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	Deep Convolutional Neural Networks to Predict Mutual Coupling Effects in Metasurfaces. Advanced Optical Materials, 2022, 10, 2102113.	7.3	28
2	Enhancement of ZnSe stability during optical composite processing via atomic layer deposition. Journal of Non-Crystalline Solids, 2022, 576, 121259.	3.1	5
3	Interlayer Slope Waveguide Coupler for Multilayer Chalcogenide Photonics. Photonics, 2022, 9, 94.	2.0	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	Glasses: Chalcogenides. , 2021, , 540-554.		0
8	Multifunctional Metasurface Design with a Generative Adversarial Network. Advanced Optical Materials, 2021, 9, 2001433.	7.3	78
9	Nonlinear Midâ€Infrared Metasurface based on a Phaseâ€Change Material. Laser and Photonics Reviews, 2021, 15, 2000373.	8.7	25
10	Reconfigurable all-dielectric metalens with diffraction-limited performance. Nature Communications, 2021, 12, 1225.	12.8	221
11	Unveiling True 3D Nanoscale Microstructural Evolution in Chalcogenide Nanocomposites: A Roadmap for Advanced Infrared Functionality. Advanced Optical Materials, 2021, 9, 2002092.	7.3	5
12	Investigation of ZnSe stability and dissolution behavior in As-S-Se chalcogenide glasses. Journal of Non-Crystalline Solids, 2021, 555, 120619.	3.1	12
13	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
14	Electrically reconfigurable non-volatile metasurface using low-loss optical phase-change material. Nature Nanotechnology, 2021, 16, 661-666.	31.5	298
15	Transient Tap Couplers for Wafer-Level Photonic Testing Based on Optical Phase Change Materials. ACS Photonics, 2021, 8, 1903-1908.	6.6	24
16	On-chip Electrothermal Switching of Low-loss Phase Change Materials for Nonvolatile Programmable Photonic Circuits. , 2021, , .		1
17	Electrically-switchable foundry-processed phase change photonic devices. , 2021, , .		5
18	Structurally and morphologically engineered chalcogenide materials for optical and photonic devices. Journal of Optical Microsystems, 2021, 1, .	1.5	10

#	ARTICLE	IF	CITATIONS
19	Externally Pumped Photonic Chipâ€Based Ultrafast Raman Soliton Source. Laser and Photonics Reviews, 2021, 15, 2000301.	8.7	11
20	Chalcogenide Glass-Ceramics for Lightweight Aberration-Minimized Infrared Gradient Refractive Index Flat Media. , 2021, , .		0
21	Phase change reconfigurable nanophotonics on a foundry-processed SOI platform. , 2021, , .		0
22	Reconfigurable Frequency-Selective Resonance Splitting in Chalcogenide Microring Resonators. ACS Photonics, 2020, 7, 499-511.	6.6	19
23	Processing and properties of novel ZnOâ€"Bi2O3â€"B2O3 glass-ceramic nanocomposites. Journal of Alloys and Compounds, 2020, 820, 153173.	5.5	13
24	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
25	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
26	Editorial special issue women in glass. International Journal of Applied Glass Science, 2020, 11, 383-384.	2.0	0
27	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
28	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
29	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
30	Monolithic Chalcogenide Optical Nanocomposites Enable Infrared System Innovation: Gradient Refractive Index Optics. Advanced Optical Materials, 2020, 8, 2000150.	7.3	13
31	Advances in infrared gradient refractive index (GRIN) materials: a review. Optical Engineering, 2020, 59, 1.	1.0	22
32	Deep learning modeling approach for metasurfaces with high degrees of freedom. Optics Express, 2020, 28, 31932.	3.4	73
33	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
34	Mid-infrared nonlinear optical properties of droplet-free chalcogenide GeSe2-As2Se3-PbSe glasses. , 2020, , .		0
35	Infrared Glassâ€"Ceramics with Multidispersion and Gradient Refractive Index Attributes. Advanced Functional Materials, 2019, 29, 1902217.	14.9	21
36	Three-Dimensional Microstructural Characterization of Novel Chalcogenide Nanocomposites for Gradient Refractive Index Applications. Microscopy and Microanalysis, 2019, 25, 2500-2501.	0.4	4

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37	Broadband transparent optical phase change materials for high-performance nonvolatile photonics. Nature Communications, 2019, 10, 4279.	12.8	349
38	Observation of very high order multi-photon absorption in GeSbS chalcogenide glass. APL Photonics, 2019, 4, 036102.	5.7	25
39	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
40	Laser-induced modification of local refractive index in infrared glass-ceramic films. , 2019, , .		3
41	Scalable laser-written Ge-As-Pb-Se chalcogenide glass-ceramic films and the realization of infrared gradient refractive index elements. , 2019, , .		3
42	Broadband couplers for hybrid silicon-chalcogenide glass photonic integrated circuits. Optics Express, 2019, 27, 13781.	3.4	14
43	Understanding aging in chalcogenide glass thin films using precision resonant cavity refractometry. Optical Materials Express, 2019, 9, 2252.	3.0	12
44	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
45	New Candidate Multicomponent Chalcogenide Glasses for Supercontinuum Generation. Applied Sciences (Switzerland), 2018, 8, 2082.	2.5	39
46	Refractive index patterning of infrared glass ceramics through laser-induced vitrification [Invited]. Optical Materials Express, 2018, 8, 2722.	3.0	36
47	Processing and fabrication of micro-structures by multiphoton lithography in germanium-doped arsenic selenide. Optical Materials Express, 2018, 8, 1902.	3.0	13
48	Long-lived monolithic micro-optics for multispectral GRIN applications. Scientific Reports, 2018, 8, 7388.	3.3	29
49	Ultralow Dispersion Multicomponent Thinâ€Film Chalcogenide Glass for Broadband Gradientâ€Index Optics. Advanced Materials, 2018, 30, e1803628.	21.0	36
50	Advances in infrared GRIN: a review of novel materials towards components and devices. , 2018, , .		5
51	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
52	Self-Organized Freestanding One-Dimensional Au Nanoparticle Arrays. ACS Nano, 2017, 11, 5844-5852.	14.6	12
53	Nonlinear optical properties of GeSbS chalcogenide waveguides. , 2017, , .		1
54	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

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55	Influence of phase separation on structureâ€“property relationships in the (GeSe2â€“3As2Se3)1âˆ’xPbSex glass system. Journal of Commonwealth Law and Legal Education, 2017, 58, 115-126.	0.5	6
56	Nonlinear characterization of GeSbS chalcogenide glass waveguides. Scientific Reports, 2016, 6, 39234.	3.3	50
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