1	19
89	Plasma treatment of silicone oil- infused surfaces switches impact of water droplets from bouncing to tanner-like spreading. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2018, 538, 133-139.	2.3	11
90	Comments on â€œThe Principle of Least Action for Reversible Thermodynamic Processes and Cyclesâ€, Entropy 2018, 20, 542. Entropy, 2018, 20, 980.	1.1	2

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91	Surface charging by the cold plasma discharge of lentil and pepper seeds in comparison with polymers. Colloids and Surfaces B: Biointerfaces, 2018, 172, 541-544.	2.5	12
92	Entropy Contribution to the Line Tension: Insights from Polymer Physics, Water String Theory, and the Three-Phase Tension. Entropy, 2018, 20, 712.	1.1	2
93	Langevin Approach to Modeling of Small Levitating Ordered Droplet Clusters. Journal of Physical Chemistry Letters, 2018, 9, 3834-3838.	2.1	15
94	Propulsion of liquid marbles: A tool to measure their effective surface tension and viscosity. Journal of Colloid and Interface Science, 2018, 532, 32-36.	5.0	25
95	Self-Propulsion of Water-Supported Liquid Marbles Filled with Sulfuric Acid. Journal of Physical Chemistry B, 2018, 122, 7936-7942.	1.2	25
96	Magnetically inspired deformation of the liquid/vapor interface drives soap bubbles. Surface Innovations, 2018, 6, 231-236.	1.4	14
97	Characterization of Self-Assembled 2D Patterns with Voronoi Entropy. Entropy, 2018, 20, 956.	1.1	49
98	On the Universal Quantitative Pattern of the Distribution of Initial Characters in General Dictionaries: The Exponential Distribution is Valid for Various Languages. Journal of Quantitative Linguistics, 2017, 24, 273-288.	0.7	6
99	Paradoxical Long-Timespan Opening of the Hole in Self-Supported Water Films of Nanometer Thickness. Langmuir, 2017, 33, 4688-4693.	1.6	0
100	Self-assembled levitating clusters of water droplets: pattern-formation and stability. Scientific Reports, 2017, 7, 1888.	1.6	61
101	Rotating and rolling rigid bodies and the â€œhairy ballâ€•theorem. American Journal of Physics, 2017, 85, 447-453.	0.3	9
102	Self-propelling rotator driven by soluto-capillary marangoni flows. Applied Physics Letters, 2017, 110, 131604.	1.5	19
103	Paradoxical coffee-stain effect driven by the Marangoni flow observed on oil-infused surfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 522, 355-360.	2.3	10
104	Small Levitating Ordered Droplet Clusters: Stability, Symmetry, and Voronoi Entropy. Journal of Physical Chemistry Letters, 2017, 8, 5599-5602.	2.1	41
105	Superposition of Translational and Rotational Motions under Self-Propulsion of Liquid Marbles Filled with Aqueous Solutions of Camphor. Langmuir, 2017, 33, 13234-13241.	1.6	18
106	Plasma treatment switches the regime of wetting and floating of pepper seeds. Colloids and Surfaces B: Biointerfaces, 2017, 157, 417-423.	2.5	24
107	Camphor-Engine-Driven Micro-Boat Guides Evolution of Chemical Gardens. Scientific Reports, 2017, 7, 3930.	1.6	12
108	Relaxation spectra of polymers and phenomena of electrical and hydrophobic recovery: Interplay between bulk and surface properties of polymers. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 198-205.	2.4	13

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109	Liquid Marbles, Elastic Nonstick Droplets: From Minireactors to Self-Propulsion. Langmuir, 2017, 33, 663-669.	1.6	144
110	Breath-Figure Self-Assembly, a Versatile Method of Manufacturing Membranes and Porous Structures: Physical, Chemical and Technological Aspects. Membranes, 2017, 7, 45.	1.4	48
111	Friction, Free Axes of Rotation and Entropy. Entropy, 2017, 19, 123.	1.1	2
112	Physics of Wetting. , 2017, , .		46
113	Self-propulsion of a metallic superoleophobic micro-boat. Journal of Colloid and Interface Science, 2016, 479, 182-188.	5.0	23
114	Physics of solidâ€“liquid interfaces: From the Young equation to the superhydrophobicity (Review) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.2	32
115	Evaporation of Ethanolâ€“Water Binary Mixture Sessile Liquid Marbles. Langmuir, 2016, 32, 6097-6104.	1.6	35
116	Obstructions imposed by the PoincarÃ©â€“Brouwer (â€œhairy ballâ€) theorem on the propagation of electromagnetic waves. Journal of Electromagnetic Waves and Applications, 2016, 30, 1049-1053.	1.0	4
117	Under-Liquid Self-Assembly of Submerged Buoyant Polymer Particles. Langmuir, 2016, 32, 5714-5720.	1.6	3
118	Superoleophobic Surfaces Obtained via Hierarchical Metallic Meshes. Langmuir, 2016, 32, 4134-4140.	1.6	31
119	Electrostatic interaction between water droplets coated by cold plasma treated silicone oil. Quantification of cold plasmas charging of liquids. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 509, 224-228.	2.3	4
120	Influence of cold radiofrequency air and nitrogen plasmas treatment on wetting of polypropylene by the liquid epoxy resin. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 506, 445-449.	2.3	7
121	Synthesis and properties of magnetic superhydrophobic mesoporous Fe2O3â€“SiO2 composites. Russian Journal of Applied Chemistry, 2016, 89, 1960-1968.	0.1	2
122	Revisiting the Benford law: When the Benford-like distribution of leading digits in sets of numerical data is expectable?. Physica A: Statistical Mechanics and Its Applications, 2016, 461, 595-601.	1.2	8
123	Geometric optics and the â€œhairy ball theoremâ€. Results in Physics, 2016, 6, 76-77.	2.0	3
124	Intuitive considerations clarifying the origin and applicability of the Benford law. Results in Physics, 2016, 6, 3-6.	2.0	11
125	Benfordâ€™s law, its applicability and breakdown in the IR spectra of polymers. Physica A: Statistical Mechanics and Its Applications, 2016, 444, 524-529.	1.2	9
126	Surface tension supported floating of heavy objects: Why elongated bodies float better?. Journal of Colloid and Interface Science, 2016, 463, 8-12.	5.0	22

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127	Wetting Transitions. , 2016, , 4380-4387.		0
128	How to grow a movable mini-garden in a droplet: Growing chemical gardens in a water and aqueous ethanol solutions droplets deposited on a superhydrophobic surface. Colloids and Interface Science Communications, 2015, 7, 12-15.	2.0	3
129	A floating self-propelling liquid marble containing aqueous ethanol solutions. RSC Advances, 2015, 5, 101006-101012.	1.7	65
130	Sagging ropes demonstrate transversality conditions of variational problems. American Journal of Physics, 2015, 83, 998-1002.	0.3	2
131	Scaling law governing the roughness of the swash edge line. Scientific Reports, 2015, 4, 6243.	1.6	1
132	Elastic properties of liquid marbles. Colloid and Polymer Science, 2015, 293, 2157-2164.	1.0	47
133	Surface instabilities and patterning at liquid/vapor interfaces: Exemplifications of the â€œhairy ball theoremâ€• Colloids and Interface Science Communications, 2015, 5, 5-7.	2.0	15
134	Temporal Electret Behavior of Polymer Films Exposed to Cold Radiofrequency Plasma. Advanced Engineering Materials, 2015, 17, 1175-1179.	1.6	6
135	Elastic Properties of Liquid Surfaces Coated with Colloidal Particles. Advances in Condensed Matter Physics, 2015, 2015, 1-6.	0.4	12
136	Progress in low voltage reversible electrowetting with lubricated polymer honeycomb substrates. RSC Advances, 2015, 5, 32491-32496.	1.7	23
137	Oscillating/Vibrating Surfaces. , 2015, , 395-411.		2
138	On universality of scaling law describing roughness of triple line. European Physical Journal E, 2015, 38, 2.	0.7	8
139	Interaction of cold radiofrequency plasma with seeds of beans (Phaseolus vulgaris). Journal of Experimental Botany, 2015, 66, 4013-4021.	2.4	130
140	Interpretation of elasticity of liquid marbles. Journal of Colloid and Interface Science, 2015, 457, 148-151.	5.0	20
141	Liquid marbles: Physics and applications. Sadhana - Academy Proceedings in Engineering Sciences, 2015, 40, 653-671.	0.8	16
142	Liquid marbles containing petroleum and their properties. Petroleum Science, 2015, 12, 340-344.	2.4	14
143	Probing properties of cold radiofrequency plasma with polymer probe. Journal of Plasma Physics, 2015, 81, .	0.7	2
144	Self-Propulsion of Liquid Marbles: Leidenfrost-like Levitation Driven by Marangoni Flow. Journal of Physical Chemistry C, 2015, 119, 9910-9915.	1.5	127

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145	Physical mechanisms of interaction of cold plasma with polymer surfaces. Journal of Colloid and Interface Science, 2015, 448, 175-179.	5.0	52
146	Controlling drop bouncing using surfaces with gradient features. Applied Physics Letters, 2015, 107, .	1.5	93
147	Phenomenological model of wetting charged dielectric surfaces and its testing with plasma-treated polymer films and inflatable balloons. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 487, 162-168.	2.3	9
148	Floating of heavy objects on liquid surfaces coated with colloidal particles. Colloid and Polymer Science, 2015, 293, 567-572.	1.0	5
149	Progress in understanding wetting transitions on rough surfaces. Advances in Colloid and Interface Science, 2015, 222, 92-103.	7.0	356
150	Hydrophilization and hydrophobic recovery in polymers obtained by casting of polymer solutions on water surface. Journal of Colloid and Interface Science, 2014, 435, 192-197.	5.0	13
151	A generalized electrowetting equation: Its derivation and consequences. Chemical Physics Letters, 2014, 599, 139-141.	1.2	6
152	Robust Technique Allowing the Manufacture of Superoleophobic (Omniphobic) Metallic Surfaces. Advanced Engineering Materials, 2014, 16, 1127-1132.	1.6	26
153	Hydrophilization of liquid surfaces by plasma treatment. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 461, 225-230.	2.3	31
154	Low voltage reversible electrowetting exploiting lubricated polymer honeycomb substrates. Applied Physics Letters, 2014, 104, .	1.5	34
155	Shaped composite liquid marbles. Journal of Colloid and Interface Science, 2014, 417, 206-209.	5.0	10
156	Polysulfone Membranes Demonstrating Asymmetric Diode-like Water Permeability and Their Applications. Macromolecular Materials and Engineering, 2014, 299, 27-30.	1.7	13
157	On the Role of the Line Tension in the Stability of Cassie Wetting. Langmuir, 2013, 29, 5515-5519.	1.6	32
158	Robust technique allowing manufacturing superoleophobic surfaces. Applied Surface Science, 2013, 270, 98-103.	3.1	53
159	Submerged (Under-Liquid) Floating of Light Objects. Langmuir, 2013, 29, 10700-10704.	1.6	5
160	Jetting liquid marbles: study of the Taylor instability in immersed marbles. Colloid and Polymer Science, 2013, 291, 1535-1539.	1.0	8
161	Wetting of real solid surfaces: new glance on well-known problems. Colloid and Polymer Science, 2013, 291, 339-342.	1.0	74
162	Contact angles of rotating sessile droplets. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 432, 38-41.	2.3	19

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163	Revisiting the Fine Structure of the Triple Line. Langmuir, 2013, 29, 14163-14167.	1.6	21
164	Electrically Controlled Membranes Exploiting Cassie-Wenzel Wetting Transitions. Scientific Reports, 2013, 3, 3028.	1.6	22
165	Impact of surface forces on wetting of hierarchical surfaces and contact angle hysteresis. Colloid and Polymer Science, 2013, 291, 343-346.	1.0	34
166	Revisiting the surface tension of liquid marbles: Measurement of the effective surface tension of liquid marbles with the pendant marble method. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 425, 15-23.	2.3	62
167	Towards understanding hydrophobic recovery of plasma treated polymers: Storing in high polarity liquids suppresses hydrophobic recovery. Applied Surface Science, 2013, 273, 549-553.	3.1	76
168	Entropy Harvesting. Entropy, 2013, 15, 2210-2217.	1.1	1
169	Towards Understanding Wetting Transitions on Biomimetic Surfaces: Scaling Arguments and Physical Mechanisms. Green Energy and Technology, 2012, , 127-147.	0.4	0
170	Cold Radiofrequency Plasma Treatment Modifies Wettability and Germination Speed of Plant Seeds. Scientific Reports, 2012, 2, 741.	1.6	264
171	New insights into liquid marbles. Soft Matter, 2012, 8, 11018.	1.2	90
172	Wetting Transitions on Post-Built and Porous Reliefs. Journal of Adhesion Science and Technology, 2012, 26, 1169-1180.	1.4	7
173	Wetting Transitions on Rough Substrates: General Considerations. Journal of Adhesion Science and Technology, 2012, 26, 207-220.	1.4	31
174	Formation of liquid marbles and wetting transitions. Journal of Colloid and Interface Science, 2012, 384, 157-161.	5.0	23
175	Wetting Transitions and Depinning of the Triple Line. Langmuir, 2012, 28, 3460-3464.	1.6	93
176	Honeycomb structures obtained with breath figures self-assembly allow water/oil separation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2012, 415, 394-398.	2.3	41
177	Contact Angles of Sessile Droplets Deposited on Rough and Flat Surfaces in the Presence of External Fields. Mathematical Modelling of Natural Phenomena, 2012, 7, 1-5.	0.9	42
178	Composite non-stick droplets and their actuation with electric field. Applied Physics Letters, 2012, 100, .	1.5	65
179	Superhydrophobicity of Lotus Leaves versus Birds Wings: Different Physical Mechanisms Leading to Similar Phenomena. Langmuir, 2012, 28, 14992-14997.	1.6	58
180	On the Nature of the Breath Figures Selfâ€Assembly in Evaporated Polymer Solutions: Revisiting Physical Factors Governing the Patterning. Macromolecular Chemistry and Physics, 2012, 213, 1742-1747.	1.1	23

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181	Plasma treatment induced wetting transitions on biological tissue (pigeon feathers). Colloids and Surfaces B: Biointerfaces, 2012, 92, 367-371.	2.5	21
182	Plasma treatment allows water suspending of the natural hydrophobic powder (lycopodium). Colloids and Surfaces B: Biointerfaces, 2012, 97, 171-174.	2.5	11
183	Stable water and glycerol marbles immersed in organic liquids: From liquid marbles to Pickering-like emulsions. Journal of Colloid and Interface Science, 2012, 366, 196-199.	5.0	38
184	Wet Etching. , 2012, , 2829-2830.		1
185	Wear. , 2012, , 2828-2828.		0
186	Waypoint Detection. , 2012, , 2821-2828.		0
187	Wetting Transitions. , 2012, , 2830-2837.		0
188	Use of Liquid Marbles as Micro-Reactors. International Journal of Chemical Reactor Engineering, 2011, 9, .	0.6	14
189	Relativistic Wetting Effects for Sessile Drops. Journal of Adhesion Science and Technology, 2011, 25, 1403-1410.	1.4	0
190	How to Make the Cassie Wetting State Stable?. Langmuir, 2011, 27, 8171-8176.	1.6	210
191	Non-Stick Droplet Surgery with a Superhydrophobic Scalpel. Langmuir, 2011, 27, 3266-3270.	1.6	44
192	Janus Droplets: Liquid Marbles Coated with Dielectric/Semiconductor Particles. Langmuir, 2011, 27, 7-10.	1.6	107
193	Comment on Water Droplet Motion Control on Superhydrophobic Surfaces: Exploiting the Wenzel-to-Cassie Transition. Langmuir, 2011, 27, 12769-12770.	1.6	13
194	Wetting transitions on biomimetic surfaces. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 1712-1712.	1.6	3
195	Liquid marbles: Properties and applications. Current Opinion in Colloid and Interface Science, 2011, 16, 266-271.	3.4	220
196	Evaporation of droplets on strongly and weakly pinning surfaces and dynamics of the triple line. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2011, 385, 235-240.	2.3	118
197	Singleâ€step technique allowing formation of microscaled thermally stable polymer honeycomb reliefs demonstrating reversible wettability. Polymers for Advanced Technologies, 2011, 22, 94-98.	1.6	12
198	General equation describing wetting of rough surfaces. Journal of Colloid and Interface Science, 2011, 360, 317-319.	5.0	119

#	Article	IF	Citations
199	The potential comb improves the efficiency of low-frequency energy harvesting. Journal of Applied Physics, 2011, 109, 114512.	1.1	3
200	Electrically Deformable Liquid Marbles. Journal of Adhesion Science and Technology, 2011, 25, 1371-1377.	1.4	38
201	On the mechanism of patterning in rapidly evaporated polymer solutions: Is temperature-gradient-driven Marangoni instability responsible for the large-scale patterning?. Journal of Colloid and Interface Science, 2010, 343, 602-607.	5.0	36
202	Interfacial and conductive properties of liquid marbles coated with carbon black. Powder Technology, 2010, 203, 529-533.	2.1	82
203	Thickness of gravity-flattened water layers (â€œpuddlesâ€) deposited on the polymer substrates and the hysteresis of the contact angle. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2010, 372, 135-138.	2.3	3
204	Micropump based on liquid marbles. Applied Physics Letters, 2010, 97, .	1.5	76
205	Wetting transitions on biomimetic surfaces. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 4695-4711.	1.6	122
206	On the Nature of the Friction between Nonstick Droplets and Solid Substrates. Langmuir, 2010, 26, 12479-12482.	1.6	54
207	Why are the values of the surface tension of most organic liquids similar?. American Journal of Physics, 2010, 78, 1309-1311.	0.3	17
208	On the applicability of the equipartition theorem. Thermal Science, 2010, 14, 855-858.	0.5	3
209	A reliable method of manufacturing metallic hierarchical superhydrophobic surfaces. Applied Physics Letters, 2009, 94, .	1.5	19
210	Electrostatically driven droplets deposited on superhydrophobic surfaces. Applied Physics Letters, 2009, 95, .	1.5	16
211	On the Mechanism of Floating and Sliding of Liquid Marbles. ChemPhysChem, 2009, 10, 654-656.	1.0	102
212	Revealing of water surface pollution with liquid marbles. Applied Surface Science, 2009, 255, 6429-6431.	3.1	139
213	Robust method of manufacturing rubber wasteâ€based water repellent surfaces. Polymers for Advanced Technologies, 2009, 20, 650-653.	1.6	6
214	Water rolling and floating upon water: Marbles supported by a water/marble interface. Journal of Colloid and Interface Science, 2009, 333, 419-421.	5.0	70
215	Oblate spheroid model for calculation of the shape and contact angles of heavy droplets. Journal of Colloid and Interface Science, 2009, 331, 174-177.	5.0	51
216	Young, Boruvkaâ€“Neumann, Wenzel and Cassieâ€“Baxter equations as the transversality conditions for the variational problem of wetting. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 345, 163-165.	2.3	112

#	Article	IF	Citations
217	Surface tension of liquid marbles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 351, 78-82.	2.3	114
218	Comment on Water Wetting Transition Parameters of Perfluorinated Substrates with Periodically Distributed Flat-Top Microscale Obstacles. Langmuir, 2009, 25, 13694-13695.	1.6	13
219	Shape, Vibrations, and Effective Surface Tension of Water Marbles. Langmuir, 2009, 25, 1893-1896.	1.6	100
220	A Variational Approach to Wetting of Composite Surfaces: Is Wetting of Composite Surfaces a One-Dimensional or Two-Dimensional Phenomenon?. Langmuir, 2009, 25, 10451-10454.	1.6	64
221	â€œPetal Effectâ€•on Surfaces Based on Lycopodium: High-Stick Surfaces Demonstrating High Apparent Contact Angles. Journal of Physical Chemistry C, 2009, 113, 5568-5572.	1.5	152
222	Wetting of Flat and Rough Curved Surfaces. Journal of Physical Chemistry C, 2009, 113, 17275-17277.	1.5	43
223	Lotus Effect: Superhydrophobicity and Self-Cleaning. , 2009, , 43-78.		15
224	Measurable values, numbers and fundamental physical constants: Is the Boltzmann constant Kb a fundamental physical constant?. Thermal Science, 2009, 13, 253-258.	0.5	3
225	Mesoscopic Patterning in Evaporated Polymer Solutions: Poly(ethylene glycol) and Roomâ€Temperatureâ€Vulcanized Polyorganosilanes/â€siloxanes Promote Formation of Honeycomb Structures. Macromolecular Chemistry and Physics, 2008, 209, 567-576.	1.1	40
226	Freeâ€Standing, Thermostable, Micrometerâ€Scale Honeycomb Polymer Films and their Properties. Macromolecular Materials and Engineering, 2008, 293, 872-877.	1.7	26
227	Why does the Cassieâ€“Baxter equation apply?. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 324, 47-50.	2.3	111
228	The rigorous derivation of Young, Cassieâ€“Baxter and Wenzel equations and the analysis of the contact angle hysteresis phenomenon. Chemical Physics Letters, 2008, 450, 355-359.	1.2	466
229	On the role of contact line tension and 2D defects in the formation of the water depletion layer on hydrophobic surfaces. Chemical Physics Letters, 2008, 456, 186-188.	1.2	2
230	Variational approach to wetting problems: Calculation of a shape of sessile liquid drop deposited on a solid substrate in external field. Chemical Physics Letters, 2008, 463, 103-105.	1.2	23
231	On the role of the Plateau borders in the pattern formation occurring in thin evaporated polymer layers. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2008, 312, 245-248.	2.3	3
232	New Investigations on Ferrofluidics: Ferrofluidic Marbles and Magnetic-Field-Driven Drops on Superhydrophobic Surfaces. Langmuir, 2008, 24, 12119-12122.	1.6	187
233	Superhydrophobic Metallic Surfaces and Their Wetting Properties. Journal of Adhesion Science and Technology, 2008, 22, 379-385.	1.4	35
234	Characterization of rough surfaces with vibrated drops. Physical Chemistry Chemical Physics, 2008, 10, 4056.	1.3	120

#	Article	IF	Citations
235	The Reversible Giant Change in the Contact Angle on the Polysulfone and Polyethersulfone Films Exposed to UV Irradiation. Langmuir, 2008, 24, 5977-5980.	1.6	33
236	Contact Angle Hysteresis on Polymer Substrates Established with Various Experimental Techniques, Its Interpretation, and Quantitative Characterization. Langmuir, 2008, 24, 4020-4025.	1.6	101
237	Correct Values of Rayleigh and Marangoni Numbers for Liquid Layers Deposited on Thin Substrates. Industrial & Engineering Chemistry Research, 2008, 47, 1726-1728.	1.8	12
238	Resonance Cassieâ^'Wenzel Wetting Transition for Horizontally Vibrated Drops Deposited on a Rough Surface. Langmuir, 2007, 23, 12217-12221.	1.6	115
239	Cassieâ^'Wenzel Wetting Transition in Vibrating Drops Deposited on Rough Surfaces:â€‰ Is the Dynamic Cassieâ^'Wenzel Wetting Transition a 2D or 1D Affair?. Langmuir, 2007, 23, 6501-6503.	1.6	258
240	The Carnot engine based on the small thermodynamic system: Its efficiency and the ergodic hypothesis. American Journal of Physics, 2007, 75, 911-915.	0.3	10
241	Environmental Scanning Electron Microscopy Study of the Fine Structure of the Triple Line and Cassieâ^'Wenzel Wetting Transition for Sessile Drops Deposited on Rough Polymer Substrates. Langmuir, 2007, 23, 4378-4382.	1.6	70
242	Selfâ€Assembly in Evaporated Polymer Solutions: Patterning on Two Scales. Israel Journal of Chemistry, 2007, 47, 319-328.	1.0	9
243	On the Mechanisms of Colloidal Particle and Vapor Bubble Aggregation in Liquid Flows. Israel Journal of Chemistry, 2007, 47, 381-384.	1.0	1
244	Vibration-induced Cassie-Wenzel wetting transition on rough surfaces. Applied Physics Letters, 2007, 90, 201917.	1.5	148
245	Formation of Films on Water Droplets Floating on a Polymer Solution Surface. Macromolecular Chemistry and Physics, 2007, 208, 702-709.	1.1	25
246	Self-assembled patterns obtained with evaporated polymer solutions and pre-stretched polymer substrates. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 303, 253-256.	2.3	7
247	Droplet behavior on flat and textured surfaces: Co-occurrence of Deegan outward flow with Marangoni solute instability. Journal of Colloid and Interface Science, 2007, 306, 128-132.	5.0	22
248	Why do pigeon feathers repel water? Hydrophobicity of pennae, Cassieâ€“Baxter wetting hypothesis and Cassieâ€“Wenzel capillarity-induced wetting transition. Journal of Colloid and Interface Science, 2007, 311, 212-216.	5.0	196
249	Entropy of Relativistic Mono-Atomic Gas and Temperature Relativistic Transformation in Thermodynamics. Entropy, 2007, 9, 113-117.	1.1	13
250	Luminescence and absorption spectra of Eu-complex-doped PVDF film: influence of controlled stretch. , 2006, 6116, 86.		0
251	Luminescent properties of PP and LDPE films and rods doped with the Eu(III)-La(III) complex. Polymers for Advanced Technologies, 2006, 17, 20-25.	1.6	8
252	Template-assisted crystallization and colloidal self-assembly with use of the polymer micrometrically scaled honeycomb template. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 290, 273-279.	2.3	9

#	Article	IF	Citations
253	Template-assisted growth of chemical gardens: Formation of dendrite structures. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 289, 245-249.	2.3	9
254	Evolution of chemical gardens in aqueous solutions of polymers. Chemical Physics Letters, 2006, 417, 341-344.	1.2	21
255	Self-assembly in evaporated polymer solutions: Influence of the solution concentration. Journal of Colloid and Interface Science, 2006, 297, 534-540.	5.0	56
256	Patterning in rapidly evaporated polymer solutions: Formation of annular structures under evaporation of the poor solvent. Journal of Colloid and Interface Science, 2006, 300, 293-297.	5.0	16
257	Micrometrically scaled textured metallic hydrophobic interfaces validate the Cassieâ€“Baxter wetting hypothesis. Journal of Colloid and Interface Science, 2006, 302, 308-311.	5.0	74
258	Wetting Properties of the Multiscaled Nanostructured Polymer and Metallic Superhydrophobic Surfaces. Langmuir, 2006, 22, 9982-9985.	1.6	219
259	Mechanisms of mesoscopic patterning in evaporated polymer films deposited on tilted and vertical substrates. Journal of Materials Science, 2006, 41, 455-461.	1.7	6
260	The effect of controlled stretch on luminescence of Eu(III)(NO3)3(o-Phen)2 complex doped into PVDF film. Materials Letters, 2006, 60, 1911-1914.	1.3	19
261	Optical properties of the Eu(III)-La(III)-complex-doped polyolefine film and rod samples. , 2005, , .		0
262	Novel method of low-melting metal micropowders fabrication. Journal of Materials Processing Technology, 2005, 168, 367-371.	3.1	8
263	Mesoscopic and submicroscopic patterning in thin polymer films: Impact of the solvent. Materials Letters, 2005, 59, 2461-2464.	1.3	47
264	Formation of honeycomb patterns in evaporated polymer solutions: Influence of the molecular weight. Materials Letters, 2005, 59, 3553-3557.	1.3	51
265	Mesoscopic Patterning in Thin Polymer Films Formed under the Fast Dip-Coating Process. Macromolecular Materials and Engineering, 2005, 290, 114-121.	1.7	55
266	Self-assembled honeycomb polycarbonate films deposited on polymer piezoelectric substrates and their applications. Polymers for Advanced Technologies, 2005, 16, 299-304.	1.6	41
267	Mesoscopic Patterning in Evaporated Polymer Solutions:Â New Experimental Data and Physical Mechanisms. Langmuir, 2005, 21, 9604-9609.	1.6	51
268	Polyethylene films doped with EU(III) complex: their optical properties and technological applications.. , 2004, 5351, 230.		2
269	Self-organization in thin polycarbonate films and its optical and electro-optical applications. Journal of Materials Science, 2004, 39, 6639-6641.	1.7	13
270	Polyvinylidene fluorideâ€”piezoelectric polymer for integrated infrared optics applications. Optical Materials, 2004, 27, 429-434.	1.7	26

#	Article	IF	Citations
271	Low-density polyethylene films doped with europium(III) complex: their properties and applications. Polymers for Advanced Technologies, 2004, 15, 414-418.	1.6	29
272	Vibrational spectrum of PVDF and its interpretation. Polymer Testing, 2004, 23, 791-796.	2.3	370
273	Infrared optics applications of thin polyaniline emeraldine base films. Synthetic Metals, 2004, 140, 49-52.	2.1	17
274	Resonance absorption of coherent infrared radiation by thin polypropylene films and its technological applications. Applied Surface Science, 2003, 220, 125-135.	3.1	5
275	Preparation of Se-doped polyaniline emeraldine base films. Synthetic Metals, 2003, 139, 321-325.	2.1	16
276	Properties of Se-based infrared chalcogenide glasses using dynamical mechanical analysis. , 2003, , .		0
277	Infrared optics applications of thin polyaniline emeraldine base films. , 2003, , .		0
278	Optical properties and infrared optics applications of composite films based on polyethylene and low-melting-point chalcogenide glass. Optical Engineering, 2002, 41, 295.	0.5	9
279	<title>Development of a novel composite based on polyethylene and low-melting-point metal alloy</title>. , 2002, 4695, 465.		3
280	Development of a Novel Composite Based on Thermoplastic Polymers and Low Melting Point Thermoplastic Chalcogenide Glasses. Journal of Thermoplastic Composite Materials, 2002, 15, 511-523.	2.6	3
281	Mechanical and thermodynamic properties of infrared transparent low melting chalcogenide glass. Infrared Physics and Technology, 2002, 43, 397-399.	1.3	5
282	Study of water diffusion in polyacrylonitrile using IR fiber optic evanescent wave spectroscopy. Polymers for Advanced Technologies, 2002, 13, 1039-1045.	1.6	8
283	Thermal degradation of thermoplastic and thermosetting polymers induced by laser radiation and its study by FTIR spectroscopy. Polymer Degradation and Stability, 2001, 72, 125-131.	2.7	13
284	IR laser radiation induced changes in the IR absorption spectra of thermoplastic and thermosetting polymers. Journal of Optics, 2001, 3, 229-235.	1.5	18
285	Development of new near-infrared filters based on the â€œsandwichâ€•polymer-chalcogenide glass-polymer composites. Optical Engineering, 2001, 40, 661.	0.5	10
286	Development of the technology of contacting ZnSe infrared optical windows using polyethylene films. Optical Engineering, 2001, 40, 1754.	0.5	2
287	<title>Optical properties of polymer/chalcogenide glass composite materials</title>. , 2000, 4097, 179.		4
288	<title>Investigation of water penetration in polystyrene by use of polymer-coated AgClBr fibers and development of new sensor intended for the FEWS spectroscopy of organic compounds in water</title>. , 2000, 4129, 305.		6

#	Article	IF	Citations
289	Infrared laser radiation induced changes in the IR absorption spectra of thin polymer films. Journal of Optics, 2000, 2, L38-L40.	1.5	3
290	IR-laser-radiation-induced changes in the infrared absorption spectra of thin polymer films. , 2000, , .		4
291	Use of polymer-coated AgClBr fibers for fiber optic evanascent wave spectroscopy (FEWS) of biological fluids. , 1999, 3570, 100.		5
292	Fiber optic evanescent wave spectroscopy (FEWS) for blood diagnosis: the use of polymer-coated AgClBr fibers and neural network analysis. , 1999, , .		7
293	Direct writing of cylindrical microlenses on polymer substrates. , 0, , .		1
294	2D photonic crystals deposited on polymer piezoelectric substrates - new kind of MOEMS. , 0, , .		1
295	Wetting of Composite Surfaces: When and Why Is the Area Far from The Triple Line Important?. Journal of Physical Chemistry C, 0, , 130911133825002.	1.5	7
296	Impact of Conditions of Water Supply on the Germination of Tomato and Pepper Seeds. , 0, , .		0
297	Interfacial behavior of intravitreally injected drugs simulated by models of the silicone oil filled eye. Surface Innovations, 0, , 1-7.	1.4	1
298	Thermal conditions for the formation of self-assembled cluster of droplets over the water surface and diversity of levitating droplet clusters. Heat and Mass Transfer, 0, , .	1.2	4