

# Jan Petykiewicz

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/12006116/publications.pdf>

Version: 2024-02-01

28  
papers

1,712  
citations

759233

12  
h-index

996975

15  
g-index

28  
all docs

28  
docs citations

28  
times ranked

1869  
citing authors

#	ARTICLE	IF	CITATIONS
1	Inverse design and demonstration of a compact and broadband on-chip wavelength demultiplexer. Nature Photonics, 2015, 9, 374-377.	31.4	756
2	Fabrication-constrained nanophotonic inverse design. Scientific Reports, 2017, 7, 1786.	3.3	200
3	Inverse Design and Demonstration of a Compact on-Chip Narrowband Three-Channel Wavelength Demultiplexer. ACS Photonics, 2018, 5, 301-305.	6.6	183
4	Inverse design and implementation of a wavelength demultiplexing grating coupler. Scientific Reports, 2014, 4, 7210.	3.3	118
5	Ultrafast direct modulation of a single-mode photonic crystal nanocavity light-emitting diode. Nature Communications, 2011, 2, 539.	12.8	116
6	Strain-Induced Pseudoheterostructure Nanowires Confining Carriers at Room Temperature with Nanoscale-Tunable Band Profiles. Nano Letters, 2013, 13, 3118-3123.	9.1	107
7	Direct Bandgap Light Emission from Strained Germanium Nanowires Coupled with High-Q Nanophotonic Cavities. Nano Letters, 2016, 16, 2168-2173.	9.1	72
8	Multimode nanobeam cavities for nonlinear optics: high quality resonances separated by an octave. Optics Express, 2014, 22, 26498.	3.4	36
9	Second-Harmonic Generation in GaAs Photonic Crystal Cavities in (111)B and (001) Crystal Orientations. ACS Photonics, 2014, 1, 516-523.	6.6	36
10	Nanobeam photonic crystal cavity light-emitting diodes. Applied Physics Letters, 2011, 99, 071105.	3.3	28
11	Electrically Driven Photonic Crystal Nanocavity Devices. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 1700-1710.	2.9	23
12	Nonlinear frequency conversion using high-quality modes in GaAs nanobeam cavities. Optics Letters, 2014, 39, 5673.	3.3	15
13	Ge microdisk with lithographically-tunable strain using CMOS-compatible process. Optics Express, 2015, 23, 33249.	3.4	12
14	Electrical properties of GaAs photonic crystal cavity lateral p-i-n diodes. Applied Physics Letters, 2012, 101, 011104.	3.3	4
15	Electrically driven photonic crystal nanocavity devices. , 2012, , .		3
16	Inverse Design of a Wavelength Demultiplexer. , 2016, , .		2
17	Reply to 'On nanostructured silicon success'. Nature Photonics, 2016, 10, 143-144.	31.4	1
18	Ultra-Low Threshold and High Speed Electrically Driven Photonic Crystal Nanocavity Lasers and LEDs. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
19	Ultrafast Direct Modulation of a Single-Mode Photonic Crystal Nanocavity Light-Emitting Diode. , 2012, , .		0
20	Photonic crystal nanocavity lasers and modulators. , 2012, , .		0
21	Electrically controlled photonic crystal nanocavity sources and modulators. , 2013, , .		0
22	Mimicking Heterostructure Behavior Within a Single Material at Room Temperature Using Strain. , 2014, , .		0
23	Strained Ge nanowire with high-Q optical cavity for Ge laser applications. , 2015, , .		0
24	Inverse design and implementation of nanophotonic devices. , 2015, , .		0
25	Remarkable interplay between strain and parasitic absorption unravelling the best route for Si-compatible Germanium laser at room temperature. , 2016, , .		0
26	Fabrication Constrained Inverse Design of a 3-channel Wavelength Demultiplexer. , 2018, , .		0
27	Nanophotonics in novel $\sqrt{2}$ -materials: (111)-GaAs and 3C-SiC. , 2015, , .		0
28	Dramatic and previously overlooked interaction between strain and parasitic absorption in germanium with major implications for Si-compatible lasing. , 2016, , .		0