Lingling Shui

List of Publications by Year
in descending order

121 papers	3,430 citations	117625 34 h-index	175258 52 g-index
122 all docs	122 docs citations	122 times ranked	3530 citing authors

#	Article	IF	Citations
1	Strain Engineering of a MXene/CNT Hierarchical Porous Hollow Microsphere Electrocatalyst for a Highâ€Efficiency Lithium Polysulfide Conversion Process. Angewandte Chemie - International Edition, 2021, 60, 2371-2378.	13.8	176
2	Hierarchical Defective Fe_{3â€}_xC@C Hollow Microsphere Enables Fast and Longâ€Lasting Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2020, 30, 2001165.	14.9	144
3	Engineering the Conductive Network of Metal Oxideâ€Based Sulfur Cathode toward Efficient and Longevous Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2020, 10, 2002076.	19.5	126
4	Efficient and carbon-based hole transport layer-free CsPbI₂Br planar perovskite solar cells using PMMA modification. Journal of Materials Chemistry C, 2019, 7, 3852-3861.	5.5	102
5	Charge Trappingâ€Based Electricity Generator (CTEG): An Ultrarobust and High Efficiency Nanogenerator for Energy Harvesting from Water Droplets. Advanced Materials, 2020, 32, e2001699.	21.0	99
6	Electrolyte Design for Lithium Metal Anodeâ€Based Batteries Toward Extreme Temperature Application. Advanced Science, 2021, 8, e2101051.	11.2	95
7	Coordinatively Deficient Single-atom Fe-N-C Electrocatalyst with Optimized Electronic Structure for High-performance Lithium-sulfur Batteries. Energy Storage Materials, 2022, 46, 269-277.	18.0	95
8	Design of Quasiâ€MOF Nanospheres as a Dynamic Electrocatalyst toward Accelerated Sulfur Reduction Reaction for Highâ€Performance Lithiumâ€“Sulfur Batteries. Advanced Materials, 2022, 34, e2105541.	21.0	87
9	Insights into the mechanism of the enhanced visible-light photocatalytic activity of black phosphorus/BiVO₄ heterostructure: a first-principles study. Journal of Materials Chemistry A, 2018, 6, 19167-19175.	10.3	86
10	Interfacial tension controlled W/O and O/W 2-phase flows in microchannel. Lab on A Chip, 2009, 9, 795-801.	6.0	83
11	High-sensitive electrochemical sensor for determination of Norfloxacin and its metabolism using MWCNT-CPE/pRGO-ANSA/Au. Sensors and Actuators B: Chemical, 2018, 257, 1065-1075.	7.8	81
12	Scalable attoliter monodisperse droplet formation using multiphase nano-microfluidics. Microfluidics and Nanofluidics, 2011, 11, 87-92.	2.2	72
13	Promoting the Hole Extraction with Co₃O₄ Nanomaterials for Efficient Carbonâ€Based CsPbI₂Br Perovskite Solar Cells. Solar Rrl, 2019, 3, 1800315.	5.8	65
14	Porous organic polymers for Li-chemistry-based batteries: functionalities and characterization studies. Chemical Society Reviews, 2022, 51, 2917-2938.	38.1	65
15	The distinctive phase stability and defect physics in CsPbI₂Br perovskite. Journal of Materials Chemistry A, 2019, 7, 20201-20207.	10.3	64
16	Direct Growth of Oxygen Vacancy-Enriched Co₃O₄ Nanosheets on Carbon Nanotubes for High-Performance Supercapacitors. ACS Applied Materials & Interfaces, 2021, 13, 4419-4428.	8.0	55
17	Efficient and stable CH 3 NH 3 PbI 3-x (SCN) x planar perovskite solar cells fabricated in ambient air with low-temperature process. Journal of Power Sources, 2018, 377, 52-58.	7.8	53
18	Dissolving Vanadium into Titanium Nitride Lattice Framework for Rational Polysulfide Regulation in Liâ€“S Batteries. Advanced Energy Materials, 2021, 11, 2003020.	19.5	52

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19	Enhanced performance of CH3NH3PbI3â^'x Cl x perovskite solar cells by CH3NH3I modification of TiO2-perovskite layer interface. Nanoscale Research Letters, 2016, 11, 316.	5.7	50
20	Electrochemical sensor integrated microfluidic device for sensitive and simultaneous quantification of dopamine and 5-hydroxytryptamine. Sensors and Actuators B: Chemical, 2018, 273, 873-883.	7.8	49
21	Enhancing the efficiency of low-temperature planar perovskite solar cells by modifying the interface between perovskite and hole transport layer with polymers. Electrochimica Acta, 2018, 261, 445-453.	5.2	46
22	A review on self-assembly in microfluidic devices. Journal of Micromechanics and Microengineering, 2017, 27, 113002.	2.6	45
23	Molecularly imprinted polymer decorated 3D-framework of functionalized multi-walled carbon nanotubes for ultrasensitive electrochemical sensing of Norfloxacin in pharmaceutical formulations and rat plasma. Sensors and Actuators B: Chemical, 2019, 288, 363-372.	7.8	44
24	Single-Cell Phenotypic Profiling of CTCs in Whole Blood Using an Integrated Microfluidic Device. Analytical Chemistry, 2019, 91, 11078-11084.	6.5	41
25	Electrowetting on liquid-infused membrane for flexible and reliable digital droplet manipulation and application. Sensors and Actuators B: Chemical, 2019, 291, 470-477.	7.8	41
26	Electrically Controlled Localized Charge Trapping at Amorphous Fluoropolymerâ€“Electrolyte Interfaces. Small, 2020, 16, e1905726.	10.0	41
27	A Solution-Processed Dopant-Free Tin Phthalocyanine (SnPc) Hole Transport Layer for Efficient and Stable Carbon-Based CsPbI₂Br Planar Perovskite Solar Cells Prepared by a Low-Temperature Process. ACS Applied Energy Materials, 2020, 3, 7832-7843.	5.1	41
28	Synthesis of visible-light-driven BiOBrxI1-x solid solution nanoplates by ultrasound-assisted hydrolysis method with tunable bandgap and superior photocatalytic activity. Journal of Alloys and Compounds, 2018, 732, 167-177.	5.5	39
29	Amorphousâ€“crystalline-heterostructured niobium oxide as two-in-one host matrix for high-performance lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 11160-11167.	10.3	39
30	Interfacial Complexation Induced Controllable Fabrication of Stable Polyelectrolyte Microcapsules Using All-Aqueous Droplet Microfluidics for Enzyme Release. ACS Applied Materials & Interfaces, 2019, 11, 21227-21238.	8.0	38
31	Coreâ€“Shell MoS₂@CoO Electrocatalyst for Water Splitting in Neural and Alkaline Solutions. Journal of Physical Chemistry C, 2019, 123, 5833-5839.	3.1	38
32	Microfluidics Assisted Fabrication of Three-Tier Hierarchical Microparticles for Constructing Bioinspired Surfaces. ACS Nano, 2019, 13, 3638-3648.	14.6	37
33	Establishing the Preferential Adsorption of Anionâ€Đominated Solvation Structures in the Electrolytes for Highâ€Energyâ€Đensity Lithium Metal Batteries. Advanced Functional Materials, 2021, 31, 2011109.	14.9	37
34	Cell elasticity measurement using a microfluidic device with real-time pressure feedback. Lab on A Chip, 2020, 20, 2343-2353.	6.0	36
35	Geometry-controlled droplet generation in head-on microfluidic devices. Applied Physics Letters, 2008, 93, .	3.3	35
36	Two-phase microfluidics in electrowetting displays and its effect on optical performance. Biomicrofluidics, 2016, 10, 011908.	2.4	35

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37	Synthesis and characterization of mesoporous BiVO4 nanofibers with enhanced photocatalytic water oxidation performance. Applied Surface Science, 2019, 481, 255-261.	6.1	35
38	Continuous fabrication of microcapsules with controllable metal covered nanoparticle arrays using droplet microfluidics for localized surface plasmon resonance. Lab on A Chip, 2017, 17, 1970-1979.	6.0	33
39	A simple capillary-based open microfluidic device for size on-demand high-throughput droplet/bubble/microcapsule generation. Lab on A Chip, 2018, 18, 2806-2815.	6.0	33
40	Multiphase flow in lab on chip devices: A real tool for the future?. Lab on A Chip, 2008, 8, 1010.	6.0	32
41	In-Channel Responsive Surface Wettability for Reversible and Multiform Emulsion Droplet Preparation and Applications. ACS Applied Materials & Interfaces, 2019, 11, 16934-16943.	8.0	32
42	Driving Waveform Design of Electrowetting Displays Based on an Exponential Function for a Stable Grayscale and a Short Driving Time. Micromachines, 2020, 11, 313.	2.9	31
43	Cesium-Doped Graphene Quantum Dots as Ratiometric Fluorescence Sensors for Blood Glucose Detection. ACS Applied Nano Materials, 2021, 4, 8437-8446.	5.0	31
44	Redox-responsive organometallic microgel particles prepared from poly(ferrocenylsilane)s generated using microfluidics. Chemical Communications, 2014, 50, 3058-3060.	4.1	29
45	Uniform honeycomb CNT-microparticles prepared via droplet-microfluidics and sacrificial nanoparticles for electrochemical determination of methyl parathion. Sensors and Actuators B: Chemical, 2020, 321, 128517.	7.8	28
46	High performance planar perovskite solar cells based on CH3NH3PbI3-x(SCN)x perovskite film and SnO2 electron transport layer prepared in ambient air with 70% humility. Electrochimica Acta, 2018, 260, 468-476.	5.2	27
47	Janus Nanoparticles with Tunable Amphiphilicity for Stabilizing Pickering-Emulsion Droplets via Assembly Behavior at Oilâ€“Water Interfaces. ACS Applied Materials & Interfaces, 2020, 12, 26374-26383.	8.0	26
48	Triple signal-enhancing electrochemical aptasensor based on rhomboid dodecahedra carbonized-ZIF67 for ultrasensitive CRP detection. Biosensors and Bioelectronics, 2022, 207, 114129.	10.1	26
49	Screen-printing fabrication of electrowetting displays based on poly(imide siloxane) and polyimide. Displays, 2015, 37, 79-85.	3.7	25
50	Polarity-induced electronic and atomic reconstruction at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>NdNiO</mml:mi><mml:mn>2</mml:mn></mml:msub><m interfaces. Physical Review B, 2020, 102, .	3.2	25
51	Capillary instability, squeezing, and shearing in head-on microfluidic devices. Journal of Applied Physics, 2009, 106, .	2.5	24
52	Influence of fluoropolymer surface wettability on electrowetting display performance. Displays, 2018, 53, 47-53.	3.7	24
53	Microfluidic fabrication of responsive hierarchical microscale particles from macroscale materials and nanoscale particles. Sensors and Actuators B: Chemical, 2017, 247, 78-91.	7.8	23
54	Improving the performance of low-temperature planar perovskite solar cells by adding functional fullerene end-capped polyethylene glycol derivatives. Journal of Power Sources, 2018, 396, 49-56.	7.8	23

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55	High-throughput and ultra-sensitive single-cell profiling of multiple microRNAs and identification of human cancer. Chemical Communications, 2019, 55, 10404-10407.	4.1	22
56	Nitrogen defects-rich porous graphitic carbon nitride for efficient photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2020, 578, 788-795.	9.4	22
57	Microfluidic Magnetic Analyte Delivery Technique for Separation, Enrichment, and Fluorescence Detection of Ultratrace Biomarkers. Analytical Chemistry, 2021, 93, 8273-8280.	6.5	22
58	Plasmonic Nanocrystal Arrays on Photonic Crystals with Tailored Optical Resonances. ACS Applied Materials & Interfaces, 2020, 12, 37657-37669.	8.0	21
59	Bimetallic Hollow Tubular NiCoO_x as a Bifunctional Electrocatalyst for Enhanced Oxygen Reduction and Evolution Reaction. ACS Applied Materials & Interfaces, 2021, 13, 7334-7342.	8.0	21
60	An Electrochemical Sensor for Determination of Vitamin B₂ and B₆ Based on AuNPs@PDA-RGO Modified Glassy Carbon Electrode. Journal of the Electrochemical Society, 2019, 166, B821-B829.	2.9	20
61	Engineering checkerboard-like heterostructured sulfur electrocatalyst towards high-performance lithium sulfur batteries. Chemical Engineering Journal, 2022, 440, 135990.	12.7	20
62	Ag nano-assemblies on Si surface via CTAB-assisted galvanic reaction for sensitive and reliable surface-enhanced Raman scattering detection. Sensors and Actuators B: Chemical, 2020, 304, 127224.	7.8	19
63	A sensitive electrochemical sensor based on wrinkled mesoporous carbon nanomaterials for rapid and reliable assay of 17Î²-estradiol. Electrochimica Acta, 2022, 408, 139960.	5.2	18
64	A Mixed Antisolvent-Assisted Crystallization Strategy for Efficient All-Inorganic CsPbIBr₂ Perovskite Solar Cells by a Low-Temperature Process. ACS Applied Energy Materials, 2022, 5, 2881-2889.	5.1	18
65	Multilevel Spherical Photonic Crystals with Controllable Structures and Structureâ€Enhanced Functionalities. Advanced Optical Materials, 2020, 8, 1902164.	7.3	16
66	Chemical vapor deposition of amorphous molybdenum sulphide on black phosphorus for photoelectrochemical water splitting. Journal of Materials Science and Technology, 2021, 68, 1-7.	10.7	16
67	Emergent Ferroelectricity in Otherwise Nonferroelectric Oxides by Oxygen Vacancy Design at Heterointerfaces. ACS Applied Materials & Interfaces, 2020, 12, 45602-45610.	8.0	15
68	Novel 2D/2D BiOBr/UMOFNs direct Z-scheme photocatalyst for efficient phenol degradation. Nanotechnology, 2021, 32, 045711.	2.6	15
69	Accurate Isolation of Circulating Tumor Cells via a Heterovalent DNA Framework Recognition Element-Functionalized Microfluidic Chip. ACS Sensors, 2022, 7, 666-673.	7.8	15
70	Guiding particles along arbitrary trajectories by circular Pearcey-like vortex beams. Physical Review A, 2022, 106, .	2.5	15
71	Fabrication of Photo-Crosslinkable Poly(Trimethylene Carbonate)/Polycaprolactone Nanofibrous Scaffolds for Tendon Regeneration . International Journal of Nanomedicine, 2020, Volume 15, 6373-6383.	6.7	14
72	Enhanced performance and stability of ambient-processed CH3NH3PbI3-x(SCN)x planar perovskite solar cells by introducing ammonium salts. Applied Surface Science, 2020, 513, 145790.	6.1	14

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73	A highly efficient preconcentration route for rapid and sensitive detection of endotoxin based on an electrochemical biosensor. Analyst, The, 2020, 145, 4204-4211.	3.5	13
74	Boosting the performance of low-temperature processed CsPbI2Br planar perovskite solar cells by interface engineering. Dyes and Pigments, 2021, 186, 109024.	3.7	13
75	Strain Engineering of a MXene/CNT Hierarchical Porous Hollow Microsphere Electrocatalyst for a Highâ€Efficiency Lithium Polysulfide Conversion Process. Angewandte Chemie, 2021, 133, 2401-2408.	2.0	13
76	4-Bromoaniline Passivation for Efficient and Stable All-Inorganic CsPbI₂Br Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 5415-5423.	5.1	12
77	Guanidine Thiocyanateâ€Induced Highâ€Quality Perovskite Film for Efficient Tinâ€Based Perovskite Solar Cells. Solar Rrl, 2022, 6, .	5.8	12
78	Light manipulating electrode based on high optical haze aluminum-doped zinc oxide for highly efficient indium-tin-oxide free organic solar cells with over 13% efficiency. Journal of Materials Chemistry C, 2019, 7, 8515-8521.	5.5	11
79	High performance ZnO cathode interface doped by organic electrolyte and inorganic metal ion for organic solar cells. Optical Materials, 2020, 109, 110243.	3.6	11
80	Microfluidic-Assisted Fabrication of Monodisperse Coreâ€“Shell Microcapsules for Pressure-Sensitive Adhesive with Enhanced Performance. Nanomaterials, 2020, 10, 274.	4.1	11
81	Large-Area High-Contrast Hydrophobic/Hydrophilic Patterned Surface for Robust Electrowetting Devices. ACS Applied Nano Materials, 2019, 2, 1018-1026.	5.0	10
82	Nanoparticle-assisted sacrificial synthesis of hierarchical porous carbon composite for rapid sample enrichment and ultrasensitive label-free immunosensing of interleukin-6 biomarker. Journal of Electroanalytical Chemistry, 2021, 883, 115068.	3.8	10
83	Nanoid Canyons On-Demand: Electrically Switchable Surface Topography in Liquid Crystal Networks. ACS Applied Materials & Interfaces, 2018, 10, 37743-37748.	8.0	9
84	Enhanced performance of planar perovskite solar cells based on low-temperature processed TiO2 electron transport layer modified by Li2SiO3. Journal of Power Sources, 2018, 392, 1-7.	7.8	9
85	Investigating the Nucleation Kinetics of Calcium Carbonate Using a Zero-Water-Loss Microfluidic Chip. Crystal Growth and Design, 2020, 20, 2787-2795.	3.0	9
86	Magnetic polymeric nanoassemblies for magnetic resonance imaging-combined cancer theranostics. International Journal of Nanomedicine, 2018, Volume 13, 4263-4281.	6.7	8
87	Unusual Mechanism Behind Enhanced Photocatalytic Activity and Surface Passivation of SiC(0001) via Forming Heterostructure with a MoS₂ Monolayer. Journal of Physical Chemistry C, 2020, 124, 1362-1368.	3.1	7
88	Hematite photoanode modified with inexpensive hole-storage layer for highly efficient solar water oxidation. Nanotechnology, 2020, 31, 455405.	2.6	7
89	Mass Transport Determined Silica Nanowires Growth on Spherical Photonic Crystals with Nanostructureâ€Enabled Functionalities. Small, 2020, 16, 2001026.	10.0	7
90	Room-Temperature-Processed ZrO₂ Interlayer toward Efficient Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 3328-3336.	5.1	7

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91	Ionic liquid-modified ZnO-based electron transport layer for inverted organic solar cells. Journal of Materials Science: Materials in Electronics, 2020, 31, 12678-12683.	2.2	7
92	High conductivity and transparency metal network fabricated by acrylic colloidal self-cracking template for flexible thermochromic device. Organic Electronics, 2020, 83, 105763.	2.6	7
93	Particle directed dual-fluid flow driven by electrowetting for controllable multiway light valves. Applied Physics Letters, 2018, 112, .	3.3	6
94	Flow-Field-Assisted Dielectrophoretic Microchips for High-Efficiency Sheathless Particle/Cell Separation with Dual Mode. Analytical Chemistry, 2021, 93, 7606-7615.	6.5	6
95	Designable Layer Edge States in Quasiâ€2D Perovskites Induced by Femtosecond Pulse Laser. Advanced Science, 2022, 9, e2201046.	11.2	6
96	TiVN composite hollow mesospheres for high-performance supercapacitors. Materials Research Express, 2019, 6, 025801.	1.6	5
97	Structural Optimization of Single-Layer Graphene Metamaterial for Ultra-Broadband Terahertz Absorber. IEEE Photonics Journal, 2021, 13, 1-7.	2.0	5
98	The fabrication of a 3D current collector with bitter melon-like TiO₂â€“NCNFs for highly stable lithiumâ€“sulfur batteries. Nanoscale Advances, 2019, 1, 527-531.	4.6	4
99	Intelligent droplet manipulation in electrowetting devices via capacitance-based sensing and actuation for self-adaptive digital microfluidics. Microfluidics and Nanofluidics, 2020, 24, 1.	2.2	4
100	Autonomous capillary microfluidic devices with constant flow rate and temperature-controlled valving. Soft Matter, 2021, 17, 7781-7791.	2.7	4
101	Paper-based electrowetting devices fabricated with cellulose paper and paraffin wax. Results in Physics, 2021, 31, 105042.	4.1	4
102	Wafer-Scale Fabrication and Transfer of Porous Silicon Films as Flexible Nanomaterials for Sensing Application. Nanomaterials, 2022, 12, 1191.	4.1	4
103	Abruptly Autofocusing Twisted Optical Bottle Beams. Physical Review Applied, 2022, 17, .	3.8	4
104	Wafer-scale fabrication of high-density nanoslit arrays for surface-enhanced Raman spectroscopy. Nanotechnology, 2016, 27, 49LT01.	2.6	3
105	Protonation-induced molecular permeation at the oil/water interface in an electric field. Physical Chemistry Chemical Physics, 2018, 20, 29012-29017.	2.8	3
106	Large-Area and Patternable Nano-Dot Array from Electrolysis of ITO Film for Surface-Enhanced Raman Spectroscopy. Nanoscale Research Letters, 2020, 15, 8.	5.7	3
107	Kinetics of colloidal particle deposition in microfluidic systems under temperature gradients: experiment and modelling. Soft Matter, 2020, 16, 3649-3656.	2.7	3
108	Microstructuring of 2D perovskites via ion-exchange fabrication. Applied Physics Letters, 2021, 119, 223102.	3.3	3

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109	Organic Photovoltaics: A Costâ€Effective, Aqueousâ€Solutionâ€Processed Cathode Interlayer Based on Organosilica Nanodots for Highly Efficient and Stable Organic Solar Cells (Adv. Mater. 38/2020). Advanced Materials, 2020, 32, 2070284.	21.0	1
110	Two-dimensional colloidal particle assembly in ionic surfactant solutions under an oscillatory electric field. Journal Physics D: Applied Physics, 2021, 54, 475302.	2.8	1
111	Lithiumâ€“Sulfur Batteries: Hierarchical Defective Fe_{3â€‹}_xC@C Hollow Microsphere Enables Fast and Longâ€Lasting Lithiumâ€“Sulfur Batteries (Adv. Funct. Mater. 22/2020). Advanced Functional Materials, 2020, 30, .	14.9	1
112	Lithography-free synthesis of periodic, vertically-aligned, multi-walled carbon nanotube arrays. Nanotechnology, 2021, 33, .	2.6	1
113	A simple structure laser three-focus scheme for thick glass separation. AIP Advances, 2021, 11, 115001.	1.3	1
114	Bifunctional Passivation for Efficient and Stable Low-Temperature Processed All-Inorganic CsPbIBr2 Perovskite Solar Cells. Surfaces and Interfaces, 2022, 32, 102097.	3.0	1
115	Photothermal Waveguide-Directed Microreactor for Enhanced Copper Ion Detection from Quantum Dots. ACS Applied Nano Materials, 2022, 5, 9179-9187.	5.0	1
116	Configuration-Controllable Polymeric Nanovehicles Self-Assembled in Pixel Grids under an Electric Field. ACS Applied Materials & Interfaces, 2020, 12, 4052-4060.	8.0	0
117	Silica Nanowires: Mass Transport Determined Silica Nanowires Growth on Spherical Photonic Crystals with Nanostructureâ€Enabled Functionalities (Small 24/2020). Small, 2020, 16, 2070135.	10.0	0
118	Innentitelbild: Strain Engineering of a MXene/CNT Hierarchical Porous Hollow Microsphere Electrocatalyst for a Highâ€Efficiency Lithium Polysulfide Conversion Process (Angew. Chem. 5/2021). Angewandte Chemie, 2021, 133, 2198-2198.	2.0	0
119	Design of Quasiâ€MOF Nanospheres as a Dynamic Electrocatalyst toward Accelerated Sulfur Reduction Reaction for Highâ€Performance Lithiumâ€“Sulfur Batteries (Adv. Mater. 2/2022). Advanced Materials, 2022, 34, .	21.0	0
120	Adjustable multifocus laser separation scheme for thick glass with flexibly controllable thermal stress distribution. Journal of Laser Applications, 2022, 34, 012028.	1.7	0
121	Programmable hierarchical plasmonicâ€“photonic arrays via laser-induced film dewetting. Nanophotonics, 2022, .	6.0	0