

# Yao Lu

## List of Publications by Year in descending order

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102  
papers

7,442  
citations

53660

45  
h-index

54797

84  
g-index

103  
all docs

103  
docs citations

103  
times ranked

7235  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tailoring Local Electrolyte Solvation Structure via a Mesoporous Molecular Sieve for Dendrite-Free Zinc Batteries. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	56
2	Saturated Surface Charging on Micro/Nanoporous Polytetrafluoroethylene for Droplet Manipulation. <i>ACS Applied Nano Materials</i> , 2022, 5, 3342-3351.	2.4	7
3	Rational Design of Durable Anti-fouling Coatings with High Transparency, Hardness, and Flexibility. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 29156-29166.	4.0	19
4	Durable fire retardant, superhydrophobic, abrasive resistant and air/UV stable coatings. <i>Journal of Colloid and Interface Science</i> , 2021, 582, 301-311.	5.0	39
5	Creation of Topological Ultraslippery Surfaces for Droplet Motion Control. <i>ACS Nano</i> , 2021, 15, 2589-2599.	7.3	93
6	Nanocrack-based strain sensors. <i>Journal of Materials Chemistry C</i> , 2021, 9, 754-772.	2.7	37
7	Unprecedented enhancement of wear resistance for epoxy-resin graphene composites. <i>Nanoscale</i> , 2021, 13, 2855-2867.	2.8	34
8	Photolithography-assisted precise patterning of nanocracks for ultrasensitive strain sensors. <i>Journal of Materials Chemistry A</i> , 2021, 9, 4262-4272.	5.2	17
9	A coating-free superhydrophobic sensing material for full-range human motion and microliter droplet impact detection. <i>Chemical Engineering Journal</i> , 2021, 410, 128418.	6.6	22
10	Design robust, degradable and recyclable superhydrophobic materials. <i>Chemical Engineering Journal</i> , 2021, 420, 129806.	6.6	24
11	Robust Micro-Nanostructured Superhydrophobic Surfaces for Long-Term Dropwise Condensation. <i>Nano Letters</i> , 2021, 21, 9824-9833.	4.5	64
12	Comparison Study of Self-Cleaning, Anti-Icing, and Durable Corrosion Resistance of Superhydrophobic and Lubricant-Infused Ultraslippery Surfaces. <i>Langmuir</i> , 2021, 37, 11061-11071.	1.6	35
13	Liquid-like transparent and flexible coatings for anti-graffiti applications. <i>Progress in Organic Coatings</i> , 2021, 161, 106476.	1.9	8
14	The challenges, achievements and applications of submersible superhydrophobic materials. <i>Chemical Society Reviews</i> , 2021, 50, 6569-6612.	18.7	81
15	Architecture-Driven Fast Droplet Transport without Mass Loss. <i>Langmuir</i> , 2021, 37, 12519-12528.	1.6	14
16	Superhydrophilic-superhydrophobic patterned surfaces on glass substrate for water harvesting. <i>Journal of Materials Science</i> , 2020, 55, 498-508.	1.7	46
17	TiO <sub>2</sub> nanotube arrays decorated with Au and Bi <sub>2</sub> S <sub>3</sub> nanoparticles for efficient Fe <sup>3+</sup> ions detection and dye photocatalytic degradation. <i>Journal of Materials Science and Technology</i> , 2020, 39, 28-38.	5.6	32
18	Micro-Nanostructured Interface for Liquid Manipulation and Its Applications. <i>Small</i> , 2020, 16, e1903849.	5.2	70

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19	Energy conversion based on superhydrophobic surfaces. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 25430-25444.	1.3	5
20	Sacrificial layer-assisted nanoscale transfer printing. <i>Microsystems and Nanoengineering</i> , 2020, 6, 80.	3.4	13
21	Bamboo-joint-like platforms for fast, long-distance, directional, and spontaneous transport of fluids. <i>Biomicrofluidics</i> , 2020, 14, 034105.	1.2	7
22	Nanoscale SiO <sub>2</sub> -coated superhydrophobic meshes via electro-spray deposition for oil-water separation. <i>Powder Technology</i> , 2020, 373, 82-92.	2.1	24
23	A simple, inexpensive and environmental-friendly electrochemical etching method to fabricate superhydrophobic GH4169 surfaces. <i>Surface and Coatings Technology</i> , 2020, 399, 126180.	2.2	25
24	Self-healing on mismatched fractured composite surfaces of SiC with a diameter of 180 nm. <i>Nanoscale</i> , 2020, 12, 19617-19627.	2.8	3
25	Macroscale Superlubricity Enabled by Graphene-Coated Surfaces. <i>Advanced Science</i> , 2020, 7, 1903239.	5.6	64
26	Superhydrophobic Nickel-Electroplated Carbon Fibers for Versatile Oil/Water Separation with Excellent Reusability and High Environmental Stability. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 24390-24402.	4.0	72
27	Unprecedented Piezoresistance Coefficient in Strained Silicon Carbide. <i>Nano Letters</i> , 2019, 19, 6569-6576.	4.5	62
28	Robust Superhydrophobic Conical Pillars from Syringe Needle Shape to Straight Conical Pillar Shape for Droplet Pancake Bouncing. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 45345-45353.	4.0	56
29	One-step synthesis of Ag@PS nanospheres via flash nanoprecipitation. <i>Applied Organometallic Chemistry</i> , 2019, 33, e4713.	1.7	6
30	Heterojunction Fe <sub>2</sub> O <sub>3</sub> /ZnO Films with Enhanced Photocatalytic Properties Grown by Aerosol-Assisted Chemical Vapour Deposition. <i>Chemistry - A European Journal</i> , 2019, 25, 11337-11345.	1.7	28
31	Low-Cost One-Step Fabrication of Highly Conductive ZnO:Cl Transparent Thin Films with Tunable Photocatalytic Properties via Aerosol-Assisted Chemical Vapor Deposition. <i>ACS Applied Electronic Materials</i> , 2019, 1, 1408-1417.	2.0	41
32	Ultrahigh Recovery of Fracture Strength on Mismatched Fractured Amorphous Surfaces of Silicon Carbide. <i>ACS Nano</i> , 2019, 13, 7483-7492.	7.3	54
33	Facile one-step fabrication of PHC/PDMS anti-icing coatings with mechanical properties and good durability. <i>Progress in Organic Coatings</i> , 2019, 135, 263-269.	1.9	28
34	High-efficiency bubble transportation in an aqueous environment on a serial wedge-shaped wettability pattern. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13567-13576.	5.2	90
35	Thermally-induced all-damage-healable superhydrophobic surface with photocatalytic performance from hierarchical BiOCl. <i>Chemical Engineering Journal</i> , 2019, 366, 439-448.	6.6	37
36	Study on the oil/water separation performance of a super-hydrophobic copper mesh under downhole conditions. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 72, 310-318.	2.9	19

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37	Inexpensive and non-fluorinated superhydrophobic concrete coating for anti-icing and anti-corrosion. <i>Journal of Colloid and Interface Science</i> , 2019, 541, 86-92.	5.0	170
38	A universal method to create surface patterns with extreme wettability on metal substrates. <i>Journal of Colloid and Interface Science</i> , 2019, 535, 100-110.	5.0	21
39	Controlling and modelling the wetting properties of III-V semiconductor surfaces using re-entrant nanostructures. <i>Scientific Reports</i> , 2018, 8, 3544.	1.6	4
40	Robust platform for water harvesting and directional transport. <i>Journal of Materials Chemistry A</i> , 2018, 6, 5635-5643.	5.2	71
41	A superhydrophilic cement-coated mesh: an acid, alkali, and organic reagent-free material for oil/water separation. <i>Nanoscale</i> , 2018, 10, 1920-1929.	2.8	81
42	Electrochemical machining of superhydrophobic surfaces on mold steel substrates. <i>Surface and Coatings Technology</i> , 2018, 344, 499-506.	2.2	30
43	Computational Intelligence-Assisted Understanding of Nature-Inspired Superhydrophobic Behavior. <i>Advanced Science</i> , 2018, 5, 1700520.	5.6	19
44	Super-durable, non-fluorinated superhydrophobic free-standing items. <i>Journal of Materials Chemistry A</i> , 2018, 6, 357-362.	5.2	75
45	Multifunctional Porous and Magnetic Silicone with High Elasticity, Durability, and Oil-Water Separation Properties. <i>Langmuir</i> , 2018, 34, 13305-13311.	1.6	25
46	Fabrication of Superhydrophobic Micro Post Array on Aluminum Substrates Using Mask Electrochemical Machining. <i>Chinese Journal of Mechanical Engineering (English Edition)</i> , 2018, 31, .	1.9	24
47	Efficiently texturing hierarchical superhydrophobic fluoride-free translucent films by AACVD with excellent durability and self-cleaning ability. <i>Journal of Materials Chemistry A</i> , 2018, 6, 17633-17641.	5.2	99
48	Photocatalytic and electrically conductive transparent Cl-doped ZnO thin films via aerosol-assisted chemical vapour deposition. <i>Journal of Materials Chemistry A</i> , 2018, 6, 12682-12692.	5.2	34
49	Superoleophobic surfaces on stainless steel substrates obtained by chemical bath deposition. <i>Micro and Nano Letters</i> , 2017, 12, 76-81.	0.6	19
50	Buoyancy increase and drag-reduction through a simple superhydrophobic coating. <i>Nanoscale</i> , 2017, 9, 7588-7594.	2.8	141
51	Large-scale fabrication of translucent and repairable superhydrophobic spray coatings with remarkable mechanical, chemical durability and UV resistance. <i>Journal of Materials Chemistry A</i> , 2017, 5, 10622-10631.	5.2	164
52	A Targeted Functional Design for Highly Efficient and Stable Cathodes for Rechargeable Li-Ion Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1604903.	7.8	22
53	Large-Area Fabrication of Droplet Pancake Bouncing Surface and Control of Bouncing State. <i>ACS Nano</i> , 2017, 11, 9259-9267.	7.3	118
54	Table Salt as a Template to Prepare Reusable Porous PVDF-MWCNT Foam for Separation of Immiscible Oils/Organic Solvents and Corrosive Aqueous Solutions. <i>Advanced Functional Materials</i> , 2017, 27, 1702926.	7.8	160

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55	Self-standing electrodes with core-shell structures for high-performance supercapacitors. <i>Energy Storage Materials</i> , 2017, 9, 119-125.	9.5	52
56	Transparent superhydrophobic PTFE films via one-step aerosol assisted chemical vapor deposition. <i>RSC Advances</i> , 2017, 7, 29275-29283.	1.7	52
57	Transforming a Simple Commercial Glue into Highly Robust Superhydrophobic Surfaces via Aerosol-Assisted Chemical Vapor Deposition. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 42327-42335.	4.0	85
58	Super-robust superhydrophobic concrete. <i>Journal of Materials Chemistry A</i> , 2017, 5, 14542-14550.	5.2	170
59	S, Nâ€Coâ€Doped Grapheneâ€Nickel Cobalt Sulfide Aerogel: Improved Energy Storage and Electrocatalytic Performance. <i>Advanced Science</i> , 2017, 4, 1600214.	5.6	204
60	Single Step Solution Processed GaAs Thin Films from GaMe3andtBuAsH2under Ambient Pressure. <i>Journal of Physical Chemistry C</i> , 2016, 120, 7013-7019.	1.5	12
61	Power-free water pump based on a superhydrophobic surface: generation of a mushroom-like jet and anti-gravity long-distance transport. <i>Journal of Materials Chemistry A</i> , 2016, 4, 13771-13777.	5.2	16
62	Controlling the Adhesion of Superhydrophobic Surfaces Using Electrolyte Jet Machining Techniques. <i>Scientific Reports</i> , 2016, 6, 23985.	1.6	52
63	Fabrication of Long-Term Underwater Superoleophobic Al Surfaces and Application on Underwater Lossless Manipulation of Non-Polar Organic Liquids. <i>Scientific Reports</i> , 2016, 6, 31818.	1.6	18
64	Synthesis and characterization of omniphobic surfaces with thermal, mechanical and chemical stability. <i>RSC Advances</i> , 2016, 6, 106491-106499.	1.7	17
65	Design and Fabrication of the Lyophobic Slippery Surface and Its Application in Anti-Icing. <i>Journal of Physical Chemistry C</i> , 2016, 120, 11054-11059.	1.5	84
66	TiO <sub>2</sub> Nanorod Array Constructed Nanotopography for Regulation of Mesenchymal Stem Cells Fate and the Realization of Locationâ€Committed Stem Cell Differentiation. <i>Small</i> , 2016, 12, 1770-1778.	5.2	57
67	Underwater Spontaneous Pumpless Transportation of Nonpolar Organic Liquids on Extreme Wettability Patterns. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 2942-2949.	4.0	72
68	Controllable Water Adhesion and Anisotropic Sliding on Patterned Superhydrophobic Surface for Droplet Manipulation. <i>Journal of Physical Chemistry C</i> , 2016, 120, 7233-7240.	1.5	89
69	Designing durable and flexible superhydrophobic coatings and its application in oil purification. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4107-4116.	5.2	94
70	Synthesis of superhydrophobic polymer/tungsten (VI) oxide nanocomposite thin films. <i>European Journal of Chemistry</i> , 2016, 7, 139-145.	0.3	5
71	Barrelâ€Shaped Oil Skimmer Designed for Collection of Oil from Spills. <i>Advanced Materials Interfaces</i> , 2015, 2, 1500350.	1.9	112
72	Tungsten Doped TiO <sub>2</sub> with Enhanced Photocatalytic and Optoelectrical Properties via Aerosol Assisted Chemical Vapor Deposition. <i>Scientific Reports</i> , 2015, 5, 10952.	1.6	122

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73	Characteristic and Application Study of Cold Atmospheric-Pressure Nitrogen Plasma Jet. IEEE Transactions on Plasma Science, 2015, 43, 1959-1968.	0.6	35
74	Hydrophilic patterning of superhydrophobic surfaces by atmospheric-pressure plasma jet. Micro and Nano Letters, 2015, 10, 105-108.	0.6	35
75	Structure, Synthesis, and Applications of TiO <sub>2</sub> Nanobelts. Advanced Materials, 2015, 27, 2557-2582.	11.1	287
76	Robust self-cleaning surfaces that function when exposed to either air or oil. Science, 2015, 347, 1132-1135.	6.0	1,494
77	Creating robust superamphiphobic coatings for both hard and soft materials. Journal of Materials Chemistry A, 2015, 3, 20999-21008.	5.2	123
78	Highly Photocatalytically Active Iron(III) Titanium Oxide Thin films via Aerosol-Assisted CVD. Chemical Vapor Deposition, 2015, 21, 21-25.	1.4	8
79	Functionalised gold and titania nanoparticles and surfaces for use as antimicrobial coatings. Faraday Discussions, 2014, 175, 273-287.	1.6	16
80	Water droplets bouncing on superhydrophobic soft porous materials. Journal of Materials Chemistry A, 2014, 2, 12177-12184.	5.2	45
81	Creating superhydrophobic mild steel surfaces for water proofing and oil-water separation. Journal of Materials Chemistry A, 2014, 2, 11628-11634.	5.2	153
82	Self-Driven One-Step Oil Removal from Oil Spill on Water via Selective-Wettability Steel Mesh. ACS Applied Materials & Interfaces, 2014, 6, 19858-19865.	4.0	226
83	Electrochemical fabrication of superhydrophobic Zn surfaces. Applied Surface Science, 2014, 315, 346-352.	3.1	42
84	Fabrication of superhydrophobic surfaces on Mg alloy substrates via primary cell corrosion and fluoroalkylsilane modification. Materials and Corrosion - Werkstoffe Und Korrosion, 2013, 64, 979-987.	0.8	18
85	Preparation of Superoleophobic and Superhydrophobic Titanium Surfaces via an Environmentally Friendly Electrochemical Etching Method. ACS Sustainable Chemistry and Engineering, 2013, 1, 102-109.	3.2	113
86	A simple immersion approach for fabricating superhydrophobic Mg alloy surfaces. Applied Surface Science, 2013, 266, 445-450.	3.1	78
87	Fabrication of superoleophobic surfaces on Al substrates. Journal of Materials Chemistry A, 2013, 1, 14783.	5.2	79
88	Fabrication Technology of Low-Adhesive Superhydrophobic and Superamphiphobic Surfaces Based on Electrochemical Machining Method. Journal of Micro and Nano-Manufacturing, 2013, 1, .	0.8	7
89	Anisotropic sliding of multiple-level biomimetic rice leaf surfaces on aluminium substrates. Micro and Nano Letters, 2013, 8, 801-804.	0.6	21
90	Fabrication of Low-Adhesive Superhydrophobic Al Surfaces via Self-Assembled Primary Cell Assisted Etching. Journal of Dispersion Science and Technology, 2013, 34, 908-913.	1.3	5

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91	Loading capacity of a self-assembled superhydrophobic boat array fabricated via electrochemical method. <i>Micro and Nano Letters</i> , 2012, 7, 786.	0.6	20
92	Electrochemical machining of super-hydrophobic Al surfaces and effect of processing parameters on wettability. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 108, 559-568.	1.1	34
93	Ultrafast fabrication of rough structures required by superhydrophobic surfaces on Al substrates using an immersion method. <i>Chemical Engineering Journal</i> , 2012, 211-212, 143-152.	6.6	107
94	Fabrication of superhydrophobic Cu surfaces on Al substrates via a facile chemical deposition process. <i>Materials Letters</i> , 2012, 87, 43-46.	1.3	33
95	Preparation of superhydrophobic titanium surfaces via electrochemical etching and fluorosilane modification. <i>Applied Surface Science</i> , 2012, 263, 297-301.	3.1	66
96	A rapid two-step electroless deposition process to fabricate superhydrophobic coatings on steel substrates. <i>Journal of Coatings Technology Research</i> , 2012, 9, 643-650.	1.2	14
97	Fabrication of Superhydrophobic Surfaces on Aluminum Substrates via Electrochemical Etching and Re-Deposition. <i>Applied Mechanics and Materials</i> , 2012, 197, 351-355.	0.2	4
98	Fabrication of superhydrophobic surfaces with hierarchical rough structures on Mg alloy substrates via chemical corrosion method. <i>Micro and Nano Letters</i> , 2012, 7, 204.	0.6	13
99	Fabrication of superhydrophobic surfaces with high adhesive forces towards water on steel substrates. <i>Micro and Nano Letters</i> , 2012, 7, 456.	0.6	6
100	One-step electrochemical machining of superhydrophobic surfaces on aluminum substrates. <i>Journal of Materials Science</i> , 2012, 47, 162-168.	1.7	72
101	Rapid fabrication of superhydrophobic surfaces on copper substrates by electrochemical machining. <i>Applied Surface Science</i> , 2011, 257, 10910-10916.	3.1	21
102	Rapid Fabrication of Large-Area, Corrosion-Resistant Superhydrophobic Mg Alloy Surfaces. <i>ACS Applied Materials &amp; Interfaces</i> , 2011, 3, 4404-4414.	4.0	343