Benedetto Troia

List of Publications by Year in Descending Order

29 papers	529 citations	12 h-index	22 g-index
32 ext. papers	651 ext. citations	4.7 avg, IF	3.57 L-index

#	Paper	IF	Citations
29	Grating devices on a silicon nitride technology platform for visible light applications. *OSA Continuum*, **2019**, 2, 1155	1.4	14
28	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	8.5	24
27	Silicon ring resonator-coupled Mach-Zehnder interferometers for the Fano resonance in the mid-IR. *Applied Optics*, **2017**, 56, 8769-8776	1.7	7
26	Germanium-on-silicon Vernier-effect photonic microcavities for the mid-infrared. *Optics Letters*, **2016**, 41, 610-3	3	33
25	Theoretical demonstration of Brillouin lasing effect in racetrack resonators based on germanium waveguides in the mid-infrared. *Optics Letters*, **2016**, 41, 416-9	3	5
24	Investigation of a Fiberoptic Device Based on a Long Period Grating in a Ring Resonator. *Sensors*, **2016**, 16,	3.8	3
23	Dispersion of nonresonant third-order nonlinearities in GeSiSn ternary alloys. *Scientific Reports*, **2016**, 6, 32622	4.9	5
22	Investigation of mid-infrared second harmonic generation in strained germanium waveguides. *Optics Express*, **2016**, 24, 11126-44	3.3	6
21	. *IEEE Journal of Selected Topics in Quantum Electronics*, **2015**, 21, 407-418	3.8	62
20	Modeling of Radiation Effects in Silicon Photonic Devices. *IEEE Transactions on Nuclear Science*, **2015**, 62, 2155-2168	1.7	4
19	Picosecond optically reconfigurable filters exploiting full free spectral range tuning of single ring and Vernier effect resonators. *Optics Express*, **2015**, 23, 12468-77	3.3	7
18	Investigation of germanium Raman lasers for the mid-infrared. *Optics Express*, **2015**, 23, 17237-54	3.3	8
17	Modelling of Supercontinuum Generation in the Germanium-on-Silicon Waveguided Platform. *Journal of Lightwave Technology*, **2015**, 33, 4437-4444	4	10
16	Device-level characterization of the flow of light in integrated photonic circuits using ultrafast photomodulation spectroscopy. *Nature Photonics*, **2015**, 9, 54-60	33.9	34
15	Design Procedure and Fabrication of Reproducible Silicon Vernier Devices for High-Performance Refractive Index Sensing. *Sensors*, **2015**, 15, 13548-67	3.8	9
14	Germanium-on-Silicon Waveguide Engineering for Third Harmonic Generation in the Mid-Infrared. *Journal of Lightwave Technology*, **2015**, 33, 5103-5113	4	9
13	Design and Optimization of Polarization Splitting and Rotating Devices in Silicon-on-Insulator Technology. *Advances in OptoElectronics*, **2014**, 2014, 1-16	0.5	11

List of Publications

12	Mid-IR Optical and Nonlinear Properties of Germanium on Silicon Optical Waveguides. *Journal of Lightwave Technology*, **2014**, 32, 4349-4359	4	12
11	Performance of SOI Bragg grating ring resonator for nonlinear sensing applications. *Sensors*, **2014**, 14, 16017-34	3.8	21
10	Recent advances in gas and chemical detection by Vernier effect-based photonic sensors. *Sensors*, **2014**, 14, 4831-55	3.8	43
9	Generalized modelling for the design of guided-wave optical directional couplers. *Optics Letters*, **2014**, 39, 1161-4	3	17
8	Cascade-coupled racetrack resonators based on the Vernier effect in the mid-infrared. *Optics Express*, **2014**, 22, 23990-4003	3.3	18
7	Photonic resonant microcavities for chemical and biochemical sensing. *RSC Advances*, **2013**, 3, 25-44	3.7	30
6	Dispersion engineered silicon nanocrystal photonic structures for trace biochemical surface sensing by nonlinear effects. *Sensors and Actuators B: Chemical*, **2013**, 178, 233-253	8.5	2
5	Design Rules for Raman Lasers Based on SOI Racetrack Resonators. *IEEE Photonics Journal*, **2013**, 5, 1502431-1502431		10
4	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	8.5	31
3	Recent advances in integrated photonic sensors. *Sensors*, **2012**, 12, 15558-98	3.8	86
2	Chemical Sensors Based on Photonic Structures **2012**,		5
1	Design of optical filters based on multiple ring resonators operating in C and L bands **2011**,		1