Myungkoo Kang

List of Publications by Year
in descending order

57 papers	1,707 citations	430874 18 h-index	289244 40 g-index
57 all docs	57 docs citations	57 times ranked	1334 citing authors

#	Article	IF	Citations
1	Broadband transparent optical phase change materials for high-performance nonvolatile photonics. Nature Communications, 2019, 10, 4279.	12.8	349
2	Electrically reconfigurable non-volatile metasurface using low-loss optical phase-change material. Nature Nanotechnology, 2021, 16, 661-666.	31.5	298
3	Reconfigurable all-dielectric metalens with diffraction-limited performance. Nature Communications, 2021, 12, 1225.	12.8	221
4	Multifunctional Metasurface Design with a Generative Adversarial Network. Advanced Optical Materials, 2021, 9, 2001433.	7.3	78
5	Multiâ€Level Electroâ€Thermal Switching of Optical Phaseâ€Change Materials Using Graphene. Advanced Photonics Research, 2021, 2, 2000034.	3.6	75
6	Deep learning modeling approach for metasurfaces with high degrees of freedom. Optics Express, 2020, 28, 31932.	3.4	73
7	Nonlinear characterization of GeSbS chalcogenide glass waveguides. Scientific Reports, 2016, 6, 39234.	3.3	50
8	New Candidate Multicomponent Chalcogenide Glasses for Supercontinuum Generation. Applied Sciences (Switzerland), 2018, 8, 2082.	2.5	39
9	Refractive index patterning of infrared glass ceramics through laser-induced vitrification [Invited]. Optical Materials Express, 2018, 8, 2722.	3.0	36
10	Ultralow Dispersion Multicomponent Thinâ€Film Chalcogenide Glass for Broadband Gradientâ€Index Optics. Advanced Materials, 2018, 30, e1803628.	21.0	36
11	Long-lived monolithic micro-optics for multispectral GRIN applications. Scientific Reports, 2018, 8, 7388.	3.3	29
12	Deep Convolutional Neural Networks to Predict Mutual Coupling Effects in Metasurfaces. Advanced Optical Materials, 2022, 10, 2102113.	7.3	28
13	Evidence of spatially selective refractive index modification in 15GeSe_2-45As_2Se_3-40PbSe glass ceramic through correlation of structure and optical property measurements for GRIN applications. Optical Materials Express, 2017, 7, 3077.	3.0	26
14	Observation of very high order multi-photon absorption in GeSbS chalcogenide glass. APL Photonics, 2019, 4, 036102.	5.7	25
15	Nonlinear Midâ€Infrared Metasurface based on a Phaseâ€Change Material. Laser and Photonics Reviews, 2021, 15, 2000373.	8.7	25
16	Transient Tap Couplers for Wafer-Level Photonic Testing Based on Optical Phase Change Materials. ACS Photonics, 2021, 8, 1903-1908.	6.6	24
17	Advances in infrared gradient refractive index (GRIN) materials: a review. Optical Engineering, 2020, 59, 1.	1.0	22
18	Infrared Glassâ€“Ceramics with Multidispersion and Gradient Refractive Index Attributes. Advanced Functional Materials, 2019, 29, 1902217.	14.9	21

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19	Reconfigurable Frequency-Selective Resonance Splitting in Chalcogenide Microring Resonators. ACS Photonics, 2020, 7, 499-511.	6.6	19
20	Reconfigurable Parfocal Zoom Metalens. Advanced Optical Materials, 2022, 10, .	7.3	18
21	Melt property variation in GeSe 2 â€As 2 Se 3 â€PbSe glass ceramics for infrared gradient refractive index (GRIN) applications. International Journal of Applied Glass Science, 2019, 10, 27-40.	2.0	16
22	Electrically Microâ€Polarized Amorphous Sodoâ€Niobate Film Competing with Crystalline Lithium Niobate Secondâ€Order Optical Response. Advanced Optical Materials, 2020, 8, 2000202.	7.3	14
23	Broadband couplers for hybrid silicon-chalcogenide glass photonic integrated circuits. Optics Express, 2019, 27, 13781.	3.4	14
24	Processing and fabrication of micro-structures by multiphoton lithography in germanium-doped arsenic selenide. Optical Materials Express, 2018, 8, 1902.	3.0	13
25	Processing and properties of novel ZnOâ€“Bi2O3â€“B2O3 glass-ceramic nanocomposites. Journal of Alloys and Compounds, 2020, 820, 153173.	5.5	13
26	Monolithic Chalcogenide Optical Nanocomposites Enable Infrared System Innovation: Gradient Refractive Index Optics. Advanced Optical Materials, 2020, 8, 2000150.	7.3	13
27	Self-Organized Freestanding One-Dimensional Au Nanoparticle Arrays. ACS Nano, 2017, 11, 5844-5852.	14.6	12
28	Investigation of ZnSe stability and dissolution behavior in As-S-Se chalcogenide glasses. Journal of Non-Crystalline Solids, 2021, 555, 120619.	3.1	12
29	Understanding aging in chalcogenide glass thin films using precision resonant cavity refractometry. Optical Materials Express, 2019, 9, 2252.	3.0	12
30	Externally Pumped Photonic Chipâ€Based Ultrafast Raman Soliton Source. Laser and Photonics Reviews, 2021, 15, 2000301.	8.7	11
31	Structurally and morphologically engineered chalcogenide materials for optical and photonic devices. Journal of Optical Microsystems, 2021, 1, .	1.5	10
32	Spatial tailoring of the refractive index in infrared glass-ceramic films enabled by direct laser writing. Optics and Laser Technology, 2020, 126, 106058.	4.6	9
33	Fabrication and characterization of microstructures created in thermally deposited arsenic trisulfide by multiphoton lithography. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2017, 16, 023508.	0.9	8
34	Influence of phase separation on structureâ€“property relationships in the (GeSe2â€“3As2Se3)1â^’xPbSex glass system. Journal of Commonwealth Law and Legal Education, 2017, 58, 115-126.	0.5	6
35	Impact of raw material surface oxide removal on dual band infrared optical properties of As₂Se₃ chalcogenide glass. Optical Materials Express, 2020, 10, 2274.	3.0	6
36	Unveiling True 3D Nanoscale Microstructural Evolution in Chalcogenide Nanocomposites: A Roadmap for Advanced Infrared Functionality. Advanced Optical Materials, 2021, 9, 2002092.	7.3	5

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37	Secondâ€Order Optical Response in Electrically Polarized Sodoâ€Niobate Amorphous Thin Films: Particularity of Multilayer Systems. Advanced Photonics Research, 2021, 2, 2000171.	3.6	5
38	Electrically-switchable foundry-processed phase change photonic devices. , 2021, , .		5
39	Advances in infrared GRIN: a review of novel materials towards components and devices. , 2018, , .		5
40	Enhancement of ZnSe stability during optical composite processing via atomic layer deposition. Journal of Non-Crystalline Solids, 2022, 576, 121259.	3.1	5
41	Three-Dimensional Microstructural Characterization of Novel Chalcogenide Nanocomposites for Gradient Refractive Index Applications. Microscopy and Microanalysis, 2019, 25, 2500-2501.	0.4	4
42	Unveiling True Three-dimensional Microstructural Evolution in Novel Chalcogenide Nanocomposites as a Route to Infrared Gradient Refractive Index Functionality. Microscopy and Microanalysis, 2020, 26, 3078-3080.	0.4	3
43	Impact of Morphology and Microstructure on the Mechanical Properties of Ge-As-Pb-Se Glass Ceramics. Applied Sciences (Switzerland), 2020, 10, 2836.	2.5	3
44	Laser-induced modification of local refractive index in infrared glass-ceramic films. , 2019, , .		3
45	Scalable laser-written Ge-As-Pb-Se chalcogenide glass-ceramic films and the realization of infrared gradient refractive index elements. , 2019, , .		3
46	In Situ X-Ray Diffraction Studies of Crystallization Growth Behavior in ZnO-Bi2O3-B2O3 Glass as a Route to Functional Optical Devices. MRS Advances, 2018, 3, 563-567.	0.9	2
47	Nonlinear optical properties of GeSbS chalcogenide waveguides. , 2017, , .		1
48	Gradient Refractive Index (GRIN) Optics: Monolithic Chalcogenide Optical Nanocomposites Enable Infrared System Innovation: Gradient Refractive Index Optics (Advanced Optical Materials 10/2020). Advanced Optical Materials, 2020, 8, 2070040.	7.3	1
49	On-chip Electrothermal Switching of Low-loss Phase Change Materials for Nonvolatile Programmable Photonic Circuits. , 2021, , .		1
50	Editorial special issue women in glass. International Journal of Applied Glass Science, 2020, 11, 383-384.	2.0	0
51	Glasses: Chalcogenides. , 2021, , 540-554.		0
52	Mid-infrared nonlinear optical properties of droplet-free chalcogenide GeSe2-As2Se3-PbSe glasses. , 2020, , .		0
53	Chalcogenide Glass-Ceramics for Lightweight Aberration-Minimized Infrared Gradient Refractive Index Flat Media. , 2021, , .		0
54	Phase change reconfigurable nanophotonics on a foundry-processed SOI platform. , 2021, , .		0

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55	Interlayer Slope Waveguide Coupler for Multilayer Chalcogenide Photonics. Photonics, 2022, 9, 94.	2.0	0
56	Phase change materials: the 'silicon' for analog photonic computing?. , 2022, , .		0
57	Spatially-microstructured topology of chalcogenide glasses by a combination of electrothermal process and selective etching for functional infrared media. Optical Materials Express, 0, , .	3.0	0