

Iñigo Molina-Fernández

List of Publications by Year in descending order

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43
papers

1,867
citations

331670

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35
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43
all docs

43
docs citations

43
times ranked

1152
citing authors

#	ARTICLE	IF	CITATIONS
1	Polarization-independent multimode interference coupler with anisotropy-engineered bricked metamaterial. <i>Photonics Research</i> , 2022, 10, A57.	7.0	11
2	Subwavelength-engineered metamaterial devices for integrated photonics. , 2022, , .		1
3	UV-written silicon nitride integrated optical phased arrays. , 2022, , .		1
4	Mode Converter and Multiplexer With a Subwavelength Phase Shifter for Extended Broadband Operation. <i>IEEE Photonics Technology Letters</i> , 2021, 33, 1262-1265.	2.5	7
5	Bricked Subwavelength Gratings: A Tailorable On-Chip Metamaterial Topology. <i>Laser and Photonics Reviews</i> , 2021, 15, 2000478.	8.7	18
6	Complex spectral filters in silicon waveguides based on cladding-modulated Bragg gratings. <i>Optics Express</i> , 2021, 29, 15867.	3.4	20
7	High-efficiency conversion from waveguide mode to an on-chip beam using a metamaterial engineered Bragg deflector. <i>Optics Letters</i> , 2021, 46, 2409.	3.3	8
8	Suspended germanium waveguides with subwavelength-grating metamaterial cladding for the mid-infrared band. <i>Optics Express</i> , 2021, 29, 16867.	3.4	21
9	Millimeter-long metamaterial surface-emitting antenna in the silicon photonics platform. <i>Optics Letters</i> , 2021, 46, 3733.	3.3	17
10	A review of silicon subwavelength gratings: building break-through devices with anisotropic metamaterials. <i>Nanophotonics</i> , 2021, 10, 2765-2797.	6.0	70
11	Broadband 2×2 multimode interference coupler for mid-infrared wavelengths. <i>Optics Letters</i> , 2021, 46, 5300.	3.3	7
12	Low-loss off-axis curved waveguide grating demultiplexer. <i>Optics Letters</i> , 2021, 46, 4821.	3.3	3
13	Building high-performance integrated optical devices using subwavelength grating metamaterials -INVITED. <i>EPJ Web of Conferences</i> , 2021, 255, 01001.	0.3	0
14	Integrated metamaterial surface-emitting antenna for beam steering applications. , 2021, , .		1
15	Bricked patterning: a new concept to enhance the capabilities of subwavelength grating waveguides. , 2021, , .		0
16	Metamaterial engineered C+L band 90° hybrid with 150 nm feature size. , 2020, , .		0
17	Dispersion-engineered nanophotonic devices based on subwavelength metamaterial waveguides. , 2020, , .		1
18	Experimental demonstration of a broadband mode converter and multiplexer based on subwavelength grating waveguides. <i>Optics and Laser Technology</i> , 2020, 129, 106297.	4.6	25

#	ARTICLE	IF	CITATIONS
19	Narrowband Bragg filters based on subwavelength grating waveguides for silicon photonic sensing. Optics Express, 2020, 28, 37971.	3.4	22
20	Polarization splitting directional coupler using tilted subwavelength gratings. Optics Letters, 2020, 45, 3398.	3.3	26
21	Highly efficient optical antenna with small beam divergence in silicon waveguides. Optics Letters, 2020, 45, 5668.	3.3	24
22	Coherent silicon photonic interferometric biosensor with an inexpensive laser source for sensitive label-free immunoassays. Optics Letters, 2020, 45, 6595.	3.3	11
23	Ultra-broadband nanophotonic phase shifter based on subwavelength metamaterial waveguides. Photonics Research, 2020, 8, 359.	7.0	28
24	Low Limit of Detection Silicon Photonic Sensor with Extremely-Low-Cost Laser Source. , 2020, , .		1
25	An Ultracompact GRIN-Lens-Based Spot Size Converter using Subwavelength Grating Metamaterials. Laser and Photonics Reviews, 2019, 13, 1900172.	8.7	47
26	Zero-Birefringence Silicon Waveguides Based on Tilted Subwavelength Metamaterials. IEEE Photonics Journal, 2019, 11, 1-8.	2.0	14
27	Optimizing the Limit of Detection of Waveguide-Based Interferometric Biosensor Devices. Sensors, 2019, 19, 3671.	3.8	36
28	[INVITED] Subwavelength structures for silicon photonics biosensing. Optics and Laser Technology, 2019, 109, 437-448.	4.6	79
29	Mid-Infrared suspended waveguide platform and building blocks. IET Optoelectronics, 2019, 13, 55-61.	3.3	21
30	Fundamental limit of detection of photonic biosensors with coherent phase read-out. Optics Express, 2019, 27, 12616.	3.4	33
31	Design of a suspended germanium micro-antenna for efficient fiber-chip coupling in the long-wavelength mid-infrared range. Optics Express, 2019, 27, 22302.	3.4	16
32	Distributed Bragg deflector coupler for on-chip shaping of optical beams. Optics Express, 2019, 27, 33180.	3.4	17
33	Bragg filter bandwidth engineering in subwavelength grating metamaterial waveguides. Optics Letters, 2019, 44, 1043.	3.3	41
34	Ultra-Broadband Mode Converter and Multiplexer Based on Sub-Wavelength Structures. IEEE Photonics Journal, 2018, 10, 1-10.	2.0	65
35	Tilted subwavelength gratings: controlling anisotropy in metamaterial nanophotonic waveguides. Optics Letters, 2018, 43, 4691.	3.3	60
36	Design of narrowband Bragg spectral filters in subwavelength grating metamaterial waveguides. Optics Express, 2018, 26, 179.	3.4	74

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37	Subwavelength-Grating Metamaterial Structures for Silicon Photonic Devices. Proceedings of the IEEE, 2018, 106, 2144-2157.	21.3	155
38	Disorder effects in subwavelength grating metamaterial waveguides. Optics Express, 2017, 25, 12222.	3.4	31
39	Controlling leakage losses in subwavelength grating silicon metamaterial waveguides. Optics Letters, 2016, 41, 3443.	3.3	60
40	Ultra-broadband nanophotonic beamsplitter using an anisotropic sub-wavelength metamaterial. Laser and Photonics Reviews, 2016, 10, 1039-1046.	8.7	148
41	Waveguide sub-wavelength structures: a review of principles and applications. Laser and Photonics Reviews, 2015, 9, 25-49.	8.7	475
42	Evanescence field waveguide sensing with subwavelength grating structures in silicon-on-insulator. Optics Letters, 2014, 39, 4442.	3.3	143
43	An ultra-compact multimode interference coupler with a subwavelength grating slot. Laser and Photonics Reviews, 2013, 7, L12.	8.7	29