Xu Deng

List of Publications by Year
in descending order

77	8,006	126907 33	66911 78
papers	citations	h-index	g-index

80	80	80	6895
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fast photochromism in solid: Microenvironment in metal-organic frameworks promotes the isomerization of donor-acceptor Stenhouse adducts. Chemical Engineering Journal, 2022, 427, 132037.	12.7	14
2	Spontaneous charging affects the motion of sliding drops. Nature Physics, 2022, 18, 713-719.	16.7	62
3	Liquidâ€Pressureâ€Guided Superhydrophobic Surfaces with Adaptive Adhesion and Stability. Advanced Materials, 2022, 34, .	21.0	20
4	Green self-propelling swimmer driven by rain droplets. Nano Energy, 2022, 101, 107543.	16.0	25
5	General mechanism and mitigation for strong adhesion of frozen oil sands on solid substrates. Fuel, 2022, 325, 124797.	6.4	2
6	<i>Salvinia</i>-like slippery surface with stable and mobile water/air contact line. National Science Review, 2021, 8, nwaa153.	9.5	47
7	Selfâ€Assembly of Colloidal Nanoparticles into Wellâ€Ordered Centimeterâ€Long Rods via Crack Engineering. Advanced Materials Interfaces, 2021, 8, 2000222.	3.7	6
8	Surface contacts strongly influence the elasticity and thermal conductivity of silica nanoparticle fibers. Physical Chemistry Chemical Physics, 2021, 23, 3707-3715.	2.8	7
9	Robust superhydrophobicity: mechanisms and strategies. Chemical Society Reviews, 2021, 50, 4031-4061.	38.1	334
10	What Can Probing Liquidâ€"Air Menisci Inside Nanopores Teach Us About Macroscopic Wetting Phenomena?. ACS Applied Materials & Interfaces, 2021, 13, 6897-6905.	8.0	3
11	Charge Density Gradient Propelled Ultrafast Sweeping Removal of Dropwise Condensates. Journal of Physical Chemistry B, 2021, 125, 1936-1943.	2.6	18
12	In situ tunable droplet adhesion on a super-repellent surface via electrostatic induction effect. IScience, 2021, 24, 102208.	4.1	3
13	Polymeric Microparticles Generated via Confinementâ€Free Fluid Instability. Advanced Materials, 2021, 33, e2007154.	21.0	7
14	Designing of Rewritable Paper by Hydrochromic Donorâ€"Acceptor Stenhouse Adducts. ACS Nano, 2021, 15, 10384-10392.	14.6	38
15	Macrodropâ€Impactâ€Mediated Fluid Microdispensing. Advanced Science, 2021, 8, e2101331.	11.2	26
16	Durable Super-repellent Surfaces: From Solidâ€"Liquid Interaction to Applications. Accounts of Materials Research, 2021, 2, 920-932.	11.7	21
17	Is Heat Really Beneficial to Water Evaporation-Driven Electricity?. Journal of Physical Chemistry Letters, 2021, 12, 12370-12375.	4.6	8
18	Prompting Splash Impact on Superamphiphobic Surfaces by Imposing a Viscous Part. Advanced Science, 2020, 7, 1902687.	11.2	34

#	Article	IF	Citations
19	Facile Strategy to Generate Charged Droplets with Desired Polarities. ACS Omega, 2020, 5, 26908-26913.	3.5	5
20	Surface-Charge-Assisted Microdroplet Generation on a Superhydrophobic Surface. Langmuir, 2020, 36, 14352-14360.	3.5	11
21	Top-down Approach for Fabrication of Polymer Microspheres by Interfacial Engineering. Chinese Journal of Polymer Science (English Edition), 2020, 38, 1286-1293.	3.8	3
22	Biomaterial surface modification for underwater adhesion. Smart Materials in Medicine, 2020, 1, 77-91.	6.7	39
23	Design of robust superhydrophobic surfaces. Nature, 2020, 582, 55-59.	27.8	1,124
24	Evaporation and particle deposition of bi-component colloidal droplets on a superhydrophobic surface. International Journal of Heat and Mass Transfer, 2020, 159, 120063.	4.8	18
25	Harvesting Electricity from Water Evaporation through Microchannels of Natural Wood. ACS Applied Materials & Interfaces, 2020, 12, 11232-11239.	8.0	153
26	Surface charges as a versatile platform for emerging applications. Science Bulletin, 2020, 65, 1052-1054.	9.0	12
27	A droplet-based electricity generator with high instantaneous power density. Nature, 2020, 578, 392-396.	27.8	871
28	Oblique droplet impact on superhydrophobic surfaces: Jets and bubbles. Physics of Fluids, 2020, 32, .	4.0	31
29	Designing Transparent Micro/Nano Re-Entrant-Coordinated Superamphiphobic Surfaces with Ultralow Solid/Liquid Adhesion. ACS Applied Materials & Interfaces, 2019, 11, 29458-29465.	8.0	49
30	Surface charge printing for programmed droplet transport. Nature Materials, 2019, 18, 936-941.	27.5	401
31	Omniâ€Liquid Droplet Manipulation Platform. Advanced Materials Interfaces, 2019, 6, 1900653.	3.7	33
32	Multistimuli Responsive Liquidâ€Release in Dynamic Polymer Coatings for Controlling Surface Slipperiness and Optical Performance. Advanced Materials Interfaces, 2019, 6, 1901028.	3.7	13
33	Bioinspired Nacreâ€Like Alumina with a Metallic Nickel Compliant Phase Fabricated by Sparkâ€Plasma Sintering. Small, 2019, 15, 1900573.	10.0	28
34	Bioinspired hydrogel microfibres colour-encoded with colloidal crystals. Materials Horizons, 2019, 6, 1938-1943.	12.2	25
35	High-efficiency bubble transportation in an aqueous environment on a serial wedge-shaped wettability pattern. Journal of Materials Chemistry A, 2019, 7, 13567-13576.	10.3	90
36	Robust, Easyâ€Cleaning Superhydrophobic/Superoleophilic Copper Meshes for Oil/Water Separation under Harsh Conditions. Advanced Materials Interfaces, 2019, 6, 1900158.	3.7	20

#	Article	IF	Citations
37	An electric-field-dependent drop selector. Lab on A Chip, 2019, 19, 1296-1304.	6.0	6
38	Universal, Surfactantâ€Free Preparation of Hydrogel Beads on Superamphiphobic and Slippery Surfaces. Advanced Materials Interfaces, 2018, 5, 1701536.	3.7	12
39	A superhydrophilic cement-coated mesh: an acid, alkali, and organic reagent-free material for oil/water separation. Nanoscale, 2018, 10, 1920-1929.	5.6	81
40	Highâ€Performance pHâ€Switchable Supramolecular Thermosets via Cationâ€"Ï€ Interactions. Advanced Materials, 2018, 30, 1704234.	21.0	105
41	Reconfiguring surface functions using visible-light-controlled metal-ligand coordination. Nature Communications, 2018, 9, 3842.	12.8	59
42	Electrochemical sensor for determination of ractopamine based on aptamer/octadecanethiol Janus particles. Sensors and Actuators B: Chemical, 2018, 276, 204-210.	7.8	39
43	Spreading of impinging droplets on nanostructured superhydrophobic surfaces. Applied Physics Letters, 2018, 113, .	3.3	26
44	Earthwormâ€Inspired Rough Polymer Coatings with Selfâ€Replenishing Lubrication for Adaptive Frictionâ€Reduction and Antifouling Surfaces. Advanced Materials, 2018, 30, e1802141.	21.0	133
45	Anisotropic sliding on dual-rail hydrophilic tracks. Lab on A Chip, 2017, 17, 1041-1050.	6.0	56
46	Breath figure lithography for the construction of a hierarchical structure in sponges and their applications to oil/water separation. Journal of Materials Chemistry A, 2017, 5, 16369-16375.	10.3	42
47	Impact of Viscous Droplets on Superamphiphobic Surfaces. Langmuir, 2017, 33, 144-151.	3.5	67
48	Large-Area Fabrication of Droplet Pancake Bouncing Surface and Control of Bouncing State. ACS Nano, 2017, 11, 9259-9267.	14.6	118
49	Super-robust superhydrophobic concrete. Journal of Materials Chemistry A, 2017, 5, 14542-14550.	10.3	170
50	Dual-responsive supramolecular colloidal microcapsules from cucurbit[8]uril molecular recognition in microfluidic droplets. Polymer Chemistry, 2016, 7, 5996-6002.	3.9	22
51	Controlling the Localization of Liquid Droplets in Polymer Matrices by Evaporative Lithography. Angewandte Chemie, 2016, 128, 10839-10843.	2.0	5
52	Controlling the Localization of Liquid Droplets in Polymer Matrices by Evaporative Lithography. Angewandte Chemie - International Edition, 2016, 55, 10681-10685.	13.8	33
53	Polymeric Flaky Nanostructures from Cellulose Stearoyl Esters for Functional Surfaces. Advanced Materials Interfaces, 2016, 3, 1600636.	3.7	6
54	Fabrication of Long-Term Underwater Superoleophobic Al Surfaces and Application on Underwater Lossless Manipulation of Non-Polar Organic Liquids. Scientific Reports, 2016, 6, 31818.	3.3	18

#	Article	IF	Citations
55	Mechanically stable superhydrophobic polymer films by a simple hot press lamination and peeling process. RSC Advances, 2016, 6, 12530-12536.	3.6	22
56	Superamphiphobic Particles: How Small Can We Go?. Physical Review Letters, 2014, 112, 016101.	7.8	27
57	Optimization of superamphiphobic layers based on candle soot. Pure and Applied Chemistry, 2014, 86, 87-96.	1.9	23
58	Fabrication of superhydrophobic surface by a laminating exfoliation method. Journal of Materials Chemistry A, 2014, 2, 1268-1271.	10.3	31
59	Floating on Oil. Langmuir, 2014, 30, 10637-10642.	3.5	13
60	Super liquid-repellent gas membranes for carbon dioxide capture and heartâ€"lung machines. Nature Communications, 2013, 4, 2512.	12.8	98
61	Liquid Drops Impacting Superamphiphobic Coatings. Langmuir, 2013, 29, 7847-7856.	3.5	103
62	How superhydrophobicity breaks down. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 3254-3258.	7.1	397
63	Solventâ€Free Synthesis of Microparticles on Superamphiphobic Surfaces. Angewandte Chemie - International Edition, 2013, 52, 11286-11289.	13.8	38
64	Pinning-induced Variations of the Contact Angle of Drops on Microstructured Surfaces. Chemistry Letters, 2012, 41, 1343-1345.	1.3	5
65	Electrokinetics on superhydrophobic surfaces. Journal of Physics Condensed Matter, 2012, 24, 464110.	1.8	21
66	Candle Soot as a Template for a Transparent Robust Superamphiphobic Coating. Science, 2012, 335, 67-70.	12.6	1,783
67	Effect of Nanoroughness on Highly Hydrophobic and Superhydrophobic Coatings. Langmuir, 2012, 28, 15005-15014.	3.5	50
68	Wetting on the Microscale: Shape of a Liquid Drop on a Microstructured Surface at Different Length Scales. Langmuir, 2012, 28, 8392-8398.	3.5	74
69	Transparent, Thermally Stable and Mechanically Robust Superhydrophobic Surfaces Made from Porous Silica Capsules. Advanced Materials, 2011, 23, 2962-2965.	21.0	441
70	Superhydrophobic surfaces by hybrid raspberry-like particles. Faraday Discussions, 2010, 146, 35.	3.2	91
71	Effects of formulation and processing parameters on the morphology of extruded polypropyleneâ€(waste ground rubber tire powder) foams. Journal of Vinyl and Additive Technology, 2009, 15, 266-274.	3.4	9
72	Expanded Waste Ground Rubber Tire Powder/Polypropylene Composites: Processing-Structure Relationships. Journal of Composite Materials, 2009, 43, 3003-3015.	2.4	8

#	Article	IF	Citations
73	Wellâ€Controlled Microcellular Biodegradable PLA/Silk Composite Foams Using Supercritical CO₂. Macromolecular Materials and Engineering, 2009, 294, 620-624.	3.6	32
74	Dielectric properties of exfoliated graphite reinforced flouroelastomer composites. Journal of Applied Polymer Science, 2009, 111, 1358-1368.	2.6	37
75	The effect of physical treatments of waste rubber powder on the mechanical properties of the revulcanizate. Journal of Applied Polymer Science, 2009, 112, 3048-3056.	2.6	36
76	Dynamic reaction involving surface modified waste ground rubber tire powder/polypropylene. Polymer Engineering and Science, 2009, 49, 168-176.	3.1	24
77	Fly ash reinforced thermoplastic vulcanizates obtained from waste tire powder. Waste Management, 2009, 29, 1058-1066.	7.4	33