

# Benedetto Troia

## List of Publications by Year in descending order

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32  
papers

724  
citations

706676

14  
h-index

591227

27  
g-index

32  
all docs

32  
docs citations

32  
times ranked

1106  
citing authors

#	ARTICLE	IF	CITATIONS
1	Grating devices on a silicon nitride technology platform for visible light applications. OSA Continuum, 2019, 2, 1155.	1.8	24
2	Cascaded ring resonator and Mach-Zehnder interferometer with a Sagnac loop for Vernier-effect refractive index sensing. Sensors and Actuators B: Chemical, 2017, 240, 76-89.	4.0	38
3	Silicon ring resonator-coupled Mach-Zehnder interferometers for the Fano resonance in the mid-IR. Applied Optics, 2017, 56, 8769.	0.9	10
4	Investigation of a Fiberoptic Device Based on a Long Period Grating in a Ring Resonator. Sensors, 2016, 16, 1357.	2.1	3
5	Dispersion of nonresonant third-order nonlinearities in GeSiSn ternary alloys. Scientific Reports, 2016, 6, 32622.	1.6	5
6	Investigation of mid-infrared second harmonic generation in strained germanium waveguides. Optics Express, 2016, 24, 11126.	1.7	8
7	Germanium-on-silicon Vernier-effect photonic microcavities for the mid-infrared. Optics Letters, 2016, 41, 610.	1.7	48
8	Theoretical demonstration of Brillouin lasing effect in racetrack resonators based on germanium waveguides in the mid-infrared. Optics Letters, 2016, 41, 416.	1.7	6
9	Design Procedure and Fabrication of Reproducible Silicon Vernier Devices for High-Performance Refractive Index Sensing. Sensors, 2015, 15, 13548-13567.	2.1	13
10	Germanium-on-Silicon Waveguide Engineering for Third Harmonic Generation in the Mid-Infrared. Journal of Lightwave Technology, 2015, 33, 5103-5113.	2.7	13
11	Silicon Photonic Waveguides and Devices for Near- and Mid-IR Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 407-418.	1.9	86
12	Modeling of Radiation Effects in Silicon Photonic Devices. IEEE Transactions on Nuclear Science, 2015, 62, 2155-2168.	1.2	10
13	Picosecond optically reconfigurable filters exploiting full free spectral range tuning of single ring and Vernier effect resonators. Optics Express, 2015, 23, 12468.	1.7	11
14	Investigation of germanium Raman lasers for the mid-infrared. Optics Express, 2015, 23, 17237.	1.7	10
15	Modelling of Supercontinuum Generation in the Germanium-on-Silicon Waveguided Platform. Journal of Lightwave Technology, 2015, 33, 4437-4444.	2.7	13
16	Device-level characterization of the flow of light in integrated photonic circuits using ultrafast photomodulation spectroscopy. Nature Photonics, 2015, 9, 54-60.	15.6	44
17	Design and Optimization of Polarization Splitting and Rotating Devices in Silicon-on-Insulator Technology. Advances in OptoElectronics, 2014, 2014, 1-16.	0.6	15
18	Mid-IR Optical and Nonlinear Properties of Germanium on Silicon Optical Waveguides. Journal of Lightwave Technology, 2014, 32, 4349-4359.	2.7	14

#	ARTICLE	IF	CITATIONS
19	Performance of SOI Bragg Grating Ring Resonator for Nonlinear Sensing Applications. Sensors, 2014, 14, 16017-16034.	2.1	27
20	Recent Advances in Gas and Chemical Detection by Vernier Effect-Based Photonic Sensors. Sensors, 2014, 14, 4831-4855.	2.1	59
21	Generalized modelling for the design of guided-wave optical directional couplers. Optics Letters, 2014, 39, 1161.	1.7	19
22	Cascade-coupled racetrack resonators based on the Vernier effect in the mid-infrared. Optics Express, 2014, 22, 23990.	1.7	28
23	Design and fabrication of silicon cascade-coupled ring resonators operating in mid infrared. , 2014, , .		1
24	Photonic resonant microcavities for chemical and biochemical sensing. RSC Advances, 2013, 3, 25-44.	1.7	37
25	Dispersion engineered silicon nanocrystal photonic structures for trace biochemical surface sensing by nonlinear effects. Sensors and Actuators B: Chemical, 2013, 178, 233-253.	4.0	2
26	Design Rules for Raman Lasers Based on SOI Racetrack Resonators. IEEE Photonics Journal, 2013, 5, 1502431-1502431.	1.0	12
27	Recent Advances in Integrated Photonic Sensors. Sensors, 2012, 12, 15558-15598.	2.1	122
28	A generalized approach for design of photonic gas sensors based on Vernier-effect in mid-IR. Sensors and Actuators B: Chemical, 2012, 168, 402-420.	4.0	34
29	High performance optical sensing in group IV slot optical waveguides at 2.883 $\mu\text{m}$ . , 2011, , .		0
30	Design of optimized SOI slot waveguides for homogeneous optical sensing in near infrared. , 2011, , .		1
31	Design of optical filters based on multiple ring resonators operating in C and L bands. , 2011, , .		3
32	Chemical Sensors Based on Photonic Structures. , 0, , .		8