## Lei Shi

## List of Publications by Year in descending order

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Version: 2024-02-01

186265 161849 3,085 70 28 54 citations h-index g-index papers 75 75 75 3408 citing authors all docs docs citations times ranked

| #  | Article   | IF           | Citations |
|----|---|--------------|-----------|
| 1  | Generating optical vortex beams by momentum-space polarization vortices centred at bound states in the continuum. Nature Photonics, 2020, 14, 623-628.                                      | 31.4         | 244       |
| 2  | Colloidal Photonic Crystals with Narrow Stopbands Assembled from Low-Adhesive Superhydrophobic Substrates. Journal of the American Chemical Society, 2012, 134, 17053-17058.                | 13.7         | 215       |
| 3  | Using Cuttlefish Ink as an Additive to Produce ÂNonâ€iridescent Structural Colors of High Color<br>Visibility. Advanced Materials, 2015, 27, 4719-4724.                                     | 21.0         | 215       |
| 4  | Gate-tunable third-order nonlinear optical response of massless Dirac fermions in graphene. Nature Photonics, 2018, 12, 430-436.  | 31.4         | 194       |
| 5  | Amorphous Photonic Crystals with Only Shortâ€Range Order. Advanced Materials, 2013, 25, 5314-5320.  | 21.0         | 171       |
| 6  | Observation of Polarization Vortices in Momentum Space. Physical Review Letters, 2018, 120, 186103.   | 7.8          | 168       |
| 7  | Circularly Polarized States Spawning from Bound States in the Continuum. Physical Review Letters, 2019, 123, 116104.  | 7.8          | 165       |
| 8  | Additive Mixing and Conformal Coating of Noniridescent Structural Colors with Robust Mechanical Properties Fabricated by Atomization Deposition. ACS Nano, 2018, 12, 3095-3102.             | 14.6         | 139       |
| 9  | Iridescence-controlled and flexibly tunable retroreflective structural color film for smart displays. Science Advances, 2019, 5, eaaw8755.  | 10.3         | 116       |
| 10 | Bio-inspired sensors based on photonic structures of Morpho butterfly wings: a review. Journal of Materials Chemistry C, 2016, 4, 1752-1763.  | 5 <b>.</b> 5 | 77        |
| 11 | Facile full-color printing with a single transparent ink. Science Advances, 2021, 7, eabh1992.  | 10.3         | 72        |
| 12 | A mechanically tunable plasmonic structure composed of a monolayer array of metal-capped colloidal spheres on an elastomeric substrate. Nano Research, 2010, 3, 807-812.                    | 10.4         | 66        |
| 13 | Sub-micron silk fibroin film with high humidity sensibility through color changing. RSC Advances, 2017, 7, 17889-17897.   | <b>3.</b> 6  | 66        |
| 14 | Doping-Induced Second-Harmonic Generation in Centrosymmetric Graphene from Quadrupole Response. Physical Review Letters, 2019, 122, 047401.   | 7.8          | 64        |
| 15 | Ultra-fast single-crystal polymerization of large-sized covalent organic frameworks. Nature Communications, 2021, 12, 5077.   | 12.8         | 63        |
| 16 | Routing valley exciton emission of a WS2 monolayer via delocalized Bloch modes of in-plane inversion-symmetry-broken photonic crystal slabs. Light: Science and Applications, 2020, 9, 148. | 16.6         | 54        |
| 17 | Phase characterisation of metalenses. Light: Science and Applications, 2021, 10, 52.  | 16.6         | 44        |
| 18 | Structural Color Fibers Directly Drawn from Colloidal Suspensions with Controllable Optical Properties. ACS Applied Materials & Interfaces, 2019, 11, 19388-19396.                          | 8.0          | 43        |

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|----|--|--------------|-----------|
| 19 | Manipulating bandwidth of light absorption at critical coupling: An example of graphene integrated with dielectric photonic structure. Physical Review B, 2019, $100$ , .  | 3.2          | 42        |
| 20 | Topological polarization singularities in metaphotonics. Nanophotonics, 2021, 10, 1469-1486.   | 6.0          | 42        |
| 21 | Extraordinarily Large Optical Cross Section for Localized Single Nanoresonator. Physical Review Letters, 2015, 115, 023903.  | 7.8          | 34        |
| 22 | Electromagnetic scattering laws in Weyl systems. Nature Communications, 2017, 8, 1388.   | 12.8         | 34        |
| 23 | Vector Exceptional Points with Strong Superchiral Fields. Physical Review Letters, 2020, 124, 083901.  | 7.8          | 32        |
| 24 | There is plenty of room at the top: generation of hot charge carriers and their applications in perovskite and other semiconductor-based optoelectronic devices. Light: Science and Applications, 2021, 10, 174. | 16.6         | 32        |
| 25 | Observing vortex polarization singularities at optical band degeneracies. Physical Review B, 2019, 99, .   | 3.2          | 31        |
| 26 | Novel tertiary sulfonamide derivatives containing benzimidazole moiety as potent anti-gastric cancer agents: Design, synthesis and SAR studies. European Journal of Medicinal Chemistry, 2019, 183, 111731.      | 5 <b>.</b> 5 | 28        |
| 27 | Controlling Topology and Polarization State of Lasing Photonic Bound States in Continuum. Laser and Photonics Reviews, 2022, 16, .   | 8.7          | 28        |
| 28 | Shifting beams at normal incidence via controlling momentum-space geometric phases. Nature Communications, 2021, 12, 6046.   | 12.8         | 25        |
| 29 | Lipophilic Magnetic Photonic Nanochains for Practical Anticounterfeiting. Small, 2022, 18, e2200662.   | 10.0         | 25        |
| 30 | Coherent fluorescence emission by using hybrid photonic–plasmonic crystals. Laser and Photonics Reviews, 2014, 8, 717-725.   | 8.7          | 24        |
| 31 | Diffusionless transformation of soft cubic superstructure from amorphous to simple cubic and body-centered cubic phases. Nature Communications, 2021, 12, 3477.  | 12.8         | 24        |
| 32 | Interacting plexcitons for designed ultrafast optical nonlinearity in a monolayer semiconductor. Light: Science and Applications, 2022, 11, 94.  | 16.6         | 24        |
| 33 | Magneto-optical Kerr effect in perpendicularly magnetized Co/Pt films on two-dimensional colloidal crystals. Applied Physics Letters, 2009, 95, 032502.  | 3.3          | 23        |
| 34 | Macroporous oxide structures with short-range order and bright structural coloration: a replication from parrot feather barbs. Journal of Materials Chemistry, 2010, 20, 90-93.                                  | 6.7          | 23        |
| 35 | Gate Switching of Ultrafast Photoluminescence in Graphene. Nano Letters, 2018, 18, 7985-7990.  | 9.1          | 23        |
| 36 | Polarization Singularities of Photonic Quasicrystals in Momentum Space. Physical Review Letters, 2021, 127, 043901.  | 7.8          | 22        |

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|----|---|------|-----------|
| 37 | Intracellular and ⟨i⟩in Vivo⟨ i⟩ Cyanide Mapping via Surface Plasmon Spectroscopy of Single Au–Ag<br>Nanoboxes. Analytical Chemistry, 2017, 89, 2583-2591.  | 6.5  | 20        |
| 38 | Reconfigurable lateral optical force achieved by selectively exciting plasmonic dark modes near Fano resonance. Physical Review A, 2017, 96, .  | 2.5  | 19        |
| 39 | Amplified Spontaneous Emission Realized by Cogrowing Large/Small Grains with Selfâ€Passivating Defects and Aligning Transition Dipoles. Advanced Optical Materials, 2019, 7, 1900345.                             | 7.3  | 19        |
| 40 | Discovery of 1,2,4-triazine-based derivatives as novel neddylation inhibitors and anticancer activity studies against gastric cancer MGC-803 cells. Bioorganic and Medicinal Chemistry Letters, 2020, 30, 126791. | 2.2  | 19        |
| 41 | Ultrafast Response of a Hybrid Device Based on Strongly Coupled Monolayer WS <sub>2</sub> and Photonic Crystals: The Effect of Photoinduced Coulombic Screening. Laser and Photonics Reviews, 2020, 14, 1900419.  | 8.7  | 18        |
| 42 | Momentum-space imaging spectroscopy for the study of nanophotonic materials. Science Bulletin, 2021, 66, 824-838.   | 9.0  | 18        |
| 43 | Photonic crystal boosted chemiluminescence reaction. Laser and Photonics Reviews, 2013, 7, L39-L43.   | 8.7  | 16        |
| 44 | Gel-Based Artificial Photonic Skin to Sense a Gentle Touch by Reflection. ACS Applied Materials & Samp; Interfaces, 2019, 11, 15195-15200.  | 8.0  | 15        |
| 45 | Dynamical Tuning of Graphene Plasmonic Resonances byÂUltraviolet Illuminations. Advanced Optical<br>Materials, 2018, 6, 1701081.  | 7.3  | 14        |
| 46 | Using active gain to maximize light absorption. Physical Review B, 2017, 96, .  | 3.2  | 13        |
| 47 | Angle-Dependent Quality Factor of Mie Resonances in Silicon-Colloid-Based Microcavities. ACS Photonics, 2014, 1, 408-412.   | 6.6  | 12        |
| 48 | Full-color tunable photoluminescent carbon dots based on oil/water interfacial synthesis and their applications. RSC Advances, 2018, 8, 24002-24012.  | 3.6  | 12        |
| 49 | Silk Fluorescence Collimator for Ultrasensitive Humidity Sensing and Lightâ€Harvesting in Semitransparent Dyeâ€Sensitized Solar Cells. Small, 2019, 15, 1804171.  | 10.0 | 12        |
| 50 | Transmissionâ€Type Optical Modulator Based on Graphene Plasmonic Resonator Integrated with Offâ€Resonant Au Structure. Advanced Optical Materials, 2020, 8, 2000264.  | 7.3  | 12        |
| 51 | Photonic-dispersion neural networks for inverse scattering problems. Light: Science and Applications, 2021, 10, 154.  | 16.6 | 12        |
| 52 | Symmetry breaking induced excitations of dark plasmonic modes in multilayer graphene ribbons. Optics Express, 2016, 24, 20021.  | 3.4  | 11        |
| 53 | Polarization dependent plasmonic modes in elliptical graphene disk arrays. Optics Express, 2019, 27, 1080.  | 3.4  | 11        |
| 54 | Realizing Generalized Brewster Effect by Generalized Kerker Effect. Physical Review Applied, 2021, 16, .  | 3.8  | 11        |

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|----|---|------|-----------|
| 55 | Enhanced directional emission of monolayer tungsten disulfide (WS <sub>2</sub> ) with robust linear polarization via one-dimensional photonic crystal (PhC) slab. Nanophotonics, 2020, 9, 4337-4345.        | 6.0  | 10        |
| 56 | Simultaneous synthesis/assembly of anisotropic cake-shaped porphyrin particles toward colloidal microcrystals. Chemical Communications, 2016, 52, 3619-3622.  | 4.1  | 7         |
| 57 | Ways to achieve efficient non-local vortex beam generation. Nanophotonics, 2021, 10, 4297-4304.   | 6.0  | 7         |
| 58 | Edible Amorphous Structural Color. Advanced Optical Materials, 2022, 10, .  | 7.3  | 7         |
| 59 | Fast photo-induced color changes of Ag particles deposited on single-crystalline TiO2 surface. Applied Physics Letters, 2018, 112, .  | 3.3  | 4         |
| 60 | Atrase B, a novel metalloprotease with antiâ€complement and antiâ€coagulant activity, significantly delays discordant cardiac xenograft rejection. Xenotransplantation, 2020, 27, e12616.                   | 2.8  | 4         |
| 61 | Structural-colored silk based on Ti–Si bilayer. Chinese Optics Letters, 2021, 19, 051601.   | 2.9  | 4         |
| 62 | A Programmable Nanofabrication Method for Complex 3D Meta-Atom Array Based on Focused-Ion-Beam Stress-Induced Deformation Effect. Micromachines, 2020, 11, 95.  | 2.9  | 4         |
| 63 | Realization of ultrawide-angle high transmission and its applications in 5G millimeter-wave communications. Optics Express, 2022, 30, 14002.  | 3.4  | 4         |
| 64 | Unfolded band structures of photonic quasicrystals and moir $\!\tilde{A} \otimes$ superlattices. Physical Review B, 2022, 105, .  | 3.2  | 3         |
| 65 | Optical microfibers integrated with evanescent field triggered self-growing polymer nanofilms. Optics Express, 2022, 30, 18044.   | 3.4  | 3         |
| 66 | Photonics: Using Cuttlefish Ink as an Additive to Produce ÂNonâ€iridescent Structural Colors of High Color Visibility (Adv. Mater. 32/2015). Advanced Materials, 2015, 27, 4666-4666.                       | 21.0 | 2         |
| 67 | Ultrawideband, Wide Scanning Stripline-Fed Tightly Coupled Array Antenna Based on Parallel-Dipole<br>Elements. Sensors, 2020, 20, 5065.   | 3.8  | 2         |
| 68 | Graphene Plasmonic Resonances: Dynamical Tuning of Graphene Plasmonic Resonances byÂUltraviolet Illuminations (Advanced Optical Materials 6/2018). Advanced Optical Materials, 2018, 6, 1870023.            | 7.3  | 1         |
| 69 | Fluorescence: Silk Fluorescence Collimator for Ultrasensitive Humidity Sensing and Lightâ€Harvesting in Semitransparent Dyeâ€Sensitized Solar Cells (Small 13/2019). Small, 2019, 15, 1970069.              | 10.0 | 0         |
| 70 | Effect of Ni loading and impregnation method on the hydrodenitrogenation of coal tar over Ni-Mo/ $\hat{l}^3$ -Al2O3. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, , 1-13. | 2.3  | 0         |