

# Cheng Luo

## List of Publications by Year in descending order

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Version: 2024-02-01

57  
papers

1,048  
citations

394421

19  
h-index

454955

30  
g-index

57  
all docs

57  
docs citations

57  
times ranked

1145  
citing authors

#	ARTICLE	IF	CITATIONS
1	Branched ZnO Wire Structures for Water Collection Inspired by Cacti. ACS Applied Materials & Interfaces, 2014, 6, 8032-8041.	8.0	102
2	Enhancement of fog-collection efficiency of a Raschel mesh using surface coatings and local geometric changes. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2016, 508, 218-229.	4.7	74
3	Behavior of a Liquid Drop between Two Nonparallel Plates. Langmuir, 2014, 30, 8373-8380.	3.5	60
4	Releasing SU-8 structures using polystyrene as a sacrificial material. Sensors and Actuators A: Physical, 2004, 114, 123-128.	4.1	52
5	Transition from Cassieâ€“Baxter to Wenzel States on microline-formed PDMS surfaces induced by evaporation or pressing of water droplets. Microfluidics and Nanofluidics, 2011, 10, 831-842.	2.2	51
6	Reinforcement of PDMS masters using SU-8 truss structures. Journal of Micromechanics and Microengineering, 2005, 15, 1303-1309.	2.6	39
7	A Stable Intermediate Wetting State after a Water Drop Contacts the Bottom of a Microchannel or Is Placed on a Single Corner. Langmuir, 2012, 28, 9554-9561.	3.5	36
8	Bioinspired Plate-Based Fog Collectors. ACS Applied Materials & Interfaces, 2014, 6, 16257-16266.	8.0	35
9	Propulsion of microboats using isopropyl alcohol as a propellant. Journal of Micromechanics and Microengineering, 2008, 18, 067002.	2.6	32
10	Self-Rotation-Induced Propulsion of a Leidenfrost Drop on a Ratchet. Langmuir, 2017, 33, 6307-6313.	3.5	31
11	Controllable strain recovery of shape memory polystyrene to achieve superhydrophobicity with tunable adhesion. Journal of Micromechanics and Microengineering, 2014, 24, 115006.	2.6	30
12	Separation of Oil from a Water/Oil Mixed Drop Using Two Nonparallel Plates. Langmuir, 2014, 30, 10002-10010.	3.5	30
13	Theoretical Exploration of Barrel-Shaped Drops on Cactus Spines. Langmuir, 2015, 31, 11809-11813.	3.5	27
14	Fabrication of micropatterns on the sidewalls of a thermal shape memory polystyrene block. Journal of Micromechanics and Microengineering, 2010, 20, 095025.	2.6	25
15	Fabrication of super-hydrophobic channels. Journal of Micromechanics and Microengineering, 2010, 20, 025029.	2.6	24
16	Existence and Role of Large Micropillars on the Leaf Surfaces of The President Lotus. Langmuir, 2013, 29, 7715-7725.	3.5	22
17	Fabrication and application of silicon-reinforced PDMS masters. Microelectronics Journal, 2006, 37, 1036-1046.	2.0	21
18	Liquid Drop Runs Upward between Two Nonparallel Plates. Langmuir, 2015, 31, 2743-2748.	3.5	21

#	ARTICLE	IF	CITATIONS
19	A novel approach to fabricate a PPy/p-type Si heterojunction. <i>Solid-State Electronics</i> , 2006, 50, 1687-1691.	1.4	20
20	Upper bound of feed rates in thermoplastic material extrusion additive manufacturing. <i>Additive Manufacturing</i> , 2020, 32, 101019.	3.0	20
21	Angle Inequality for Judging the Transition from Cassie-Baxter to Wenzel States When a Water Drop Contacts Bottoms of Grooves between Micropillars. <i>Langmuir</i> , 2012, 28, 13636-13642.	3.5	19
22	Thermal ablation of PMMA for water release using a microheater. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, 580-588.	2.6	17
23	Fabrication of Super-Hydrophobic Microchannels via Strain-Recovery Deformations of Polystyrene and Oxygen Reactive Ion Etch. <i>Materials</i> , 2013, 6, 3610-3623.	2.9	16
24	Effects of dimensions on the sensitivity of a conducting polymer microwire sensor. <i>Microelectronics Journal</i> , 2009, 40, 912-920.	2.0	15
25	Dramatic squat and trim phenomena of mm-scaled SU-8 boats induced by Marangoni effect. <i>Microfluidics and Nanofluidics</i> , 2010, 9, 573-577.	2.2	15
26	Self-propulsion of Leidenfrost Drops between Non-Parallel Structures. <i>Scientific Reports</i> , 2017, 7, 12018.	3.3	15
27	Fabrication of Au sidewall micropatterns using Si-reinforced PDMS molds. <i>Sensors and Actuators A: Physical</i> , 2009, 152, 96-103.	4.1	12
28	Existence and stability of an intermediate wetting state on circular micropillars. <i>Microfluidics and Nanofluidics</i> , 2014, 17, 539-548.	2.2	12
29	An intermediate-layer lithography method for generating multiple microstructures made of different conducting polymers. <i>Microsystem Technologies</i> , 2007, 13, 1175-1184.	2.0	10
30	Control of the radial motion of a self-propelled microboat through a side rudder. <i>Sensors and Actuators A: Physical</i> , 2012, 188, 359-366.	4.1	10
31	Effects of feed rates on temperature profiles and feed forces in material extrusion additive manufacturing. <i>Additive Manufacturing</i> , 2020, 35, 101361.	3.0	10
32	Innovative approach for replicating micropatterns in a conducting polymer. <i>Journal of Vacuum Science &amp; Technology B</i> , 2006, 24, L19.	1.3	9
33	Fabrication of Au micropatterns on vertical Si sidewalls using flexible PDMS shadow masks. <i>Journal of Micromechanics and Microengineering</i> , 2010, 20, 127001.	2.6	8
34	Development of a self-propelled microflotilla. <i>Microsystem Technologies</i> , 2011, 17, 777-786.	2.0	8
35	Driving mechanisms of CM-scaled PDMS boats of respective close and open reservoirs. <i>Microsystem Technologies</i> , 2011, 17, 875-889.	2.0	8
36	Development of surface tension-driven microboats and microflotillas. <i>Microsystem Technologies</i> , 2012, 18, 1525-1541.	2.0	8

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37	Wetting States on Circular Micropillars with Convex Sidewalls after Liquids Contact Groove Base. <i>Langmuir</i> , 2013, 29, 15065-15075.	3.5	8
38	Conditions for Barrel and Clam-Shell Liquid Drops to Move on Bio-inspired Conical Wires. <i>Scientific Reports</i> , 2017, 7, 9717.	3.3	8
39	Modeling the temperature profile of an extrudate in material extrusion additive manufacturing. <i>Materials Letters</i> , 2020, 270, 127742.	2.6	8
40	In-situ observation of the extrusion processes of Acrylonitrile Butadiene Styrene and Polylactic Acid for material extrusion additive manufacturing. <i>Additive Manufacturing</i> , 2022, 49, 102507.	3.0	8
41	Generation of sidewall patterns in microchannels via strain-recovery deformations of polystyrene. <i>Sensors and Actuators A: Physical</i> , 2012, 188, 374-382.	4.1	7
42	Bonding widths of Deposited Polymer Strands in Additive Manufacturing. <i>Materials</i> , 2021, 14, 871.	2.9	7
43	Multiple conducting polymer microwire sensors. <i>Microsystem Technologies</i> , 2009, 15, 1737-1745.	2.0	6
44	Generation of Au micropatterns on two sidewalls of a Si channel through a PDMS shadow mask. <i>Journal of Micromechanics and Microengineering</i> , 2011, 21, 067005.	2.6	6
45	Generation of ZnO nanowires with varied densities and lengths by tilting a substrate. <i>Microsystem Technologies</i> , 2012, 18, 1497-1506.	2.0	6
46	Intermediate-layer lithography method for producing metal micropatterns. <i>Journal of Vacuum Science &amp; Technology B</i> , 2007, 25, 677.	1.3	5
47	Generation of micropatterns of conducting polymers and aluminum using an intermediate-layer lithography approach and some applications. <i>Microsystem Technologies</i> , 2009, 15, 1605-1617.	2.0	5
48	Increase buoyancy of a solid fragment using micropillars. <i>Sensors and Actuators A: Physical</i> , 2012, 182, 136-145.	4.1	5
49	Propulsion of a microsubmarine using a thermally oscillatory approach. <i>Journal of Micromechanics and Microengineering</i> , 2013, 23, 105011.	2.6	4
50	Growth of Ultra-Long ZnO Microtubes Using a Modified Vapor-Solid Setup. <i>Micromachines</i> , 2014, 5, 1069-1081.	2.9	4
51	Determination of constant viscosity for a power-law melt flow inside a circular tube. <i>Chemical Engineering Science</i> , 2019, 195, 239-241.	3.8	4
52	Electronic nose for detecting multiple targets. , 2006, 6223, 56.		3
53	Fabrication and testing of a self-propelled, miniaturized PDMS flotilla. <i>Microsystem Technologies</i> , 2012, 18, 1431-1444.	2.0	3
54	Creation of Superwetting Surfaces with Roughness Structures. <i>Langmuir</i> , 2014, 30, 14469-14475.	3.5	3

#	ARTICLE	IF	CITATIONS
55	Flexible PDMS microtubes for examining local hydrophobicity. <i>Microsystem Technologies</i> , 2015, 21, 477-485.	2.0	2
56	Two simple approaches to fabricate Au microlines on the outer surfaces of micropipettes. <i>Microsystem Technologies</i> , 2011, 17, 1115-1121.	2.0	1
57	Fabrication of micropatterns on channel sidewalls using strain-recovery property of a shape-memory polymer. , 2011, , .		1