# Jinyou Shao

List of Publications by Year
in descending order



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|---|---|---|---|
| 113 papers | 4,397 citations | 117625 34 h-index | 118850 62 g-index |
| 117 all docs | 117 docs citations | 117 times ranked | 5772 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Highly Efficient Flexible Perovskite Solar Cells Using Solution-Derived NiO<sub>x</sub> Hole Contacts. ACS Nano, 2016, 10, 3630-3636. | 14.6 | 426 |
| 2 | Highâ€Performance Piezoelectric Nanogenerators with Imprinted P(VDFâ€TrFE)/BaTiO<sub>3</sub> Nanocomposite Micropillars for Selfâ€Powered Flexible Sensors. Small, 2017, 13, 1604245. | 10.0 | 329 |
| 3 | Flexible Capacitive Pressure Sensor Enhanced by Tilted Micropillar Arrays. ACS Applied Materials & Interfaces, 2019, 11, 17796-17803. | 8.0 | 292 |
| 4 | Self-powered flexible pressure sensors with vertically well-aligned piezoelectric nanowire arrays for monitoring vital signs. Journal of Materials Chemistry C, 2015, 3, 11806-11814. | 5.5 | 171 |
| 5 | A high performance P(VDF-TrFE) nanogenerator with self-connected and vertically integrated fibers by patterned EHD pulling. Nanoscale, 2015, 7, 11536-11544. | 5.6 | 159 |
| 6 | Polydopamine-Coated Main-Chain Liquid Crystal Elastomer as Optically Driven Artificial Muscle. ACS Applied Materials & Interfaces, 2018, 10, 8307-8316. | 8.0 | 147 |
| 7 | A Stretchable and Transparent Nanocomposite Nanogenerator for Self-Powered Physiological Monitoring. ACS Applied Materials & Interfaces, 2017, 9, 42200-42209. | 8.0 | 131 |
| 8 | High energy flexible supercapacitors formed via bottom-up infilling of gel electrolytes into thick porous electrodes. Nature Communications, 2018, 9, 2578. | 12.8 | 121 |
| 9 | Flexible and Transparent Strain Sensors with Embedded Multiwalled Carbon Nanotubes Meshes. ACS Applied Materials & Interfaces, 2017, 9, 40681-40689. | 8.0 | 114 |
| 10 | Engineering the Exciton Dissociation in Quantumâ€Confined 2D CsPbBr<sub>3</sub> Nanosheet Films. Advanced Functional Materials, 2018, 28, 1705908. | 14.9 | 98 |
| 11 | Nanoimprint lithography for the manufacturing of flexible electronics. Science China Technological Sciences, 2019, 62, 175-198. | 4.0 | 88 |
| 12 | Decreasing the Saturated Contact Angle in Electrowettingâ€onâ€Dielectrics by Controlling the Charge Trapping at Liquidâ€“Solid Interfaces. Advanced Functional Materials, 2016, 26, 2994-3002. | 14.9 | 86 |
| 13 | Transparent and stretchable bimodal triboelectric nanogenerators with hierarchical micro-nanostructures for mechanical and water energy harvesting. Nano Energy, 2019, 64, 103904. | 16.0 | 85 |
| 14 | Induced-charge electroosmotic trapping of particles. Lab on A Chip, 2015, 15, 2181-2191. | 6.0 | 82 |
| 15 | Semi-Transparent ZnO-CuI/CuSCN Photodiode Detector with Narrow-Band UV Photoresponse. ACS Applied Materials & Interfaces, 2015, 7, 21235-21244. | 8.0 | 66 |
| 16 | Electrically Templated Dewetting of a UV-Curable Prepolymer Film for the Fabrication of a Concave Microlens Array with Well-Defined Curvature. ACS Applied Materials & Interfaces, 2013, 5, 9975-9982. | 8.0 | 63 |
| 17 | Switchable Dry Adhesion with Step-like Micropillars and Controllable Interfacial Contact. ACS Applied Materials & Interfaces, 2016, 8, 10029-10037. | 8.0 | 58 |
| 18 | A Flexible Piezoelectric-Pyroelectric Hybrid Nanogenerator Based on P(VDF-TrFE) Nanowire Array. IEEE Nanotechnology Magazine, 2016, 15, 295-302. | 2.0 | 55 |

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|---|---|---|---|
| 19 | Spray-Coated CsPbBr<sub>3</sub> Quantum Dot Films for Perovskite Photodiodes. ACS Applied Materials & Interfaces, 2018, 10, 26387-26395. | 8.0 | 54 |
| 20 | 3D printed piezoelectric BNNTs nanocomposites with tunable interface and microarchitectures for self-powered conformal sensors. Nano Energy, 2020, 77, 105300. | 16.0 | 54 |
| 21 | Numerical Characterization of Electrohydrodynamic Micro- or Nanopatterning Processes Based on a Phase-Field Formulation of Liquid Dielectrophoresis. Langmuir, 2013, 29, 4703-4714. | 3.5 | 53 |
| 22 | Generation of Fullyâ€Covering Hierarchical Microâ€/Nanoâ€•Structures by Nanoimprinting and Modified Laser Swelling. Small, 2014, 10, 2595-2601. | 10.0 | 53 |
| 23 | Switchable Adhesion for Nonflat Surfaces Mimicking Geckosâ€™ Adhesive Structures and Toe Muscles. ACS Applied Materials & Interfaces, 2020, 12, 39745-39755. | 8.0 | 50 |
| 24 | Fabrication of Microlens Arrays with Wellâ€controlled Curvature by Liquid Trapping and Electrohydrodynamic Deformation in Microholes. Advanced Materials, 2012, 24, OP165-9, OP90. | 21.0 | 48 |
| 25 | Discretely Supported Dry Adhesive Film Inspired by Biological Bending Behavior for Enhanced Performance on a Rough Surface. ACS Applied Materials & Interfaces, 2017, 9, 7752-7760. | 8.0 | 47 |
| 26 | Shape-programmable, deformation-locking, and self-sensing artificial muscle based on liquid crystal elastomer and lowâ€“melting point alloy. Science Advances, 2022, 8, eabn5722. | 10.3 | 46 |
| 27 | Scalable Imprinting of Flexible Multiplexed Sensor Arrays with Distributed Piezoelectricityâ€Enhanced Micropillars for Dynamic Tactile Sensing. Advanced Materials Technologies, 2020, 5, 2000046. | 5.8 | 45 |
| 28 | An Electrically Actuated Soft Artificial Muscle Based on a High-Performance Flexible Electrothermal Film and Liquid-Crystal Elastomer. ACS Applied Materials & Interfaces, 2020, 12, 56338-56349. | 8.0 | 44 |
| 29 | Highâ€Performance Packaged 3D Lithiumâ€Ion Microbatteries Fabricated Using Imprint Lithography. Advanced Materials, 2021, 33, e2006229. | 21.0 | 43 |
| 30 | Fabrication of concave microlens arrays using controllable dielectrophoretic force in template holes. Optics Letters, 2011, 36, 4083. | 3.3 | 39 |
| 31 | One-Dimensional Auâ€“ZnO Heteronanostructures for Ultraviolet Light Detectors by a Two-Step Dielectrophoretic Assembly Method. ACS Applied Materials & Interfaces, 2015, 7, 12713-12718. | 8.0 | 38 |
| 32 | An electrically active gecko-effect soft gripper under a low voltage by mimicking gecko's adhesive structures and toe muscles. Soft Matter, 2020, 16, 5599-5608. | 2.7 | 38 |
| 33 | Improved triboelectrification effect by bendable and slidable fish-scale-like microstructures. Nano Energy, 2017, 40, 646-654. | 16.0 | 37 |
| 34 | Flexible all-inorganic photoconductor detectors based on perovskite/hole-conducting layer heterostructures. Journal of Materials Chemistry C, 2018, 6, 6739-6746. | 5.5 | 36 |
| 35 | Nanoscale Electrodes for Flexible Electronics by Swelling Controlled Cracking. Advanced Materials, 2016, 28, 6337-6344. | 21.0 | 34 |
| 36 | Influence of Induced-Charge Electrokinetic Phenomena on the Dielectrophoretic Assembly of Gold Nanoparticles in a Conductive-Island-Based Microelectrode System. Langmuir, 2013, 29, 12093-12103. | 3.5 | 32 |

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|---|---|---|---|
| 37 | Dielectrophoretic-Assembled Single and Parallel-Aligned Ag Nanowireâ€“ZnO-Branched Nanorod Heteronanowire Ultraviolet Photodetectors. ACS Applied Materials & Interfaces, 2017, 9, 22837-22845. | 8.0 | 31 |
| 38 | On utilizing alternating current-flow field effect transistor for flexibly manipulating particles in microfluidics and nanofluidics. Biomicrofluidics, 2016, 10, 034105. | 2.4 | 30 |
| 39 | Bioinspired Hierarchical Structures for Contactâ€Sensible Adhesives. Advanced Functional Materials, 2022, 32, 2109076. | 14.9 | 30 |
| 40 | Friction Contribution to Bioinspired Mushroomâ€Shaped Dry Adhesives. Advanced Materials Interfaces, 2017, 4, 1700016. | 3.7 | 29 |
| 41 | Geckoâ€Effect Inspired Soft Gripper with High and Switchable Adhesion for Rough Surfaces. Advanced Materials Interfaces, 2019, 6, 1900875. | 3.7 | 29 |
| 42 | Fabricating hierarchical micro and nano structures on implantable Coâ€“Crâ€“Mo alloy for tissue engineering by one-step laser ablation. Colloids and Surfaces B: Biointerfaces, 2018, 161, 628-635. | 5.0 | 27 |
| 43 | Formation of irregular micro- or nano-structure with features of varying size by spatial fine-modulation of electric field. Soft Matter, 2013, 9, 8033. | 2.7 | 26 |
| 44 | Electrically Modulated Microtransfer Molding for Fabrication of Micropillar Arrays with Spatially Varying Heights. Langmuir, 2013, 29, 1351-1355. | 3.5 | 26 |
| 45 | Electrohydrodynamic Pressure Enhanced by Free Space Charge for Electrically Induced Structure Formation with High Aspect Ratio. Langmuir, 2014, 30, 12654-12663. | 3.5 | 26 |
| 46 | A general route to enhance the fluorescence of graphene quantum dots by Ag nanoparticles. RSC Advances, 2014, 4, 21772-21776. | 3.6 | 26 |
| 47 | Rectangle-capped and tilted micropillar array for enhanced anisotropic anti-shearing in biomimetic adhesion. Journal of the Royal Society Interface, 2015, 12, 20150090. | 3.4 | 26 |
| 48 | Electrowetting Assisted Air Detrapping in Transfer Micromolding for Difficult-to-Mold Microstructures. ACS Applied Materials & Interfaces, 2014, 6, 12737-12743. | 8.0 | 25 |
| 49 | Step-Controllable Electric-Field-Assisted Nanoimprint Lithography for Uneven Large-Area Substrates. ACS Nano, 2016, 10, 4354-4363. | 14.6 | 25 |
| 50 | AC electric field induced dielectrophoretic assembly behavior of gold nanoparticles in a wide frequency range. Applied Surface Science, 2016, 370, 184-192. | 6.1 | 25 |
| 51 | Channel-Crack-Designed Suspended Sensing Membrane as a Fully Flexible Vibration Sensor with High Sensitivity and Dynamic Range. ACS Applied Materials & Interfaces, 2021, 13, 34637-34647. | 8.0 | 24 |
| 52 | Self-healing and stretchable conductor based on embedded liquid metal patterns within imprintable dynamic covalent elastomer. Journal of Materials Chemistry C, 2022, 10, 1039-1047. | 5.5 | 23 |
| 53 | ZnO/TiO2 nanohexagon arrays heterojunction photoanode for enhancing power conversion efficiency in dye-sensitized solar cells. Journal of Alloys and Compounds, 2016, 685, 610-618. | 5.5 | 22 |
| 54 | New architecture of a petal-shaped Nb2O5 nanosheet film on FTO glass for high photocatalytic activity. RSC Advances, 2016, 6, 9581-9588. | 3.6 | 22 |

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|---|---|---|---|
| 55 | Hybrid nanostructure of SiO<sub>2</sub>@Si with Au-nanoparticles for surface enhanced Raman spectroscopy. Nanoscale, 2019, 11, 13484-13493. | 5.6 | 21 |
| 56 | Damage mechanism and morphology characteristics of chromium film in femtosecond laser rear-side ablation. Applied Surface Science, 2010, 256, 3612-3617. | 6.1 | 20 |
| 57 | Dytiscus lapponicus-Inspired Structure with High Adhesion in Dry and Underwater Environments. ACS Applied Materials & Interfaces, 2021, 13, 42287-42296. | 8.0 | 20 |
| 58 | Numerical analysis of the Rayleighâ€“Taylor instability in an electric field. Journal of Fluid Mechanics, 2016, 792, 397-434. | 3.4 | 18 |
| 59 | Generation of Hierarchically Ordered Structures on a Polymer Film by Electrohydrodynamic Structure Formation. ACS Applied Materials & Interfaces, 2016, 8, 16419-16427. | 8.0 | 18 |
| 60 | Adhesion Circle: A New Approach To Better Characterize Directional Gecko-Inspired Dry Adhesives. ACS Applied Materials & Interfaces, 2017, 9, 3060-3067. | 8.0 | 18 |
| 61 | Suspended-Template Electric-Assisted Nanoimprinting for Hierarchical Micro-Nanostructures on a Fragile Substrate. ACS Nano, 2019, 13, 10333-10342. | 14.6 | 18 |
| 62 | High performance solid-state supercapacitors based on highly conductive organogel electrolyte at low temperature. Journal of Power Sources, 2022, 524, 231102. | 7.8 | 17 |
| 63 | Periodic Parallel Array of Nanopillars and Nanoholes Resulting from Colloidal Stripes Patterned by Geometrically Confined Evaporative Self-Assembly for Unique Anisotropic Wetting. ACS Applied Materials & Interfaces, 2014, 6, 20300-20308. | 8.0 | 16 |
| 64 | Steady State of Electrohydrodynamic Patterning of Micro/Nanostructures on Thin Polymer Films. Industrial & Engineering Chemistry Research, 2014, 53, 12720-12728. | 3.7 | 16 |
| 65 | Tuning the Mechanical and Electrical Properties of Porous Electrodes for Architecting 3D Microsupercapacitors with Batteriesâ€Level Energy. Advanced Science, 2021, 8, e2004957. | 11.2 | 16 |
| 66 | Improving the height of replication in EHD patterning by optimizing the electrical properties of the template. Journal of Micromechanics and Microengineering, 2011, 21, 115004. | 2.6 | 15 |
| 67 | Microlens Arrays: Fabrication of Microlens Arrays with Well-controlled Curvature by Liquid Trapping and Electrohydrodynamic Deformation in Microholes (Adv. Mater. 23/2012). Advanced Materials, 2012, 24, OP90-OP90. | 21.0 | 15 |
| 68 | High-Performance Transparent and Conductive Films with Fully Enclosed Metal Mesh. ACS Applied Materials & Interfaces, 2021, 13, 40806-40816. | 8.0 | 15 |
| 69 | LiYF<sub>4</sub>:Yb<sup>3+</sup>, Er<sup>3+</sup>upconverting submicro-particles: synthesis and formation mechanism exploration. RSC Advances, 2014, 4, 40223-40231. | 3.6 | 14 |
| 70 | High performance flexible pH sensor based on carboxyl-functionalized and DEP aligned SWNTs. Applied Surface Science, 2016, 386, 405-411. | 6.1 | 14 |
| 71 | Mechanical properties and enhancement mechanisms of titanium-graphene nanocomposites. Acta Mechanica Sinica/Lixue Xuebao, 2020, 36, 855-865. | 3.4 | 14 |
| 72 | Gecko-Inspired Slant Hierarchical Microstructure-Based Ultrasensitive Iontronic Pressure Sensor for Intelligent Interaction. Research, 2022, 2022, . | 5.7 | 14 |

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|---|---|---|---|
| 73 | Simulation of polymer rheology in an electrically induced micro- or nano-structuring process based on electrohydrodynamics and conservative level set method. RSC Advances, 2014, 4, 21672. | 3.6 | 13 |
| 74 | Batch fabrication of nanogap electrodes arrays with controllable cracking for hydrogen sensing. Sensors and Actuators B: Chemical, 2018, 270, 475-481. | 7.8 | 13 |
| 75 | Enhanced Conversion Efficiencies in Dye-Sensitized Solar Cells Achieved through Self-Assembled Platinum(II) Metallacages. Scientific Reports, 2016, 6, 29476. | 3.3 | 12 |
| 76 | Multilayered Dual Functional SiO2@Au@SiO2@QD Nanoparticles for Simultaneous Intracellular Heating and Temperature Measurement. Langmuir, 2019, 35, 6367-6378. | 3.5 | 12 |
| 77 | Wafer-Scale and Cost-Effective Manufacturing of Controllable Nanogap Arrays for Highly Sensitive SERS Sensing. ACS Applied Materials & Interfaces, 2022, 14, 3580-3590. | 8.0 | 12 |
| 78 | Physical deoxygenation of graphene oxide paper surface and facile in situ synthesis of graphene based ZnO films. Applied Physics Letters, 2014, 105, 233106. | 3.3 | 11 |
| 79 | Flexible strain sensor based on embedded three-dimensional annular cracks with high mechanical robustness and high sensitivity. Applied Materials Today, 2021, 25, 101247. | 4.3 | 11 |
| 80 | Effects of UV radiation on the preparation of polypyrrole in the presence of hydrogen peroxide. Radiation Effects and Defects in Solids, 2015, 170, 821-831. | 1.2 | 10 |
| 81 | Ceiling temperature and photothermalsensitivity of aqueous MSA-CdTe quantum dots thermometers. Applied Surface Science, 2017, 394, 554-561. | 6.1 | 10 |
| 82 | Flexible Double-Sided Light-Emitting Devices Based on Transparent Embedded Interdigital Electrodes. ACS Applied Materials & Interfaces, 2020, 12, 43892-43900. | 8.0 | 10 |
| 83 | Microbowl-arrayed surface generated by EBL of negative-tone SU-8 for highly adhesive hydrophobicity. Applied Surface Science, 2014, 307, 365-371. | 6.1 | 9 |
| 84 | Shape-controllable plano-convex lenses with enhanced transmittance via electrowetting on a nanotextured dielectric. Journal of Materials Chemistry C, 2016, 4, 9162-9166. | 5.5 | 9 |
| 85 | A photocurable leaky dielectric for highly electrical insulating electrohydrodynamic micro-/nanopatterns. Soft Matter, 2016, 12, 8819-8824. | 2.7 | 9 |
| 86 | Photoresponse Performance Evaluation of ZnO UV Photodetector Based on Noise Analysis. IEEE Sensors Journal, 2017, 17, 4447-4453. | 4.7 | 9 |
| 87 | Influence of distorted electric field distribution on microstructure formation in the electrohydrodynamic patterning process. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 041606. | 1.2 | 8 |
| 88 | Preparation, properties, and efficient electrically induced structure formation of a leaky dielectric photoresist. RSC Advances, 2016, 6, 82450-82458. | 3.6 | 8 |
| 89 | Facile Fabrication of Electrohydrodynamic Microâ€Nanostructures with High Aspect Ratio of a Conducting Polymer for Largeâ€Scale Superhydrophilic/Superhydrophobic Surfaces. Macromolecular Materials and Engineering, 2018, 303, 1700361. | 3.6 | 8 |
| 90 | High-transmittance and focal controllable plano-convex lenses with embedded nanolens bottoms formed by electrowetting on a colloidal monolayer. Journal of Materials Chemistry C, 2020, 8, 2659-2663. | 5.5 | 8 |

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|---|---|---|---|
| 91 | Scalable fabrication of high-performance micro-supercapacitors by embedding thick interdigital microelectrodes into microcavities. Nanoscale, 2019, 11, 19772-19782. | 5.6 | 7 |
| 92 | Discretely-supported nanoimprint lithography for patterning the high-spatial-frequency stepped surface. Nano Research, 2021, 14, 2606-2612. | 10.4 | 7 |
| 93 | Metal Micropatterning by Triboelectric Spark Discharge. Advanced Functional Materials, 2022, 32, . | 14.9 | 7 |
| 94 | Role of space charges inside a dielectric polymer in the electrohydrodynamic structure formation on a prepatterned polymer (ESF-PP). RSC Advances, 2016, 6, 77275-77283. | 3.6 | 6 |
| 95 | Effect of island shape on dielectrophoretic assembly of metal nanoparticle chains in a conductive-island-based microelectrode system. Applied Surface Science, 2015, 330, 178-184. | 6.1 | 5 |
| 96 | Particle clustering during pearl chain formation in a conductive-island based dielectrophoretic assembly system. RSC Advances, 2015, 5, 5523-5532. | 3.6 | 5 |
| 97 | Numerical investigation of polymer rheology in electrohydrodynamic structuring on geometrical dielectric (ESGD) process. Microfluidics and Nanofluidics, 2016, 20, 1. | 2.2 | 5 |
| 98 | Facile Fabrication of a Flexible Patterned Film with Diverse Micro-/Nanostructures via Electrohydrodynamic Patterning. Industrial & Engineering Chemistry Research, 2021, 60, 314-323. | 3.7 | 5 |
| 99 | Compact 3D Metal Collectors Enabled by Rollâ€toâ€Roll Nanoimprinting for Improving Capacitive Energy Storage. Small Methods, 2022, 6, e2101539. | 8.6 | 5 |
| 100 | Large area assembly of patterned nanoparticles by a polydimethylsiloxane template. Science China Materials, 2015, 58, 884-892. | 6.3 | 4 |
| 101 | Investigation of the role of template features on the electrically induced structure formation (EISF) for a faithful duplication. Electrophoresis, 2017, 38, 1105-1112. | 2.4 | 4 |
| 102 | Role of geometric shapes on the load transfer in graphene-PMMA nanocomposites. Computational Materials Science, 2020, 184, 109863. | 3.0 | 4 |
| 103 | A facile method to fabricate surfaces showing superhydrophilicity in air and superhydrophobicity in oil. Science China Technological Sciences, 2017, 60, 1724-1731. | 4.0 | 3 |
| 104 | Nanoimprinting metal-containing nanoparticle-doped gratings to enhance the polarization of light-emitting chips by induced scattering. Nanotechnology, 2021, 32, 235304. | 2.6 | 3 |
| 105 | Making high-fidelity imprint template by resist patterns over a flexible conductive polymer substrate. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, 86-89. | 1.2 | 2 |
| 106 | Nanoscale Electrodes: Nanoscale Electrodes for Flexible Electronics by Swelling Controlled Cracking (Adv. Mater. 30/2016). Advanced Materials, 2016, 28, 6516-6516. | 21.0 | 2 |
| 107 | Titaniaâ€“silica hybrid films derived by a solâ€“gel process for organic field effect transistors. Journal of Sol-Gel Science and Technology, 2017, 83, 666-674. | 2.4 | 2 |
| 108 | Pattern formation in thin polymeric films via electrohydrodynamic patterning. RSC Advances, 2022, 12, 9681-9697. | 3.6 | 2 |

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|---|---|---|---|
| 109 | Soft Gripper: Geckoâ€Effect Inspired Soft Gripper with High and Switchable Adhesion for Rough Surfaces (Adv. Mater. Interfaces 18/2019). Advanced Materials Interfaces, 2019, 6, 1970119. | 3.7 | 1 |
| 110 | Facile fabrication of flexible concave microlens arrays with a well-controlled curvature. Materials Chemistry Frontiers, 2021, 5, 7759-7766. | 5.9 | 1 |
| 111 | Metal Micropatterning by Triboelectric Spark Discharge (Adv. Funct. Mater. 1/2022). Advanced Functional Materials, 2022, 32, . | 14.9 | 1 |
| 112 | Influence of Template Geometry on Polymer Micro-Structure Duplication in Electrohydrodynamics Patterning Process. Journal of Macromolecular Science - Physics, 2012, 51, 1537-1547. | 1.0 | 0 |
| 113 | Formation of Arbitrary Patterns in Ultraviolet Cured Polymer Film via Electrohydrodynamic Patterning. Scientific World Journal, The, 2014, 2014, 1-9. | 2.1 | 0 |