# Mikhail Y Shalaginov

List of Publications by Year
in descending order



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|---|---|---|---|
| 53 papers | 2,507 citations | 279798 23 h-index | 361022 35 g-index |
| 55 all docs | 55 docs citations | 55 times ranked | 2367 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Deep Convolutional Neural Networks to Predict Mutual Coupling Effects in Metasurfaces. Advanced Optical Materials, 2022, 10, 2102113. | 7.3 | 28 |
| 2 | Dielectric spectroscopic investigation of reversible photo-induced changes in amorphous Ge<sub>2</sub>Sb<sub>2</sub>Se<sub>5</sub> thin films. Journal of Applied Physics, 2022, 131, 075102. | 2.5 | 1 |
| 3 | Understanding wide field-of-view metalenses. , 2022, , . | | 0 |
| 4 | Phase change materials: the 'silicon' for analog photonic computing?. , 2022, , . | | 0 |
| 5 | Reconfigurable Parfocal Zoom Metalens. Advanced Optical Materials, 2022, 10, . | 7.3 | 18 |
| 6 | Multiâ€Level Electroâ€Thermal Switching of Optical Phaseâ€Change Materials Using Graphene. Advanced Photonics Research, 2021, 2, 2000034. | 3.6 | 75 |
| 7 | Multifunctional Metasurface Design with a Generative Adversarial Network. Advanced Optical Materials, 2021, 9, 2001433. | 7.3 | 78 |
| 8 | Nonlinear Midâ€Infrared Metasurface based on a Phaseâ€Change Material. Laser and Photonics Reviews, 2021, 15, 2000373. | 8.7 | 25 |
| 9 | Reconfigurable all-dielectric metalens with diffraction-limited performance. Nature Communications, 2021, 12, 1225. | 12.8 | 221 |
| 10 | Multifunctional Metasurface Design with a Generative Adversarial Network (Advanced Optical) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38 | 7.3 | 1 |
| 11 | Electrically reconfigurable non-volatile metasurface using low-loss optical phase-change material. Nature Nanotechnology, 2021, 16, 661-666. | 31.5 | 298 |
| 12 | Large-area optical metasurface fabrication using nanostencil lithography. Optics Letters, 2021, 46, 2324. | 3.3 | 8 |
| 13 | Myths and truths about optical phase change materials: A perspective. Applied Physics Letters, 2021, 118, . | 3.3 | 76 |
| 14 | Transient Tap Couplers for Wafer-Level Photonic Testing Based on Optical Phase Change Materials. ACS Photonics, 2021, 8, 1903-1908. | 6.6 | 24 |
| 15 | Electrically-switchable foundry-processed phase change photonic devices. , 2021, , . | | 5 |
| 16 | A Deep Learning Approach to Explore the Mutual Coupling Effects in Metasurfaces. , 2021, , . | | 1 |
| 17 | Wide Field-of-view Achromatic Metalenses. , 2021, , . | | 1 |
| 18 | A Transferrable, Adaptable, Free-Standing, and Water-Resistant Hyperbolic Metamaterial. ACS Applied Materials & Interfaces, 2021, 13, 49224-49231. | 8.0 | 3 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Design of broadband and wide field-of-view metalenses. Optics Letters, 2021, 46, 5735-5738. | 3.3 | 18 |
| 20 | Phase change reconfigurable nanophotonics on a foundry-processed SOI platform. , 2021, , . | | 0 |
| 21 | Ge2Sb2Se4Te1 Metasurface for Enhancing Third-Harmonic Generation in the Mid-Infrared. , 2021, , . | | 0 |
| 22 | Electrically Reconfigurable Nonvolatile Metasurface based on Phase Change Materials. , 2021, , . | | 0 |
| 23 | Ge2Sb2Se5 Glass as High-capacity Promising Lithium-ion Battery Anode. Nano Energy, 2020, 68, 104326. | 16.0 | 38 |
| 24 | On-Chip Single-Layer Integration of Diamond Spins with Microwave and Plasmonic Channels. ACS Photonics, 2020, 7, 2018-2026. | 6.6 | 9 |
| 25 | Single-Element Diffraction-Limited Fisheye Metalens. Nano Letters, 2020, 20, 7429-7437. | 9.1 | 104 |
| 26 | Enhanced laser action from smart fabrics made with rollable hyperbolic metamaterials. Npj Flexible Electronics, 2020, 4, . | 10.7 | 8 |
| 27 | Broadband enhancement of on-chip single-photon extraction via tilted hyperbolic metamaterials. Applied Physics Reviews, 2020, 7, 021403. | 11.3 | 36 |
| 28 | All-dielectric Metasurface Designs Enabled by Deep Neural Networks. , 2020, , . | | 7 |
| 29 | Deep learning modeling approach for metasurfaces with high degrees of freedom. Optics Express, 2020, 28, 31932. | 3.4 | 73 |
| 30 | Design for quality: reconfigurable flat optics based on active metasurfaces. Nanophotonics, 2020, 9, 3505-3534. | 6.0 | 87 |
| 31 | Broadband transparent optical phase change materials for high-performance nonvolatile photonics. Nature Communications, 2019, 10, 4279. | 12.8 | 349 |
| 32 | A Deep Learning Approach for Objective-Driven All-Dielectric Metasurface Design. ACS Photonics, 2019, 6, 3196-3207. | 6.6 | 212 |
| 33 | Understanding aging in chalcogenide glass thin films using precision resonant cavity refractometry. Optical Materials Express, 2019, 9, 2252. | 3.0 | 12 |
| 34 | Single-layer Planar Metasurface Lens with >170Â° Field of View. , 2019, , . | | 3 |
| 35 | Reshaping light: reconfigurable photonics enabled by broadband low-loss optical phase change materials. , 2019, , . | | 3 |
| 36 | Ultra-thin high-efficiency mid-infrared transmissive Huygens meta-optics. Nature Communications, 2018, 9, 1481. | 12.8 | 126 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Hybrid Plasmonic Bullseye Antennas for Efficient Photon Collection. ACS Photonics, 2018, 5, 692-698. | 6.6 | 59 |
| 38 | Ultrabright Room-Temperature Sub-Nanosecond Emission from Single Nitrogen-Vacancy Centers Coupled to Nanopatch Antennas. Nano Letters, 2018, 18, 4837-4844. | 9.1 | 121 |
| 39 | Lasing Action with Gold Nanorod Hyperbolic Metamaterials. ACS Photonics, 2017, 4, 674-680. | 6.6 | 49 |
| 40 | Superconducting detector for visible and near-infrared quantum emitters [Invited]. Optical Materials Express, 2017, 7, 513. | 3.0 | 17 |
| 41 | Massive Parallel Positioning of Nanodiamonds on Nanophotonic Structures. , 2017, , . | | 0 |
| 42 | Subwavelength optics with hyperbolic metamaterials: Waveguides, scattering, and optical topological transitions. , 2016, , . | | 0 |
| 43 | Long-range plasmonic waveguides with hyperbolic cladding. Optics Express, 2015, 23, 31109. | 3.4 | 48 |
| 44 | Enhancement of singleâ€‘photon emission from nitrogenâ€‘vacancy centers with TiN/(Al,Sc)N hyperbolic metamaterial. Laser and Photonics Reviews, 2015, 9, 120-127. | 8.7 | 93 |
| 45 | Multilayer Cladding with Hyperbolic Dispersion for Plasmonic Waveguides. , 2015, , . | | 0 |
| 46 | Finite-width plasmonic waveguides with hyperbolic multilayer cladding. Optics Express, 2015, 23, 9681. | 3.4 | 58 |
| 47 | Effect of photonic density of states on spin-flip induced fluorescence contrast in diamond nitrogen-vacancy center ensembles (Presentation Recording). Proceedings of SPIE, 2015, , . | 0.8 | 0 |
| 48 | Nitrogen-vacancy single-photon emission enhanced with nanophotonic structures (Presentation) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 | | 0 |
| 49 | Effect of a hyperbolic metamaterial on radiation patterns of a single-photon source. , 2015, , . | | 0 |
| 50 | Enhanced Multi-Photon Emission from Single NV Center Coupled to Graphene by Laser-Shaping. , 2015, , . | | 0 |
| 51 | Single-photon source based on NV center in nanodiamond coupled to TiN-based hyperbolic metamaterial. , 2014, , . | | 0 |
| 52 | Plasmonic waveguides cladded by hyperbolic metamaterials. Optics Letters, 2014, 39, 4663. | 3.3 | 56 |
| 53 | First-Principles Calculations of Structural, Elastic, Electronic, and Optical Properties of Perovskite-type KMgH<sub>3</sub> Crystals: Novel Hydrogen Storage Material. Journal of Physical Chemistry B, 2011, 115, 2836-2841. | 2.6 | 52 |