

# Dingshan Gao

## List of Publications by Year in descending order

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76  
papers

1,624  
citations

236612

25  
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315357

38  
g-index

76  
all docs

76  
docs citations

76  
times ranked

1288  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dielectric Metasurfaces Enabled Ultradensely Integrated Multidimensional Optical System. Laser and Photonics Reviews, 2022, 16, .	4.4	13
2	Generalized Modular Spectrometers Combining a Compact Nanobeam Microcavity and Computational Reconstruction. ACS Photonics, 2022, 9, 74-81.	3.2	17
3	Compact and high Q multimode racetrack ringresonator based on transformation optics. Optics Express, 2022, 30, 15766-15776.	1.7	0
4	Ultra-compact and low loss onchip higher order mode pass filter based on topology optimization. Applied Physics Express, 2020, 13, 022005.	1.1	8
5	Self-Configuring and Reconfigurable Silicon Photonic Signal Processor. ACS Photonics, 2020, 7, 792-799.	3.2	70
6	Gain characteristics of the hybrid slot waveguide amplifiers integrated with NaYF <sub>4</sub> :Er <sup>3+</sup> NPs-PMMA covalently linked nanocomposites. RSC Advances, 2020, 10, 11148-11155.	1.7	8
7	Efficient Mode Transfer on a Compact Silicon Chip by Encircling Moving Exceptional Points. Physical Review Letters, 2020, 124, 153903.	2.9	58
8	Deterministic design of focusing apodized subwavelength grating coupler based on weak form and transformation optics. Optics Express, 2020, 28, 35395.	1.7	10
9	Compact and broadband multimode waveguide bend by shape-optimizing with transformation optics. Photonics Research, 2020, 8, 1843.	3.4	27
10	On-chip programmable pulse processor employing cascaded MZI-MRR structure. Frontiers of Optoelectronics, 2019, 12, 148-156.	1.9	41
11	Wideband adaptive microwave frequency identification using an integrated silicon photonic scanning filter. Photonics Research, 2019, 7, 172.	3.4	38
12	Universal multimode waveguide crossing based on transformation optics: publisher's note. Optica, 2019, 6, 125.	4.8	0
13	Experimental demonstration of DFB lasers with active distributed reflector. Optics Express, 2018, 26, 29784.	1.7	20
14	Demonstration of on-chip 640-Gbit/s throughput, granularity-flexible programmable optical filtering and reconfigurable optical add/drop multiplexing on silicon platform. , 2018, , .		2
15	Universal multimode waveguide crossing based on transformation optics. Optica, 2018, 5, 1549.	4.8	87
16	Sharp fano resonance in subwavelength grating waveguide micro-ring resonator. , 2017, , .		1
17	High-sensitivity complex refractive index sensing based on Fano resonance in the subwavelength grating waveguide micro-ring resonator. Optics Express, 2017, 25, 20911.	1.7	78
18	Broadband and compact contradirectional coupler with subwavelength grating waveguides. , 2017, , .		0

#	ARTICLE	IF	CITATIONS
19	Design and simulation of two-section DFB lasers with short active-section lengths. Optics Express, 2016, 24, 10590.	1.7	23
20	High-Q and High-Sensitivity One-Dimensional Photonic Crystal Slot Nanobeam Cavity Sensors. IEEE Photonics Technology Letters, 2016, 28, 689-692.	1.3	38
21	Ultra-Compact Broadband Tunable Graphene Plasmonic Multimode Interferometer. IEEE Photonics Technology Letters, 2016, 28, 645-648.	1.3	10
22	Silicon Reflective Arrayed Waveguide Grating with Multimode Interference Reflectors. , 2016, , .		0
23	On-chip passive three-port circuit of all-optical ordered-route transmission. Scientific Reports, 2015, 5, 10190.	1.6	32
24	High Q one-dimensional photonic crystal slot nanobeam cavity for high-sensitivity refractive index sensing. , 2015, , .		0
25	Integrated all-optical three-port circuit of ordered-route transmission. , 2015, , .		0
26	Photonic measurement of microwave frequency using a silicon microdisk resonator. Optics Communications, 2015, 335, 266-270.	1.0	37
27	Experimental observation of optical differentiation and optical Hilbert transformation using a single SOI microdisk chip. Scientific Reports, 2015, 4, 3960.	1.6	27
28	Arbitrary waveform generator and differentiator employing an integrated optical pulse shaper. Optics Express, 2015, 23, 12161.	1.7	35
29	Silicon-Based Integrated Comb Filter and Demultiplexer for Simultaneous WDM Signal Processing. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 240-247.	1.9	5
30	Efficient side-coupling into the slow light modes of photonic crystal slot waveguides. , 2014, , .		0
31	Potential for large optical gain improvement of erbium-doped slot waveguide amplifiers in silicon photonics. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 2021.	0.9	16
32	Investigation of the slot mode enhancement of erbium-doped polymer silicon on insulator waveguide amplifiers. , 2014, , .		0
33	Comparison analysis of microwave photonic filter using SOI microring and microdisk resonators. , 2014, , .		0
34	High efficiency asymmetric directional coupler for slow light slot photonic crystal waveguides. Optics Express, 2014, 22, 11021.	1.7	6
35	Simultaneous multi-channel RZ-OOK/DPSK to NRZ-OOK/DPSK format conversion based on integrated delay interferometers and arrayed-waveguide grating. Science China Technological Sciences, 2013, 56, 558-562.	2.0	7
36	An efficient directional coupling from dielectric waveguide to hybrid long-range plasmonic waveguide on a silicon platform. Applied Physics B: Lasers and Optics, 2013, 111, 15-19.	1.1	13

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37	Compact Notch Microwave Photonic Filters Using On-Chip Integrated Microring Resonators. IEEE Photonics Journal, 2013, 5, 5500307-5500307.	1.0	57
38	High-order photonic differentiator employing on-chip cascaded microring resonators. Optics Letters, 2013, 38, 628.	1.7	46
39	Compact, flexible and versatile photonic differentiator using silicon Mach-Zehnder interferometers. Optics Express, 2013, 21, 7014.	1.7	40
40	Highly efficient phase-matched second harmonic generation using an asymmetric plasmonic slot waveguide configuration in hybrid polymer-silicon photonics. Optics Express, 2013, 21, 14876.	1.7	34
41	Slow light in an alternative row of ellipse-hole photonic crystal waveguide. Applied Optics, 2013, 52, 1155.	0.9	40
42	Ultracompact Onchip Photonic Differentiator Based on Silicon Microdisk Resonator. , 2013, , .		0
43	High Efficiency and Broadband Two-Dimensional Blazed Grating Coupler With Fully Etched Triangular Holes. Journal of Lightwave Technology, 2012, 30, 2363-2366.	2.7	21
44	Flat Band Slow Light With High Coupling Efficiency in One-Dimensional Grating Waveguides. IEEE Photonics Technology Letters, 2012, 24, 7-9.	1.3	17
45	High Extinction Ratio Circular Polarizer With Conical Double-Helical Metamaterials. Journal of Lightwave Technology, 2012, 30, 2442-2446.	2.7	24
46	Slab-Thickness Dependence of Photonic Bandgap in Photonic-Crystal Slabs. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 1636-1642.	1.9	11
47	Photonic band gaps in two-dimensional photonic crystals of core-shell-type dielectric nanorod heterostructures. Optics Communications, 2012, 285, 1988-1992.	1.0	27
48	A Silicon-Based 3-D Hybrid Long-Range Plasmonic Waveguide for Nanophotonic Integration. Journal of Lightwave Technology, 2012, 30, 163-168.	2.7	119
49	Dispersion Engineering of Wide Slot Photonic Crystal Waveguides by Bragg-Like Corrugation of the Slot. IEEE Photonics Technology Letters, 2011, 23, 1298-1300.	1.3	43
50	Low Dispersion Slow Light in Slot Waveguide Grating. IEEE Photonics Technology Letters, 2011, 23, 1700-1702.	1.3	13
51	Enhanced bandgap in annular photonic-crystal silicon-on-insulator asymmetric slabs. Optics Letters, 2011, 36, 2263.	1.7	9
52	Low crosstalk Arrayed Waveguide Grating with Cascaded Waveguide Grating Filter. Journal of Physics: Conference Series, 2011, 276, 012055.	0.3	3
53	Transmission properties of the single mode fiber with a cross-sectional micro-channel investigated using time-domain finite difference (FDTD) method. Optical Fiber Technology, 2011, 17, 580-585.	1.4	0
54	Wideband slow light in one-dimensional grating waveguide. Proceedings of SPIE, 2011, , .	0.8	0

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55	Silicon-Based Stress-Coupled Optical Racetrack Resonators for Seismic Prospecting. IEEE Sensors Journal, 2011, 11, 1035-1039.	2.4	8
56	Wideband slow light in one-dimensional grating waveguide. , 2011, , .		0
57	Analysis of silicon-based optical racetrack resonator for acceleration sensing. Proceedings of SPIE, 2010, , .	0.8	1
58	Investigation of the effects of process-induced disorder location on planar photonic crystal waveguide properties. Microelectronic Engineering, 2010, 87, 2301-2305.	1.1	0
59	Polarizing beam splitter based on a subwavelength asymmetric profile grating. Journal of Optics (United Kingdom), 2010, 12, 015703.	1.0	14
60	A high performance polarization independent reflector based on a multilayered configuration grating structure. Journal of Optics (United Kingdom), 2010, 12, 045703.	1.0	18
61	A Multilayer-Based High-Performance Multisubpart Profile Grating Reflector. IEEE Photonics Technology Letters, 2010, 22, 203-205.	1.3	9
62	Novel Kind of Semislow Light Photonic Crystal Waveguides With Large Delay-Bandwidth Product. IEEE Photonics Technology Letters, 2010, 22, 844-846.	1.3	38
63	Wideband Slow Light in One-Dimensional Chirped Holey Grating Waveguide. IEEE Photonics Technology Letters, 2010, 22, 1135-1137.	1.3	14
64	Wideband slow light in chirped slot photonic-crystal coupled waveguides. Optics Express, 2010, 18, 10567.	1.7	34
65	Improvement of delay-bandwidth product in photonic crystal slow-light waveguides. Optics Express, 2010, 18, 16309.	1.7	58
66	Crosstalk suppression in silicon nanowire arrayed waveguide grating by cascaded grating filter. , 2010, , .		0
67	Ultrafast polarization optical switch constructed from one-dimensional photonic crystal and its performance analysis. Science Bulletin, 2009, 54, 3663-3669.	1.7	14
68	Polarization insensitive self-collimation waveguide in square lattice annular photonic crystals. Optics Communications, 2009, 282, 3172-3176.	1.0	43
69	Flat Band Slow Light in Symmetric Line Defect Photonic Crystal Waveguides. IEEE Photonics Technology Letters, 2009, 21, 1571-1573.	1.3	64
70	Self-collimated waveguide bends and partial bandgap reflection of photonic crystals with parallelogram lattice. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2008, 25, 791.	0.8	31
71	Ultra broadband SOI binary blazed grating mirror. , 2008, , .		0
72	Silicon based ultra-compact modulator with photonic crystal. Proceedings of SPIE, 2007, , .	0.8	0

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73	Nonlinear equation method for band structure calculations of photonic crystal slabs. Applied Physics Letters, 2006, 88, 163105.	1.5	37
74	Mode analysis of the UV-written channel waveguide. , 2006, , .		0
75	Si-based optoelectronic devices for optical communications. , 2006, 6352, 471.		9
76	Nano-optoelectronics research in WNLO. , 2006, , .		1