Cheng Luo

List of Publications by Year
in descending order

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	In-situ observation of the extrusion processes of Acrylonitrile Butadiene Styrene and Polylactic Acid for material extrusion additive manufacturing. Additive Manufacturing, 2022, 49, 102507.	3.0	8
2	Bonding widths of Deposited Polymer Strands in Additive Manufacturing. Materials, 2021, 14, 871.	2.9	7
3	Upper bound of feed rates in thermoplastic material extrusion additive manufacturing. Additive Manufacturing, 2020, 32, 101019.	3.0	20
4	Effects of feed rates on temperature profiles and feed forces in material extrusion additive manufacturing. Additive Manufacturing, 2020, 35, 101361.	3.0	10
5	Modeling the temperature profile of an extrudate in material extrusion additive manufacturing. Materials Letters, 2020, 270, 127742.	2.6	8
6	Determination of constant viscosity for a power-law melt flow inside a circular tube. Chemical Engineering Science, 2019, 195, 239-241.	3.8	4
7	Self-Rotation-Induced Propulsion of a Leidenfrost Drop on a Ratchet. Langmuir, 2017, 33, 6307-6313.	3.5	31
8	Conditions for Barrel and Clam-Shell Liquid Drops to Move on Bio-inspired Conical Wires. Scientific Reports, 2017, 7, 9717.	3.3	8
9	Self-propulsion of Leidenfrost Drops between Non-Parallel Structures. Scientific Reports, 2017, 7, 12018.	3.3	15
10	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
11	Liquid Drop Runs Upward between Two Nonparallel Plates. Langmuir, 2015, 31, 2743-2748.	3.5	21
12	Theoretical Exploration of Barrel-Shaped Drops on Cactus Spines. Langmuir, 2015, 31, 11809-11813.	3.5	27
13	Flexible PDMS microtubes for examining local hydrophobicity. Microsystem Technologies, 2015, 21, 477-485.	2.0	2
14	Growth of Ultra-Long ZnO Microtubes Using a Modified Vapor-Solid Setup. Micromachines, 2014, 5, 1069-1081.	2.9	4
15	Creation of Superwetting Surfaces with Roughness Structures. Langmuir, 2014, 30, 14469-14475.	3.5	3
16	Existence and stability of an intermediate wetting state on circular micropillars. Microfluidics and Nanofluidics, 2014, 17, 539-548.	2.2	12
17	Controllable strain recovery of<i>shape memory</i>polystyrene to achieve superhydrophobicity with tunable adhesion. Journal of Micromechanics and Microengineering, 2014, 24, 115006.	2.6	30
18	Branched ZnO Wire Structures for Water Collection Inspired by Cacti. ACS Applied Materials & Interfaces, 2014, 6, 8032-8041.	8.0	102

#	ARTICLE	IF	CITATIONS
19	Separation of Oil from a Water/Oil Mixed Drop Using Two Nonparallel Plates. Langmuir, 2014, 30, 10002-10010.	3.5	30
20	Bioinspired Plate-Based Fog Collectors. ACS Applied Materials & Interfaces, 2014, 6, 16257-16266.	8.0	35
21	Behavior of a Liquid Drop between Two Nonparallel Plates. Langmuir, 2014, 30, 8373-8380.	3.5	60
22	Existence and Role of Large Micropillars on the Leaf Surfaces of <i>The President</i> Lotus. Langmuir, 2013, 29, 7715-7725.	3.5	22
23	Wetting States on Circular Micropillars with Convex Sidewalls after Liquids Contact Groove Base. Langmuir, 2013, 29, 15065-15075.	3.5	8
24	Fabrication of Super-Hydrophobic Microchannels via Strain-Recovery Deformations of Polystyrene and Oxygen Reactive Ion Etch. Materials, 2013, 6, 3610-3623.	2.9	16
25	Propulsion of a microsubmarine using a thermally oscillatory approach. Journal of Micromechanics and Microengineering, 2013, 23, 105011.	2.6	4
26	Fabrication and testing of a self-propelled, miniaturized PDMS flotilla. Microsystem Technologies, 2012, 18, 1431-1444.	2.0	3
27	Generation of ZnO nanowires with varied densities and lengths by tilting a substrate. Microsystem Technologies, 2012, 18, 1497-1506.	2.0	6
28	Development of surface tension-driven microboats and microflotillas. Microsystem Technologies, 2012, 18, 1525-1541.	2.0	8
29	Angle Inequality for Judging the Transition from Cassieâ€“Baxter to Wenzel States When a Water Drop Contacts Bottoms of Grooves between Micropillars. Langmuir, 2012, 28, 13636-13642.	3.5	19
30	Increase buoyancy of a solid fragment using micropillars. Sensors and Actuators A: Physical, 2012, 182, 136-145.	4.1	5
31	Generation of sidewall patterns in microchannels via strain-recovery deformations of polystyrene. Sensors and Actuators A: Physical, 2012, 188, 374-382.	4.1	7
32	Control of the radial motion of a self-propelled microboat through a side rudder. Sensors and Actuators A: Physical, 2012, 188, 359-366.	4.1	10
33	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
34	Development of a self-propelled microflotilla. Microsystem Technologies, 2011, 17, 777-786.	2.0	8
35	Two simple approaches to fabricate Au microlines on the outer surfaces of micropipettes. Microsystem Technologies, 2011, 17, 1115-1121.	2.0	1
36	Driving mechanisms of CM-scaled PDMS boats of respective close and open reservoirs. Microsystem Technologies, 2011, 17, 875-889.	2.0	8

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37	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
38	Fabrication of micropatterns on channel sidewalls using strain-recovery property of a shape-memory polymer. , 2011, , .		1
39	Generation of Au micropatterns on two sidewalls of a Si channel through a PDMS shadow mask. Journal of Micromechanics and Microengineering, 2011, 21, 067005.	2.6	6
40	Dramatic squat and trim phenomena of mm-scaled SU-8 boats induced by Marangoni effect. Microfluidics and Nanofluidics, 2010, 9, 573-577.	2.2	15
41	Fabrication of Au micropatterns on vertical Si sidewalls using flexible PDMS shadow masks. Journal of Micromechanics and Microengineering, 2010, 20, 127001.	2.6	8
42	Fabrication of micropatterns on the sidewalls of a thermal shape memory polystyrene block. Journal of Micromechanics and Microengineering, 2010, 20, 095025.	2.6	25
43	Fabrication of super-hydrophobic channels. Journal of Micromechanics and Microengineering, 2010, 20, 025029.	2.6	24
44	Generation of micropatterns of conducting polymers and aluminum using an intermediate-layer lithography approach and some applications. Microsystem Technologies, 2009, 15, 1605-1617.	2.0	5
45	Multiple conducting polymer microwire sensors. Microsystem Technologies, 2009, 15, 1737-1745.	2.0	6
46	Effects of dimensions on the sensitivity of a conducting polymer microwire sensor. Microelectronics Journal, 2009, 40, 912-920.	2.0	15
47	Fabrication of Au sidewall micropatterns using Si-reinforced PDMS molds. Sensors and Actuators A: Physical, 2009, 152, 96-103.	4.1	12
48	Propulsion of microboats using isopropyl alcohol as a propellant. Journal of Micromechanics and Microengineering, 2008, 18, 067002.	2.6	32
49	Intermediate-layer lithography method for producing metal micropatterns. Journal of Vacuum Science & Technology B, 2007, 25, 677.	1.3	5
50	An intermediate-layer lithography method for generating multiple microstructures made of different conducting polymers. Microsystem Technologies, 2007, 13, 1175-1184.	2.0	10
51	Electronic nose for detecting multiple targets. , 2006, 6223, 56.		3
52	Fabrication and application of silicon-reinforced PDMS masters. Microelectronics Journal, 2006, 37, 1036-1046.	2.0	21
53	A novel approach to fabricate a PPy/p-type Si heterojunction. Solid-State Electronics, 2006, 50, 1687-1691.	1.4	20
54	Thermal ablation of PMMA for water release using a microheater. Journal of Micromechanics and Microengineering, 2006, 16, 580-588.	2.6	17

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55	Innovative approach for replicating micropatterns in a conducting polymer. Journal of Vacuum Science & Technology B, 2006, 24, L19.	1.3	9
56	Reinforcement of PDMS masters using SU-8 truss structures. Journal of Micromechanics and Microengineering, 2005, 15, 1303-1309.	2.6	39
57	Releasing SU-8 structures using polystyrene as a sacrificial material. Sensors and Actuators A: Physical, 2004, 114, 123-128.	4.1	52