

# Jonghwa Shin

## List of Publications by Year in descending order

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Version: 2024-02-01

74  
papers

2,974  
citations

159525

30  
h-index

161767

54  
g-index

75  
all docs

75  
docs citations

75  
times ranked

4086  
citing authors

#	ARTICLE	IF	CITATIONS
1	Photonic topological Lifshitz interfaces. <i>Nanophotonics</i> , 2022, 11, 1211-1217.	2.9	1
2	All-Color Sub-ambient Radiative Cooling Based on Photoluminescence. <i>ACS Photonics</i> , 2022, 9, 1196-1205.	3.2	21
3	Machine learning assisted synthesis of lithium-ion batteries cathode materials. <i>Nano Energy</i> , 2022, 98, 107214.	8.2	24
4	Mechanoresponsive scatterers for high-contrast optical modulation. <i>Nanophotonics</i> , 2022, 11, 2737-2762.	2.9	14
5	Data-driven concurrent nanostructure optimization based on conditional generative adversarial networks. <i>Nanophotonics</i> , 2022, 11, 2865-2873.	2.9	4
6	Photolithographic realization of target nanostructures in 3D space by inverse design of phase modulation. <i>Science Advances</i> , 2022, 8, .	4.7	12
7	Directional radiation for optimal radiative cooling. <i>Optics Express</i> , 2021, 29, 8376.	1.7	17
8	Self-Assembled Nano-“Lotus Pod Metasurface for Light Trapping. <i>ACS Photonics</i> , 2021, 8, 1616-1622.	3.2	8
9	Fabrication and characterization of resistive double square loop arrays for ultra-wide bandwidth microwave absorption. <i>Scientific Reports</i> , 2021, 11, 12767.	1.6	6
10	Colloidal deposition of colored daytime radiative cooling films using nanoparticle-based inks. <i>Materials Today Physics</i> , 2021, 21, 100510.	2.9	22
11	Ultrawideband electromagnetic metamaterial absorber utilizing coherent absorptions and surface plasmon polaritons based on double layer carbon metapatterns. <i>Scientific Reports</i> , 2021, 11, 23045.	1.6	15
12	Extreme anti-reflection enhanced magneto-optic Kerr effect microscopy. <i>Nature Communications</i> , 2020, 11, 5937.	5.8	21
13	Ideal spectral emissivity for radiative cooling of earthbound objects. <i>Scientific Reports</i> , 2020, 10, 13038.	1.6	15
14	Laser Synthesis of MOF-Derived Ni@Carbon for High-Performance Pseudocapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 39154-39162.	4.0	56
15	Mimicking bio-mechanical principles in photonic metamaterials for giant broadband nonlinearity. <i>Communications Physics</i> , 2020, 3, .	2.0	6
16	High-Contrast Optical Modulation from Strain-Induced Nanogaps at 3D Heterogeneous Interfaces. <i>Advanced Science</i> , 2020, 7, 1903708.	5.6	36
17	Broadband metamaterials and metasurfaces: a review from the perspectives of materials and devices. <i>Nanophotonics</i> , 2020, 9, 3165-3196.	2.9	49
18	Spectrally sharp metasurfaces for wide-angle high extinction of green lasers. <i>Optics Express</i> , 2020, 28, 22121.	1.7	2

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19	Photo-stimulated charge transfer in contact electrification coupled with plasmonic excitations. <i>Nano Energy</i> , 2019, 65, 104031.	8.2	5
20	Mie resonator method for reliable permittivity measurement of loss-less ceramics in microwave frequency at high temperature. <i>Journal of Applied Physics</i> , 2019, 126, 094101.	1.1	0
21	A General Recipe for Nondispersive Optical Activity in Bilayer Chiral Metamaterials. <i>Advanced Optical Materials</i> , 2019, 7, 1801729.	3.6	7
22	Near-atomically flat, chemically homogeneous, electrically conductive optical metasurface. <i>Nanoscale</i> , 2019, 11, 9580-9586.	2.8	2
23	Metal Nanoparticle Array as a Tunable Refractive Index Material over Broad Visible and Infrared Wavelengths. <i>ACS Photonics</i> , 2018, 5, 1188-1195.	3.2	32
24	Transferrable Plasmonic Au Thin Film Containing Sub-20 nm Nanohole Array Constructed via High-Resolution Polymer Self-Assembly and Nanotransfer Printing. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 2216-2223.	4.0	22
25	Bimodal phase separated block copolymer/homopolymer blends self-assembly for hierarchical porous metal nanomesh electrodes. <i>Nanoscale</i> , 2018, 10, 100-108.	2.8	17
26	Ultralarge Area Sub-10 nm Plasmonic Nanogap Array by Block Copolymer Self-Assembly for Reliable High-Sensitivity SERS. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 44660-44667.	4.0	59
27	Pyramidal Metal-dielectric hybrid-structure geometry with an asymmetric TiO <sub>2</sub> layer for broadband light absorption and photocatalytic applications. <i>Nano Energy</i> , 2018, 53, 468-474.	8.2	5
28	Finite-difference time-domain analysis of increased penetration depth in optical coherence tomography by wavefront shaping. <i>Biomedical Optics Express</i> , 2018, 9, 3883.	1.5	7
29	Direct Chemical Synthesis of Plasmonic Black Colloidal Gold Superparticles with Broadband Absorption Properties. <i>Nano Letters</i> , 2018, 18, 5927-5932.	4.5	34
30	Bright and vivid plasmonic color filters having dual resonance modes with proper orthogonality. <i>Optics Express</i> , 2018, 26, 27403.	1.7	9
31	Signal self-enhancement by coordinated assembly of gold nanoparticles enables accurate one-step-immunoassays. <i>Nanoscale</i> , 2017, 9, 16476-16484.	2.8	8
32	Optical effective media with independent control of permittivity and permeability based on conductive particles. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	27
33	Broadband giant-refractive-index material based on mesoscopic space-filling curves. <i>Nature Communications</i> , 2016, 7, 12661.	5.8	51
34	Complex High-Aspect-Ratio Metal Nanostructures by Secondary Sputtering Combined with Block Copolymer Self-Assembly. <i>Advanced Materials</i> , 2016, 28, 8439-8445.	11.1	26
35	Highly tunable refractive index visible-light metasurface from block copolymer self-assembly. <i>Nature Communications</i> , 2016, 7, 12911.	5.8	143
36	Flexible Near-Field Nanopatterning with Ultrathin, Conformal Phase Masks on Nonplanar Substrates for Biomimetic Hierarchical Photonic Structures. <i>ACS Nano</i> , 2016, 10, 4609-4617.	7.3	58

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37	Two-dimensional metal-dielectric hybrid-structured film with titanium oxide for enhanced visible light absorption and photo-catalytic application. <i>Nano Energy</i> , 2016, 21, 115-122.	8.2	21
38	Fast and bright spontaneous emission of Er <sup>3+</sup> ions in metallic nanocavity. <i>Nature Communications</i> , 2015, 6, 7080.	5.8	19
39	Aluminum Nanoarrays for Plasmon-Enhanced Light Harvesting. <i>ACS Nano</i> , 2015, 9, 6206-6213.	7.3	82
40	Anisotropic dielectric metamaterial slab as a single-material large-acceptance-angle anti-reflection layer for high-temperature applications. , 2015, , .		0
41	Metamaterial-based light diffuser with deep-subwavelength thickness. , 2015, , .		0
42	Anomalous Rapid Defect Annihilation in Self-Assembled Nanopatterns by Defect Melting. <i>Nano Letters</i> , 2015, 15, 1190-1196.	4.5	37
43	Au@Ag Core-Shell Nanoparticle Array by Block Copolymer Lithography for Synergistic Broadband Plasmonic Properties. <i>ACS Nano</i> , 2015, 9, 5536-5543.	7.3	130
44	Self-aligned deterministic coupling of single quantum emitter to nanofocused plasmonic modes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 5280-5285.	3.3	36
45	One-way optical modal transition based on causality in momentum space. <i>Optics Express</i> , 2015, 23, 24997.	1.7	11
46	Synergistic Concurrent Enhancement of Charge Generation, Dissociation, and Transport in Organic Solar Cells with Plasmonic Metal@Carbon Nanotube Hybrids. <i>Advanced Materials</i> , 2015, 27, 1519-1525.	11.1	85
47	Optical vortex arrays from smectic liquid crystals. <i>Optics Express</i> , 2014, 22, 4699.	1.7	37
48	Negative-Tone Block Copolymer Lithography by In Situ Surface Chemical Modification. <i>Small</i> , 2014, 10, 4207-4212.	5.2	6
49	Mussel-Inspired Plasmonic Nanohybrids for Light Harvesting. <i>Advanced Materials</i> , 2014, 26, 4463-4468.	11.1	72
50	Nanodomain Swelling Block Copolymer Lithography for Morphology Tunable Metal Nanopatterning. <i>Small</i> , 2014, 10, 3742-3749.	5.2	18
51	Nanostructures: Mussel-Inspired Plasmonic Nanohybrids for Light Harvesting ( <i>Adv. Mater.</i> 26/2014). <i>Advanced Materials</i> , 2014, 26, 4596-4596.	11.1	0
52	Full-Field Subwavelength Imaging Using a Scattering Superlens. <i>Physical Review Letters</i> , 2014, 113, 113901.	2.9	81
53	Multicomponent Nanopatterns by Directed Block Copolymer Self-Assembly. <i>ACS Nano</i> , 2013, 7, 8899-8907.	7.3	99
54	Subwavelength light focusing using random nanoparticles. <i>Nature Photonics</i> , 2013, 7, 454-458.	15.6	160

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55	Subwavelength Light Control via Wavefront Shaping in Complex Media. , 2013, , .		0
56	Optical recoil of asymmetric nano-optical antenna. Optics Express, 2011, 19, 14929.	1.7	5
57	A terahertz metamaterial with unnaturally high refractive index. Nature, 2011, 470, 369-373.	13.7	551
58	Deterministic Nanotexturing by Directional Photofluidization Lithography. Advanced Materials, 2011, 23, 3244-3250.	11.1	37
59	Photofluidic Nanotexturing: Deterministic Nanotexturing by Directional Photofluidization Lithography (Adv. Mater. 29/2011). Advanced Materials, 2011, 23, 3243-3243.	11.1	0
60	Frequency selective heterojunction metal-insulator-metal mirror for surface plasmons. Physical Review B, 2011, 83, .	1.1	3
61	Transmission Through a Scalar Wave Three-Dimensional Electromagnetic Metamaterial and the Implication for Polarization Control. Journal of Nanoscience and Nanotechnology, 2010, 10, 1737-1740.	0.9	3
62	Directional Photofluidization Lithography for Nanoarchitectures with Controlled Shapes and Sizes. Nano Letters, 2010, 10, 296-304.	4.5	72
63	Fabrication of the Funnel-Shaped Three-Dimensional Plasmonic Tip Arrays by Directional Photofluidization Lithography. ACS Nano, 2010, 4, 7175-7184.	7.3	52
64	One-Dimensional Metal Nanowire Assembly via Block Copolymer Soft Graphoepitaxy. Nano Letters, 2010, 10, 3500-3505.	4.5	102
65	Extraordinary Magnetic Field Enhancement with Metallic Nanowire: Role of Surface Impedance in Babinet's Principle for Sub-Skin-Depth Regime. Physical Review Letters, 2009, 103, 263901.	2.9	49
66	Two-dimensionally relocatable microfiber-coupled photonic crystal resonator. Optics Express, 2009, 17, 13009.	1.7	13
67	Three-Dimensional Metamaterials with an Ultrahigh Effective Refractive Index over a Broad Bandwidth. Physical Review Letters, 2009, 102, 093903.	2.9	128
68	Three-dimensional electromagnetic metamaterials that homogenize to uniform non-Maxwellian media. Physical Review B, 2007, 76, .	1.1	31
69	Cut-Through Metal Slit Array as an Anisotropic Metamaterial Film. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1116-1122.	1.9	51
70	Conditions for designing single-mode air-core waveguides in three-dimensional photonic crystals. Applied Physics Letters, 2006, 89, 161103.	1.5	6
71	Conditions for self-collimation in three-dimensional photonic crystals. Optics Letters, 2005, 30, 2397.	1.7	34
72	Simple geometric criterion to predict the existence of surface modes in air-core photonic-bandgap fibers. Optics Express, 2004, 12, 1864.	1.7	34

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73	Simulations of the effect of the core ring on surface and air-core modes in photonic bandgap fibers. Optics Express, 2004, 12, 3436.	1.7	24
74	Designing air-core photonic-bandgap fibers free of surface modes. IEEE Journal of Quantum Electronics, 2004, 40, 551-556.	1.0	44