Michal Yarom

List of Publications by Year
in descending order

55 papers	5,950 citations	257357 24 h-index	175177 52 g-index
56 all docs	56 docs citations	56 times ranked	6769 citing authors

#	Article	IF	Citations
1	Wetting on Hydrophobic Rough Surfaces:Â To Be Heterogeneous or Not To Be?. Langmuir, 2003, 19, 8343-8348.	1.6	1,249
2	The Lotus Effect:Â Superhydrophobicity and Metastability. Langmuir, 2004, 20, 3517-3519.	1.6	973
3	Soft contact: measurement and interpretation of contact angles. Soft Matter, 2006, 2, 12-17.	1.2	440
4	A review on the wettability of dental implant surfaces I: Theoretical and experimental aspects. Acta Biomaterialia, 2014, 10, 2894-2906.	4.1	356
5	Contact angles and wettability: towards common and accurate terminology. Surface Innovations, 2017, 5, 3-8.	1.4	328
6	From Hygrophilic to Superhygrophobic: Theoretical Conditions for Making High-Contact-Angle Surfaces from Low-Contact-Angle Materials. Langmuir, 2008, 24, 7573-7579.	1.6	313
7	Shape-Dependent Localization of Carbon Nanotubes and Carbon Black in an Immiscible Polymer Blend during Melt Mixing. Macromolecules, 2011, 44, 6094-6102.	2.2	263
8	When Wenzel and Cassie Are Right: Reconciling Local and Global Considerations. Langmuir, 2009, 25, 1277-1281.	1.6	252
9	Super-hydrophobicity fundamentals: implications to biofouling prevention. Biofouling, 2006, 22, 107-115.	0.8	199
10	Solid-Surface Characterization by Wetting. Annual Review of Materials Research, 2009, 39, 473-489.	4.3	197
11	Hydro- hygro- oleo- omni-phobic? Terminology of wettability classification. Soft Matter, 2012, 8, 6867.	1.2	174
12	Contact angles: history of over 200 years of open questions. Surface Innovations, 2020, 8, 3-27.	1.4	168
13	Underwater Superhydrophobicity:Â Theoretical Feasibility. Langmuir, 2006, 22, 1400-1402.	1.6	155
14	Physics and applications of superhydrophobic and superhydrophilic surfaces and coatings. Surface Innovations, 2014, 2, 211-227.	1.4	130
15	THE SPREADING OF AQUEOUS SURFACTANT SOLUTIONS ON GLASS. Chemical Engineering Communications, 1981, 13, 133-143.	1.5	86
16	Superhydrophobic and superhygrophobic surfaces: from understanding non-wettability to design considerations. Soft Matter, 2013, 9, 7900.	1.2	81
17	Vapour-driven Marangoni propulsion: continuous, prolonged and tunable motion. Chemical Science, 2012, 3, 2526.	3.7	76
18	Profiling Single Cancer Cells with Volatolomics Approach. IScience, 2019, 11, 178-188.	1.9	45

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19	Optimizing Super-Hydrophobic Surfaces: Criteria for Comparison of Surface Topographies. Journal of Adhesion Science and Technology, 2009, 23, 401-411.	1.4	41
20	Particle Adhesion to Drops. Journal of Adhesion, 2005, 81, 869-880.	1.8	36
21	Correlating Interfacial Tensions with Surface Tensions: A Gibbsian Approach. Langmuir, 2010, 26, 5568-5575.	1.6	35
22	Wettability and Surface Tension of Amphiphilic Polymer Films: Timeâ€Dependent Measurements of the Most Stable Contact Angle. Macromolecular Chemistry and Physics, 2012, 213, 1448-1456.	1.1	30
23	Adhesion of Standard Explosive Particles to Model Surfaces. Journal of Physical Chemistry C, 2012, 116, 22815-22822.	1.5	26
24	Super-hydrophobic surfaces: Methodological considerations for physical design. Journal of Colloid and Interface Science, 2020, 568, 148-154.	5.0	25
25	Adhesion and Wetting in an Aqueous Environment:â€‰ Theoretical Assessment of Sensitivity to the Solid Surface Energy. Langmuir, 2004, 20, 1317-1320.	1.6	24
26	Rate of Bubble Coalescence following Quasi-Static Approach: Screening and Neutralization of the Electric Double Layer. Scientific Reports, 2014, 4, 4266.	1.6	22
27	Vaporâ€“liquid nucleation: the solid touch. Advances in Colloid and Interface Science, 2015, 222, 743-754.	7.0	21
28	Contact angle equilibrium: the intrinsic contact angle. Journal of Adhesion Science and Technology, 1992, 6, 689-701.	1.4	19
29	A biophysical vascular bubble model for devising decompression procedures. Physiological Reports, 2017, 5, e13191.	0.7	17
30	Contact angle measurement on rough surfaces: the missing link. Surface Innovations, 2017, 5, 190-193.	1.4	16
31	The porous nano-fibers raft: analysis of load-carrying mechanism and capacity. Soft Matter, 2011, 7, 7382.	1.2	15
32	Interfaces at equilibrium: A guide to fundamentals. Advances in Colloid and Interface Science, 2017, 244, 164-173.	7.0	15
33	The capillary race: Optimal surface tensions for fastest penetration. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2006, 282-283, 263-271.	2.3	14
34	Condensation Enhancement by Surface Porosity: Three-Stage Mechanism. Langmuir, 2015, 31, 8852-8855.	1.6	14
35	Bubble size on detachment from the luminal aspect of ovine large blood vessels after decompression: The effect of mechanical disturbance. Respiratory Physiology and Neurobiology, 2015, 216, 1-8.	0.7	13
36	Surface Tension and Adsorption without a Dividing Surface. Langmuir, 2015, 31, 12653-12657.	1.6	13

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37	Bubble the wave or waive the bubble: Why seawater waves foam and freshwater waves do not?. Colloids and Interface Science Communications, 2015, 6, 9-12.	2.0	9
38	Expansion of bubbles under a pulsatile flow regime in decompressed ovine blood vessels. Respiratory Physiology and Neurobiology, 2016, 222, 1-5.	0.7	8
39	Multi-scale roughness and the Lotus effect: Discontinuous liquid-air interfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 521, 78-85.	2.3	7
40	Thermal energy storage in columns packed with crosslinked polyethylene tubes. Polymer Engineering and Science, 1984, 24, 1227-1231.	1.5	6
41	Negative Pressure within a Liquidâ€"Fluid Interface Determines Its Thickness. Langmuir, 2020, 36, 7943-7947.	1.6	6
42	Capillary Condensation with a Grain of Salt. Langmuir, 2017, 33, 13444-13450.	1.6	5
43	Characterization of treated polyolefin surfaces by a liquid mixture spreading technique. Journal of Applied Polymer Science, 1980, 25, 1253-1256.	1.3	4
44	Surface tension of an ideal solid: What does it mean?. Current Opinion in Colloid and Interface Science, 2021, 51, 101388.	3.4	4
45	THERMODYNAMIC EQUILIBRIUM OF NONHOMOGENEOUS AND NONISOTROPIC CHEMICALLY REACTIVE SYSTEMS. Chemical Engineering Communications, 1985, 39, 381-388.	1.5	3
46	The Effect of Contamination on Adhesive Strength: Wettability Characterization by the CSC Method. Journal of Adhesion, 1987, 24, 139-153.	1.8	3
47	ASSESSMENT OF RED BLOOD CELL DEFORMABILITY BY CENTRIFUGAL SEDIMENTATION. Chemical Engineering Communications, 1996, 152-153, 5-15.	1.5	3
48	An Upper Bound on the Theoretical Activity Coefficient of Non-Electrolytes. ChemPhysChem, 2002, 3, 952-956.	1.0	3
49	The validity of the analytical approximations to the equation of bubble oscillations. Canadian Journal of Chemical Engineering, 1975, 53, 560-562.	0.9	2
50	Viscous effect on stagnation depth of bubbles in a vertically oscillating liquid column. Canadian Journal of Chemical Engineering, 1976, 54, 509-514.	0.9	2
51	EQUATIONS OF STATE AS CONSERVATION EQUATIONS. Chemical Engineering Communications, 1983, 22, 299-302.	1.5	2
52	HIGH-FREQUENCY SINGLE DROP FORMATION: PHENOMENOLOGY AND THE EFFECT OF SURFACTANTS. Chemical Engineering Communications, 1987, 55, 165-175.	1.5	2
53	Enhanced sedimentation of suspensions in porous media. Physics of Fluids, 1994, 6, 3180-3182.	1.6	0
54	Bubble clicking: Oscillations induced by the lung surfactant. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2007, 304, 18-24.	2.3	0

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55	Equilibrium Wetting Fundamentals. , 2009, , 43-54.		0