Francesco Dell Olio

List of Publications by Year in Descending Order

74 papers	1,749 citations	22 h-index	40 g-index
92 ext. papers	2,173 ext. citations	3.1 avg, IF	4.96 L-index

#	Paper	IF	Citations
74	Analogue of electromagnetically induced transparency in square slotted silicon metasurfaces supporting bound states in the continuum.. *Optics Express*, **2022**, 30, 4615-4630	3.3	8
73	All-Dielectric Metasurface Based on Complementary Split-Ring Resonators for Refractive Index Sensing. *Photonics*, **2022**, 9, 130	2.2	0
72	Multiplexed Liquid Biopsy and Tumor Imaging Using Surface-Enhanced Raman Scattering. *Biosensors*, **2021**, 11,	5.9	2
71	Low-Cost Wireless Wearable System for Posture Monitoring. *Electronics (Switzerland)*, **2021**, 10, 2569	2.6	1
70	Strongly resonant silicon slot metasurfaces with symmetry-protected bound states in the continuum. *Optics Express*, **2021**, 29, 10374-10385	3.3	26
69	Photonic technologies for liquid biopsies: recent advances and open research challenges.. *Laser and Photonics Reviews*, **2021**, 15,	8.3	4
68	Liquid Biopsies: Photonic Technologies for Liquid Biopsies: Recent Advances and Open Research Challenges (Laser Photonics Rev. 15(1)/2021). *Laser and Photonics Reviews*, **2021**, 15, 2170012	8.3	3
67	Comprehensive mathematical modelling of ultra-high Q grating-assisted ring resonators. *Journal of Optics (United Kingdom)*, **2020**, 22, 035802	1.7	13
66	Ultralow Loss and High Extinction Ratio TM-Pass Polarizer in Silicon Photonics. *IEEE Photonics Journal*, **2020**, 12, 1-11	1.8	5
65	Electro-Photonic Chip-Scale Microsystem for Label-Free Single Bacteria Monitoring. *Lecture Notes in Electrical Engineering*, **2019**, 53-58	0.2	
64	Ultra-Compact Tuneable Notch Filter Using Silicon Photonic Crystal Ring Resonator. *Journal of Lightwave Technology*, **2019**, 37, 2970-2980	4	16
63	Silicon photonic biosensors. *IET Optoelectronics*, **2019**, 13, 48-54	1.5	8
62	Monitoring of individual bacteria using electro-photonic traps. *Biomedical Optics Express*, **2019**, 10, 3463-3471	3.5	15
61	Measured radiation effects on InGaAsP/InP ring resonators for space applications. *Optics Express*, **2019**, 27, 24434-24444	3.3	8
60	Design of a Label-Free Multiplexed Biosensing Platform Based on an Ultracompact Plasmonic Resonant Cavity. *Lecture Notes in Electrical Engineering*, **2019**, 263-267	0.2	
59	Integrated Photonic and Plasmonic Resonant Devices for Label-Free Biosensing and Trapping at the Nanoscale. *Physica Status Solidi (A) Applications and Materials Science*, **2019**, 216, 1800561	1.6	6
58	Design of an ultra-compact graphene-based integrated microphotonic tunable delay line. *Optics Express*, **2018**, 26, 4593-4604	3.3	18

57	. *IEEE Photonics Journal*, **2018**, 10, 1-11	1.8	3
56	Photonic and Plasmonic Nanotweezing of Nano- and Microscale Particles. *Applied Spectroscopy*, **2017**, 71, 367-390	3.1	18
55	Design of a New Ultracompact Resonant Plasmonic Multi-Analyte Label-Free Biosensing Platform. *Sensors*, **2017**, 17,	3.8	11
54	Planar photonic gyroscopes for satellite attitude control **2017**,		3
53	Ultra-high Q/V hybrid cavity for strong light-matter interaction. *APL Photonics*, **2017**, 2, 086101	5.2	30
52	New microwave photonic filter based on a ring resonator including a photonic crystal structure **2017**,		4
51	Photonic, plasmonic and hybrid nanotweezers for single nanoparticle trapping and manipulation **2017**,		1
50	Rigorous model for the design of ultra-high Q-factor resonant cavities **2016**,		6
49	A High-Q InP Resonant Angular Velocity Sensor for a Monolithically Integrated Optical Gyroscope. *IEEE Photonics Journal*, **2016**, 8, 1-19	1.8	45
48	Rigorous design of an ultra-high Q/V photonic/plasmonic cavity to be used in biosensing applications. *Optics and Laser Technology*, **2016**, 77, 151-161	4.2	26
47	Photonics in Space **2016**,		15
46	Modeling and Design of a New Flexible Graphene-on-Silicon Schottky Junction Solar Cell. *Electronics (Switzerland)*, **2016**, 5, 73	2.6	6
45	Resonant nanoplasmonic platform for fast and early diagnosis of cardiovascular diseases **2016**,		1
44	Graphene-based fine-tunable optical delay line for optical beamforming in phased-array antennas. *Applied Optics*, **2016**, 55, 4342-9	0.2	20
43	Design of a high-performance optical tweezer for nanoparticle trapping. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	8
42	New microphotonic resonant devices for label-free biosensing **2016**,		1
41	Novel graphene-based photonic devices for efficient light control and manipulation **2015**,		3
40	New miniaturized exhaled nitric oxide sensor based on a high Q/V mid-infrared 1D photonic crystal cavity. *Applied Optics*, **2015**, 54, 2208-17	1.7	9

39	. *IEEE Photonics Journal*, **2015**, 7, 1-9	1.8	24
38	New ultrasensitive resonant photonic platform for label-free biosensing. *Optics Express*, **2015**, 23, 28593-3604	3.5	33
37	Backscattering noise control in the readout circuit of innovative optoelectronic resonant gyroscopes **2014**,		1
36	Hybrid photonic-plasmonic microcavities for Q/V ratio enhancement **2014**,		1
35	Design of a new photonic/plasmonic microcavity allowing a strong light-matter interaction **2014**,		3
34	Recent advances in miniaturized optical gyroscopes. *Journal of the European Optical Society-Rapid Publications*, **2014**, 9,	2.5	62
33	Design of an Optical Trapping Device Based on an Ultra-High Q/V Resonant Structure. *IEEE Photonics Journal*, **2014**, 6, 1-16	1.8	24
32	System test of an optoelectronic gyroscope based on a high Q -factor InP ring resonator. *Optical Engineering*, **2014**, 53, 127104	1.1	8
31	High performance SOI microring resonator for biochemical sensing. *Optics and Laser Technology*, **2014**, 59, 60-67	4.2	65
30	Resonant optical gyro: Monolithic vs. hybrid integration **2013**,		3
29	Label-free optical resonant sensors for biochemical applications. *Progress in Quantum Electronics*, **2013**, 37, 51-107	9.1	134
28	Effect of fabrication tolerances on the performance of two-dimensional polymer photonic crystal channel drop filters: a theoretical investigation based on the finite element method. *Optical Engineering*, **2013**, 52, 097104	1.1	3
27	Theoretical investigation of indium phosphide buried ring resonators for new angular velocity sensors. *Optical Engineering*, **2013**, 52, 024601	1.1	16
26	High performance InP ring resonator for new generation monolithically integrated optical gyroscopes. *Optics Express*, **2013**, 21, 556-64	3.3	82
25	Theoretical investigation on the scale factor of a triple ring cavity to be used in frequency sensitive resonant gyroscopes. *Journal of the European Optical Society-Rapid Publications*, **2013**, 8,	2.5	8
24	Design, fabrication, and preliminary test results of a new InGaAsP/InP high-Q ring resonator for gyro applications **2012**,		10
23	Numerical and experimental investigation of an optical high-Q spiral resonator gyroscope **2012**,		10
22	Coupled ring resonators: Physical effects and potential applications **2012**,		1

21	Multiple ring resonators in optical gyroscopes **2012**,		2
20	. *IEEE Photonics Journal*, **2012**, 4, 1844-1854	1.8	40
19	Advances in Gyroscope Technologies **2011**,		30
18	Innovative Integrated-Optic Resonator for Angular Rate Sensing: Design and Experimental Characterization. *Lecture Notes in Electrical Engineering*, **2011**, 345-349	0.2	1
17	Photonic technologies for angular velocity sensing. *Advances in Optics and Photonics*, **2010**, 2, 370	16.7	151
16	Fast light generation through velocity manipulation in two vertically-stacked ring resonators. *Optics Express*, **2010**, 18, 2973-86	3.3	25
15	Light manipulation in resonant photonic devices **2010**,		1
14	Phononic and photonic band gap structures: modelling and applications. *Physics Procedia*, **2010**, 3, 357-364		64
13	Three-dimensional modelling of scattering loss in InGaAsP/InP and silica-on-silicon bent waveguides. *Journal of the European Optical Society-Rapid Publications*, **2009**, 4,	2.5	17
12	Quality factor and finesse optimization in buried InGaAsP/InP ring resonators. *Journal of the European Optical Society-Rapid Publications*, **2009**, 4,	2.5	8
11	Efficient Chemical Sensing by Coupled Slot SOI Waveguides. *Sensors*, **2009**, 9, 1012-32	3.8	50
10	Fully three-dimensional accurate modeling of scattering loss in optical waveguides. *Optical and Quantum Electronics*, **2009**, 41, 285-298	2.4	16
9	Scaling and Optimization of MOS Optical Modulators in Nanometer SOI Waveguides. *IEEE Nanotechnology Magazine*, **2008**, 7, 401-408	2.6	28
8	Micro-racetrack coupled-resonator optical waveguides in silicon photonic wires. *Journal of Optics*, **2008**, 10, 064003		4
7	Modeling and design of a microdisk photonic sensor for biological applications **2007**,		1
6	Ammonia Optical Sensing by Microring Resonators. *Sensors*, **2007**, 7, 2741-2749	3.8	72
5	Simulation of a high speed interferometer optical modulator in polymer materials. *Journal of Computational Electronics*, **2007**, 6, 297-300	1.8	2
4	Guided-Wave Optical Biosensors. *Sensors*, **2007**, 7, 508-536	3.8	100

3	Optical sensing by optimized silicon slot waveguides. *Optics Express*, **2007**, 15, 4977-93	3.3	262
2	Sensitivity Analysis of Rib Waveguides for Integrated Optical Sensors **2007**,		1
1	Electromagnetic field photonic sensors. *Progress in Quantum Electronics*, **2006**, 30, 45-73	9.1	41