

Gene Whyman

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

3,246
citations

218381

26
h-index

223531

46
g-index

51
all docs

51
docs citations

51
times ranked

3130
citing authors

#	ARTICLE	IF	CITATIONS
1	The rigorous derivation of Young, Cassieâ€“Baxter and Wenzel equations and the analysis of the contact angle hysteresis phenomenon. <i>Chemical Physics Letters</i> , 2008, 450, 355-359.	1.2	466
2	Cassieâ€“Wenzel Wetting Transition in Vibrating Drops Deposited on Rough Surfaces:â€“ Is the Dynamic Cassieâ€“Wenzel Wetting Transition a 2D or 1D Affair?. <i>Langmuir</i> , 2007, 23, 6501-6503.	1.6	258
3	Wetting Properties of the Multiscaled Nanostructured Polymer and Metallic Superhydrophobic Surfaces. <i>Langmuir</i> , 2006, 22, 9982-9985.	1.6	219
4	How to Make the Cassie Wetting State Stable?. <i>Langmuir</i> , 2011, 27, 8171-8176.	1.6	210
5	Why do pigeon feathers repel water? Hydrophobicity of pennaes, Cassieâ€“Baxter wetting hypothesis and Cassieâ€“Wenzel capillarity-induced wetting transition. <i>Journal of Colloid and Interface Science</i> , 2007, 311, 212-216.	5.0	196
6	Vibration-induced Cassie-Wenzel wetting transition on rough surfaces. <i>Applied Physics Letters</i> , 2007, 90, 201917.	1.5	148
7	Interaction of cold radiofrequency plasma with seeds of beans (<i>Phaseolus vulgaris</i>). <i>Journal of Experimental Botany</i> , 2015, 66, 4013-4021.	2.4	130
8	Self-Propulsion of Liquid Marbles: Leidenfrost-like Levitation Driven by Marangoni Flow. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9910-9915.	1.5	127
9	Characterization of rough surfaces with vibrated drops. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 4056.	1.3	120
10	Resonance Cassieâ€“Wenzel Wetting Transition for Horizontally Vibrated Drops Deposited on a Rough Surface. <i>Langmuir</i> , 2007, 23, 12217-12221.	1.6	115
11	Surface tension of liquid marbles. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2009, 351, 78-82.	2.3	114
12	Contact Angle Hysteresis on Polymer Substrates Established with Various Experimental Techniques, Its Interpretation, and Quantitative Characterization. <i>Langmuir</i> , 2008, 24, 4020-4025.	1.6	101
13	Shape, Vibrations, and Effective Surface Tension of Water Marbles. <i>Langmuir</i> , 2009, 25, 1893-1896.	1.6	100
14	Controlling drop bouncing using surfaces with gradient features. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	93
15	Interfacial and conductive properties of liquid marbles coated with carbon black. <i>Powder Technology</i> , 2010, 203, 529-533.	2.1	82
16	Micrometrically scaled textured metallic hydrophobic interfaces validate the Cassieâ€“Baxter wetting hypothesis. <i>Journal of Colloid and Interface Science</i> , 2006, 302, 308-311.	5.0	74
17	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. <i>Langmuir</i> , 2007, 23, 4378-4382.	1.6	70
18	Revisiting the surface tension of liquid marbles: Measurement of the effective surface tension of liquid marbles with the pendant marble method. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013, 425, 15-23.	2.3	62

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19	Superhydrophobicity of Lotus Leaves versus Birds Wings: Different Physical Mechanisms Leading to Similar Phenomena. <i>Langmuir</i> , 2012, 28, 14992-14997.	1.6	58
20	Physical mechanisms of interaction of cold plasma with polymer surfaces. <i>Journal of Colloid and Interface Science</i> , 2015, 448, 175-179.	5.0	52
21	Oblate spheroid model for calculation of the shape and contact angles of heavy droplets. <i>Journal of Colloid and Interface Science</i> , 2009, 331, 174-177.	5.0	51
22	Mesoscopic Patterning in Evaporated Polymer Solutions: Poly(ethylene glycol) and Room-Temperature-Vulcanized Polyorganosilanes/siloxanes Promote Formation of Honeycomb Structures. <i>Macromolecular Chemistry and Physics</i> , 2008, 209, 567-576.	1.1	40
23	Electrically Deformable Liquid Marbles. <i>Journal of Adhesion Science and Technology</i> , 2011, 25, 1371-1377.	1.4	38
24	Superhydrophobic Metallic Surfaces and Their Wetting Properties. <i>Journal of Adhesion Science and Technology</i> , 2008, 22, 379-385.	1.4	35
25	On the Role of the Line Tension in the Stability of Cassie Wetting. <i>Langmuir</i> , 2013, 29, 5515-5519.	1.6	32
26	Superoleophobic Surfaces Obtained via Hierarchical Metallic Meshes. <i>Langmuir</i> , 2016, 32, 4134-4140.	1.6	31
27	Plasma treatment switches the regime of wetting and floating of pepper seeds. <i>Colloids and Surfaces B: Biointerfaces</i> , 2017, 157, 417-423.	2.5	24
28	Variational approach to wetting problems: Calculation of a shape of sessile liquid drop deposited on a solid substrate in external field. <i>Chemical Physics Letters</i> , 2008, 463, 103-105.	1.2	23
29	Interpretation of elasticity of liquid marbles. <i>Journal of Colloid and Interface Science</i> , 2015, 457, 148-151.	5.0	20
30	A reliable method of manufacturing metallic hierarchical superhydrophobic surfaces. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	19
31	Self-propelling rotator driven by soluto-capillary marangoni flows. <i>Applied Physics Letters</i> , 2017, 110, 131604.	1.5	19
32	Electrostatically driven droplets deposited on superhydrophobic surfaces. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	16
33	Comment on Water Wetting Transition Parameters of Perfluorinated Substrates with Periodically Distributed Flat-Top Microscale Obstacles. <i>Langmuir</i> , 2009, 25, 13694-13695.	1.6	13
34	Relaxation spectra of polymers and phenomena of electrical and hydrophobic recovery: Interplay between bulk and surface properties of polymers. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017, 55, 198-205.	2.4	13
35	Elastic Properties of Liquid Surfaces Coated with Colloidal Particles. <i>Advances in Condensed Matter Physics</i> , 2015, 2015, 1-6.	0.4	12
36	Stabilization of cubic phase in scandium-doped zirconia nanocrystals synthesized with sol-gel method. <i>Journal of the American Ceramic Society</i> , 2019, 102, 3236-3243.	1.9	10

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37	Template-assisted crystallization and colloidal self-assembly with use of the polymer micrometrically scaled honeycomb template. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 290, 273-279.	2.3	9
38	Template-assisted growth of chemical gardens: Formation of dendrite structures. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2006, 289, 245-249.	2.3	9
39	Jetting liquid marbles: study of the Taylor instability in immersed marbles. <i>Colloid and Polymer Science</i> , 2013, 291, 1535-1539.	1.0	8
40	On universality of scaling law describing roughness of triple line. <i>European Physical Journal E</i> , 2015, 38, 2.	0.7	8
41	Wetting Transitions on Post-Built and Porous Reliefs. <i>Journal of Adhesion Science and Technology</i> , 2012, 26, 1169-1180.	1.4	7
42	Robust method of manufacturing rubber waste-based water repellent surfaces. <i>Polymers for Advanced Technologies</i> , 2009, 20, 650-653.	1.6	6
43	Under-Liquid Self-Assembly of Submerged Buoyant Polymer Particles. <i>Langmuir</i> , 2016, 32, 5714-5720.	1.6	3
44	Dielectric properties of UV-irradiated ultrathin polysulfone films revealed by surface plasmon resonance method. <i>International Journal of Polymer Analysis and Characterization</i> , 2018, 23, 396-402.	0.9	2
45	Simultaneous determination of thickness and refractive index using Cauchy or Sellmeier formulas by the example of surface plasmon resonance study on ultrathin polysulfone film. <i>International Journal of Polymer Analysis and Characterization</i> , 2021, 26, 661-667.	0.9	2
46	Towards Understanding Wetting Transitions on Biomimetic Surfaces: Scaling Arguments and Physical Mechanisms. <i>Green Energy and Technology</i> , 2012, , 127-147.	0.4	0
47	Impact of Conditions of Water Supply on the Germination of Tomato and Pepper Seeds. , 0, , .		0
48	Influence of UV irradiation in nitrogen and air environment on dielectric properties of ultrathin polysulfone films revealed using surface plasmon resonance method. <i>International Journal of Polymer Analysis and Characterization</i> , 2018, 23, 669-674.	0.9	0