

Kripa K Varanasi

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

85
papers

7,706
citations

37
h-index

87
g-index

95
ext. papers

8,846
ext. citations

8.7
avg, IF

6.38
L-index

#	Paper	IF	Citations
85	Electrostatic dust removal using adsorbed moisture-assisted charge induction for sustainable operation of solar panels.. <i>Science Advances</i> , 2022 , 8, eabm0078	14.3	3
84	Dynamics of an impacting emulsion droplet.. <i>Science Advances</i> , 2022 , 8, eabl7160	14.3	4
83	Crystal critters: Self-ejection of crystals from heated, superhydrophobic surfaces. <i>Science Advances</i> , 2021 , 7,	14.3	6
82	Levitation of fizzy drops. <i>Science Advances</i> , 2021 , 7,	14.3	2
81	Catalyst-proximal plastrons enhance activity and selectivity of carbon dioxide electroreduction. <i>Cell Reports Physical Science</i> , 2021 , 2, 100318	6.1	7
80	Self-Propulsion of Boiling Droplets on Thin Heated Oil Films. <i>Physical Review Letters</i> , 2021 , 127, 074502	7.4	3
79	Phase Change Dispersion Made by Condensation-Emulsification.. <i>ACS Omega</i> , 2021 , 6, 34580-34595	3.9	
78	Bubble Capturing: Capturing Bubbles and Preventing Foam Using Aerophilic Surfaces (Adv. Mater. Interfaces 6/2020). <i>Advanced Materials Interfaces</i> , 2020 , 7, 2070029	4.6	2
77	Lubricant-Impregnated Surfaces for Mitigating Asphaltene Deposition. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 28750-28758	9.5	1
76	Asphaltene Adsorption on Functionalized Solids. <i>Langmuir</i> , 2020 , 36, 3894-3902	4	8
75	Crystal critters. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	2
74	Differences between Colloidal and Crystalline Evaporative Deposits. <i>Langmuir</i> , 2020 , 36, 11732-11741	4	8
73	Enhancing the Injectability of High Concentration Drug Formulations Using Core Annular Flows. <i>Advanced Healthcare Materials</i> , 2020 , 9, e2001022	10.1	3
72	Capturing Bubbles and Preventing Foam Using Aerophilic Surfaces. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1901599	4.6	2
71	Low-Voltage Surface Electrocoalescence Enabled by High-K Dielectrics and Surfactant Bilayers for Oil-Water Separation. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 34812-34818	9.5	5
70	Waterbowls: Reducing Impacting Droplet Interactions by Momentum Redirection. <i>ACS Nano</i> , 2019 , 13, 7729-7735	16.7	11
69	Grafted Nanofilms Promote Dropwise Condensation of Low-Surface-Tension Fluids for High-Performance Heat Exchangers. <i>Joule</i> , 2019 , 3, 1377-1388	27.8	23

68	Mobility of Yield Stress Fluids on Lubricant-Impregnated Surfaces. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 16123-16129	9.5	7
67	Study of the relationship between the crystal structure and micro-nano morphology of anodized stainless steels. <i>Electrochemistry Communications</i> , 2019 , 101, 109-114	5.1	3
66	Microstructured Ceramic-Coated Carbon Nanotube Surfaces for High Heat Flux Pool Boiling. <i>ACS Applied Nano Materials</i> , 2019 , 2, 5538-5545	5.6	4
65	Evaporative Crystallization of Spirals. <i>Langmuir</i> , 2019 , 35, 10484-10490	4	7
64	Reduced adhesion of sparkling water droplets. <i>Physical Review Fluids</i> , 2019 , 4,	2.8	8
63	Synthetic Butterfly Scale Surfaces with Compliance-Tailored Anisotropic Drop Adhesion. <i>Advanced Materials</i> , 2019 , 31, e1807686	24	27
62	Design of a spaceflight biofilm experiment. <i>Acta Astronautica</i> , 2018 , 148, 294-300	2.9	24
61	Evaporative Crystallization in Drops on Superhydrophobic and Liquid-Impregnated Surfaces. <i>Langmuir</i> , 2018 , 34, 12350-12358	4	26
60	Multilevel robustness. <i>Nature Materials</i> , 2018 , 17, 298-300	27	9
59	Separating nanoscale emulsions: Progress and challenges to date. <i>Current Opinion in Colloid and Interface Science</i> , 2018 , 36, 110-117	7.6	18
58	Crystallization-Induced Fouling during Boiling: Formation Mechanisms to Mitigation Approaches. <i>Langmuir</i> , 2018 , 34, 782-788	4	15
57	Self-peeling of impacting droplets. <i>Nature Physics</i> , 2018 , 14, 35-39	16.2	35
56	Short-Fluorinated iCVD Coatings for Nonwetting Fabrics. <i>Advanced Functional Materials</i> , 2018 , 28, 17073556	15.6	53
55	Electrostatically driven fog collection using space charge injection. <i>Science Advances</i> , 2018 , 4, eaao5323	14.3	63
54	Droplet fragmentation using a mesh. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	31
53	Expansion and retraction dynamics in drop-on-drop impacts on nonwetting surfaces. <i>Physical Review Fluids</i> , 2018 , 3,	2.8	13
52	Plastron Regeneration on Submerged Superhydrophobic Surfaces Using In Situ Gas Generation by Chemical Reaction. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 33684-33692	9.5	27
51	Photothermal trap utilizing solar illumination for ice mitigation. <i>Science Advances</i> , 2018 , 4, eaat0127	14.3	63

50	Enhancing the Performance of Viscous Electrode-Based Flow Batteries Using Lubricant-Impregnated Surfaces. <i>ACS Applied Energy Materials</i> , 2018 , 1, 3614-3621	6.1	4
49	Visible light guided manipulation of liquid wettability on photoresponsive surfaces. <i>Nature Communications</i> , 2017 , 8, 14968	17.4	68
48	Designing Ultra-Low Hydrate Adhesion Surfaces by Interfacial Spreading of Water-Immiscible Barrier Films. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 21496-21502	9.5	20
47	Kinetics of Photoinduced Wettability Switching on Nanoporous Titania Surfaces under Oil. <i>Advanced Materials Interfaces</i> , 2017 , 4, 1700462	4.6	15
46	Decreasing the Hydroxylation Affinity of La _{1-x} Sr _x MnO ₃ Perovskites To Promote Oxygen Reduction Electrocatalysis. <i>Chemistry of Materials</i> , 2017 , 29, 9990-9997	9.6	29
45	Creating nanoscale emulsions using condensation. <i>Nature Communications</i> , 2017 , 8, 1371	17.4	37
44	Enhancing droplet deposition through in-situ precipitation. <i>Nature Communications</i> , 2016 , 7, 12560	17.4	103
43	Surface and wetting characteristics of textured bisphenol-A based polycarbonate surfaces: Acetone-induced crystallization texturing methods. <i>Journal of Applied Polymer Science</i> , 2016 , 133, n/a-n/a ^{2,9}	2.9	9
42	Thermocapillary motion on lubricant-impregnated surfaces. <i>Physical Review Fluids</i> , 2016 , 1,	2.8	76
41	CHAPTER 10:Lubricant-Impregnated Surfaces. <i>RSC Soft Matter</i> , 2016 , 285-318	0.5	19
40	Characterization of Environmental Dust in the Dammam Area and Mud After-Effects on Bisphenol-A Polycarbonate Sheets. <i>Scientific Reports</i> , 2016 , 6, 24308	4.9	37
39	Low Ice Adhesion on Nano-Textured Superhydrophobic Surfaces under Supersaturated Conditions. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 12583-7	9.5	133
38	Reactivity of Perovskites with Water: Role of Hydroxylation in Wetting and Implications for Oxygen Electrocatalysis. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 18504-18512	3.8	70
37	Role of surface oxygen-to-metal ratio on the wettability of rare-earth oxides. <i>Applied Physics Letters</i> , 2015 , 106, 061601	3.4	91
36	Inverted Leidenfrost-like Effect during Condensation. <i>Langmuir</i> , 2015 , 31, 5353-63	4	8
35	Critical heat flux maxima during boiling crisis on textured surfaces. <i>Nature Communications</i> , 2015 , 6, 8247.4	17.4	227
34	How droplets nucleate and grow on liquids and liquid impregnated surfaces. <i>Soft Matter</i> , 2015 , 11, 69-80.6	3.6	108
33	Sustaining dry surfaces under water. <i>Scientific Reports</i> , 2015 , 5, 12311	4.9	47

32	Influence of dust and mud on the optical, chemical, and mechanical properties of a pv protective glass. <i>Scientific Reports</i> , 2015 , 5, 15833	4.9	78
31	Low-Dimensional Conduction Mechanisms in Highly Conductive and Transparent Conjugated Polymers. <i>Advanced Materials</i> , 2015 , 27, 4604-10	24	95
30	Conjugated Polymers: Low-Dimensional Conduction Mechanisms in Highly Conductive and Transparent Conjugated Polymers (Adv. Mater. 31/2015). <i>Advanced Materials</i> , 2015 , 27, 4664-4664	24	1
29	Dropwise condensation of low surface tension fluids on omniphobic surfaces. <i>Scientific Reports</i> , 2014 , 4, 4158	4.9	129
28	Separating oil-water nanoemulsions using flux-enhanced hierarchical membranes. <i>Scientific Reports</i> , 2014 , 4, 5504	4.9	73
27	Active surfaces: Ferrofluid-impregnated surfaces for active manipulation of droplets. <i>Applied Physics Letters</i> , 2014 , 105, 041604	3.4	87
26	Scale-resistant surfaces: Fundamental studies of the effect of surface energy on reducing scale formation. <i>Applied Surface Science</i> , 2014 , 313, 591-599	6.7	45
25	Drag reduction using lubricant-impregnated surfaces in viscous laminar flow. <i>Langmuir</i> , 2014 , 30, 10970-4	4	190
24	Stable dropwise condensation for enhancing heat transfer via the initiated chemical vapor deposition (iCVD) of grafted polymer films. <i>Advanced Materials</i> , 2014 , 26, 418-23	24	175
23	Designing Lubricant-Impregnated Textured Surfaces to Resist Scale Formation. <i>Advanced Materials Interfaces</i> , 2014 , 1, 1300068	4.6	61
22	Superhydrophobic surfaces by laser ablation of rare-earth oxide ceramics. <i>MRS Communications</i> , 2014 , 4, 95-99	2.7	26
21	Multimode multidrop serial coalescence effects during condensation on hierarchical superhydrophobic surfaces. <i>Langmuir</i> , 2013 , 29, 881-91	4	175
20	Reducing the contact time of a bouncing drop. <i>Nature</i> , 2013 , 503, 385-8	50.4	601
19	Increasing Leidenfrost point using micro-nano hierarchical surface structures. <i>Applied Physics Letters</i> , 2013 , 103, 201601	3.4	120
18	Electrostatic precursor films. <i>Soft Matter</i> , 2013 , 9, 9918	3.6	3
17	Droplet mobility on lubricant-impregnated surfaces. <i>Soft Matter</i> , 2013 , 9, 1772-1780	3.6	642
16	Hydrophobicity of rare-earth oxide ceramics. <i>Nature Materials</i> , 2013 , 12, 315-20	27	464
15	Mechanism of frost formation on lubricant-impregnated surfaces. <i>Langmuir</i> , 2013 , 29, 5230-8	4	273

14	Ice adhesion on lubricant-impregnated textured surfaces. <i>Langmuir</i> , 2013 , 29, 13414-8	4	235
13	Self-similarity of contact line depinning from textured surfaces. <i>Nature Communications</i> , 2013 , 4, 1492	17.4	162
12	Visualization of contact line motion on hydrophobic textures. <i>Surface Innovations</i> , 2013 , 1, 84-91	1.9	10
11	Enhanced condensation on lubricant-impregnated nanotextured surfaces. <i>ACS Nano</i> , 2012 , 6, 10122-9	16.7	440
10	Hierarchical polymeric textures via solvent-induced phase transformation: A single-step production of large-area superhydrophobic surfaces. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2012 , 394, 8-13	5.1	52
9	Rapid deceleration-driven wetting transition during pendant drop deposition on superhydrophobic surfaces. <i>Physical Review Letters</i> , 2011 , 106, 036102	7.4	136
8	Size-dependent thermal oxidation of copper: single-step synthesis of hierarchical nanostructures. <i>Nanoscale</i> , 2011 , 3, 4972	7.7	27
7	Controlling nucleation and growth of water using hybrid hydrophobic-hydrophilic surfaces 2010 ,		9
6	Frost formation and ice adhesion on superhydrophobic surfaces. <i>Applied Physics Letters</i> , 2010 , 97, 234103	3.4	505
5	Dynamic wetting on superhydrophobic surfaces: Droplet impact and wetting hysteresis 2010 ,		8
4	Relationships between water wettability and ice adhesion. <i>ACS Applied Materials & Interfaces</i> , 2010 , 2, 3100-10	9.5	538
3	Nonwetting of impinging droplets on textured surfaces. <i>Applied Physics Letters</i> , 2009 , 94, 133109	3.4	289
2	Spatial control in the heterogeneous nucleation of water. <i>Applied Physics Letters</i> , 2009 , 95, 094101	3.4	340
1	The Dynamics of Lead-Screw Drives: Low-Order Modeling and Experiments. <i>Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME</i> , 2004 , 126, 388-396	1.6	91