Ran Hao

List of Publications by Year
in descending order

75 papers	1,660 citations	279798 23 h-index	289244 40 g-index
75 all docs	75 docs citations	75 times ranked	1824 citing authors

#	Article	IF	Citations
1	Revealing the Orbital Angular Momentum Spectrum and Correlation Phase of Optical Vortices With Wander Perturbations and Spiral Offsets. Journal of Lightwave Technology, 2022, 40, 2008-2014.	4.6	4
2	Photonic MoirÃ© lattice waveguide with a large slow light bandwidth and delay-bandwidth product. Applied Optics, 2022, 61, 5776.	1.8	3
3	Stop band blocking window modeling with energy absorber in 5G midâ€band cellular communications. International Journal of RF and Microwave Computer-Aided Engineering, 2021, 31, e22533.	1.2	0
4	Independent Bifocal Metalens Design Based on Deep Learning Algebra. IEEE Photonics Technology Letters, 2021, 33, 403-406.	2.5	8
5	Optimization of Graphene-Based Slot Waveguides for Efficient Modulation. IEEE Journal of Selected Topics in Quantum Electronics, 2020, 26, 1-5.	2.9	4
6	Experimental demonstration of a graphene-based hybrid plasmonic modulator: publisherâ€™s note. Optics Letters, 2020, 45, 827.	3.3	0
7	Realizing the electromagnetically induced transparency (EIT)-like transmission with a single hole-ring resonator. Optics Communications, 2019, 445, 101-105.	2.1	4
8	Graphene-based Hybrid Plasmonic Modulator with High Modulation Efficiency. , 2019, , .		0
9	Spoof Surface Plasmonic Graphene for Controlling the Transports and Emissions of Electromagnetic Waves. IEEE Transactions on Microwave Theory and Techniques, 2019, 67, 50-56.	4.6	7
10	Frequency optimization of permeability metamaterial for enhanced resolution. Applied Optics, 2019, 58, 3200.	1.8	1
11	Experimental demonstration of a graphene-based hybrid plasmonic modulator. Optics Letters, 2019, 44, 2586.	3.3	23
12	Increasing the bandwidth of slow light in fishbone-like grating waveguides. Photonics Research, 2019, 7, 240.	7.0	5
13	Carrier Dynamics of Nanopillar Textured Ultrathin Si Film/PEDOT:PSS Heterojunction Solar Cell. IEEE Journal of Photovoltaics, 2018, 8, 757-762.	2.5	3
14	Toroidal Localized Spoof Plasmons on Compact Metadisks. Advanced Science, 2018, 5, 1700487.	11.2	27
15	Enhanced performance of a graphene/GaAs self-driven near-infrared photodetector with upconversion nanoparticles. Nanoscale, 2018, 10, 8023-8030.	5.6	84
16	Wideband slow light in grating waveguides. , 2018, , .		0
17	Large modulation capacity in graphene-based slot modulators by enhanced hybrid plasmonic effects. Scientific Reports, 2018, 8, 16830.	3.3	5
18	Ridge waveguide assisted highly efficient transverse-electric-pass polarizer based on a hybrid plasmonic waveguide. Applied Optics, 2018, 57, 5533.	1.8	7

#	Article	IF	Citations
19	Highly Efficient Graphene-Based Optical Modulator With Edge Plasmonic Effect. IEEE Photonics Journal, 2018, 10, 1-7.	2.0	11
20	Design of Ultracompact Graphene-Based Superscatterers. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 130-137.	2.9	23
21	Modeling and Optimization of Substrate Electromagnetic Coupling and Isolation in Modern Lightly Doped CMOS Substrate. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 662-669.	2.2	1
22	A Low-Profile Broadband Bandpass Frequency Selective Surface With Two Rapid Band Edges for 5G Near-Field Applications. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 670-676.	2.2	61
23	Electromagnetic Characteristics of Multiport TSVs Using L-2L De-Embedding Method and Shielding TSVs. IEEE Transactions on Electromagnetic Compatibility, 2017, 59, 1541-1548.	2.2	12
24	An Active Absorber Based on Nonvolatile Floating-Gate Graphene Structure. IEEE Nanotechnology Magazine, 2017, 16, 189-195.	2.0	8
25	Gradient Chiral Metamirrors for Spinâ€Selective Anomalous Reflection. Laser and Photonics Reviews, 2017, 11, 1700115.	8.7	89
26	A TE/TM independent polarizer based on graphene interferometer. , 2017, , .		0
27	A graphene-on-gap modulator with high modulation efficiency. , 2017, , .		0
28	A broadband and tunable absorber with non-volatile floating-gate graphene structure. , 2017, , .		0
29	Highly efficient graphene-on-gap modulator by employing the hybrid plasmonic effect. Optics Letters, 2017, 42, 1736.	3.3	44
30	Fullâ€Polarization 3D Metasurface Cloak with Preserved Amplitude and Phase. Advanced Materials, 2016, 28, 6866-6871.	21.0	259
31	Terahertz modulator based on graphene-embedded waveguide. , 2016, , .		0
32	Plasmonic transmission lines with zero crosstalk. , 2016, , .		1
33	A graphene-based all-fiber electro-absorption modulator. Journal of Optics (India), 2016, 45, 337-342.	1.7	8
34	Concealing arbitrary objects remotely with multi-folded transformation optics. Light: Science and Applications, 2016, 5, e16177-e16177.	16.6	52
35	Large slow light capacity in graphene-based grating waveguide. , 2016, , .		0
36	Scaling Analysis of High Gain Monolayer MoS₂Photodetector for Its Performance Optimization. IEEE Transactions on Electron Devices, 2016, 63, 1608-1614.	3.0	12

#	Article	IF	Citations
37	Improved Slow Light Capacity In Graphene-based Waveguide. Scientific Reports, 2015, 5, 15335.	3.3	31
38	Graphene Assisted TE/TM-Independent Polarizer Based on Machâ€"Zehnder Interferometer. IEEE Photonics Technology Letters, 2015, 27, 1112-1115.	2.5	36
39	Graphene-aluminum oxide metamaterial for a compact polarization-independent modulator. , 2015, , .		2
40	Tunable slow wave waveguides based on graphene. , 2015, , .		0
41	Graphene Embedded Modulator with Extremely Small Footprint and High Modulation Efficiency. Journal of Photonics, 2014, 2014, 1-6.	1.0	1
42	PDN Impedance Modeling for Multiple Through Vias Array in Doped Silicon. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1202-1209.	2.2	7
43	Double-Shielded Interposer With Highly Doped Layers for High-Speed Signal Propagation. IEEE Transactions on Electromagnetic Compatibility, 2014, 56, 1210-1217.	2.2	5
44	Full RLGC model extraction of Through Silicon Via (TSV) with charge distribution effects. Journal of Electromagnetic Waves and Applications, 2014, 28, 1596-1609.	1.6	2
45	A Graphene-Enhanced Fiber-Optic Phase Modulator With Large Linear Dynamic Range. IEEE Photonics Technology Letters, 2014, 26, 1867-1870.	2.5	24
46	The study of few-layer graphene based Machâ"Zehnder modulator. Optics Communications, 2014, 323, 49-53.	2.1	41
47	Ultra-compact graphene-embedded optical phase modulators. , 2014, , .		5
48	Tunability Analysis of a Graphene-Embedded Ring Modulator. IEEE Photonics Technology Letters, 2014, 26, 2008-2011.	2.5	60
49	Recent developments in graphene-based optical modulators. Frontiers of Optoelectronics, 2014, 7, 277-292.	3.7	17
50	Dynamic control of wideband slow wave in graphene based waveguides. Optics Letters, 2014, 39, 3094.	3.3	16
51	A non-contact graphene surface scattering rate characterization method at microwave frequency by combining Raman spectroscopy and coaxial connectors measurement. Carbon, 2014, 77, 53-58.	10.3	17
52	Ultra-compact optical modulator by graphene induced electro-refraction effect. Applied Physics Letters, 2013, 103, .	3.3	118
53	Reconfigurable Parallel Plasmonic Transmission Lines With Nanometer Light Localization and Long Propagation Distance. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 4601809-4601809.	2.9	6
54	Ab initio optical study of graphene on hexagonal boron nitride and fluorographene substrates. Journal of Materials Chemistry C, 2013, 1, 1618.	5.5	39

#	Article	IF	Citations
55	Low-chirp high-extinction-ratio modulator based on grapheneâ€"silicon waveguide. Optics Letters, 2013, 38, 2512.	3.3	55
56	Unidirectional surface plasmons in nonreciprocal graphene. New Journal of Physics, 2013, 15, 113003.	2.9	40
57	Two-dimensional light confinement in cross-index-modulation plasmonic waveguides. Optics Letters, 2012, 37, 2934.	3.3	29
58	Novel Demodulation Method for Fiber-Optic Interferometers Based on $pi/2$ Phase Modulation. IEEE Photonics Technology Letters, 2012, 24, 1981-1983.	2.5	4
59	A wedge-to-wedge plasmonic waveguide for subwavelength confinement and long-range propagation. , 2012, , .		0
60	Silicon slow light photonic crystals structures: present achievements and future trends. Frontiers of Optoelectronics in China, 2011, 4, 243-253.	0.2	4
61	Influence of the localization of process-induced disorder on planar photonic crystal waveguide properties. Proceedings of SPIE, 2010, , .	0.8	0
62	Investigation of the effects of process-induced disorder location on planar photonic crystal waveguide properties. Microelectronic Engineering, 2010, 87, 2301-2305.	2.4	0
63	Polarizing beam splitter based on a subwavelength asymmetric profile grating. Journal of Optics (United Kingdom), 2010, 12, 015703.	2.2	14
64	A high performance polarization independent reflector based on a multilayered configuration grating structure. Journal of Optics (United Kingdom), 2010, 12, 045703.	2.2	18
65	Novel Kind of Semislow Light Photonic Crystal Waveguides With Large Delay-Bandwidth Product. IEEE Photonics Technology Letters, 2010, 22, 844-846.	2.5	38
66	Wideband Slow Light in One-Dimensional Chirped Holey Grating Waveguide. IEEE Photonics Technology Letters, 2010, 22, 1135-1137.	2.5	14
67	Novel slow light waveguide with controllable delay-bandwidth product and utra-low dispersion. Optics Express, 2010, 18, 5942.	3.4	76
68	Improvement of delay-bandwidth productâ€¨in photonic crystal slow-light waveguides. Optics Express, 2010, 18, 16309.	3.4	58
69	A new kind of semi-slow light photonic crystal waveguides with large delay-bandwidth product. Proceedings of SPIE, 2010, , .	0.8	0
70	Silicon nanophotonic devices based on periodic structures. , 2010, , .		0
71	Fabrication of annular photonic crystals by atomic layer deposition and sacrificial etching. Journal of Vacuum Science & Technology B, 2009, 27, 568-572.	1.3	28
72	Flat Band Slow Light in Symmetric Line Defect Photonic Crystal Waveguides. IEEE Photonics Technology Letters, 2009, 21, 1571-1573.	2.5	64

#	Article	IF	Citations
73	Design of annular photonic crystal slabs. Optics Letters, 2008, 33, 1614.	3.3	24
74	The complete bandgap in ring-shaped photonic crystal SOI slab. , 2008, , .		1
75	Silicon based ultra-compact modulator with photonic crystal. Proceedings of SPIE, 2007, , .	0.8	0