

# Emmanuel

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/354443/publications.pdf>

Version: 2024-02-01

88  
papers

1,312  
citations

331670

21  
h-index

377865

34  
g-index

88  
all docs

88  
docs citations

88  
times ranked

1197  
citing authors

#	ARTICLE	IF	CITATIONS
1	On-Chip Optical Nano-Tweezers for Culture-Less Fast Bacterial Viability Assessment. <i>Small</i> , 2022, 18, e2103765.	10.0	9
2	Phage susceptibility testing and infectious titer determination through wide-field lensless monitoring of phage plaque growth. <i>PLoS ONE</i> , 2021, 16, e0248917.	2.5	10
3	Seven at One Blow: Particle Cluster Stability in a Single Plasmonic Trap on a Silicon Waveguide. <i>ACS Photonics</i> , 2020, 7, 1942-1949.	6.6	11
4	Tunable optical lattices in the near-field of a few-mode nanophotonic waveguide. <i>EPJ Web of Conferences</i> , 2019, 215, 14001.	0.3	0
5	On-Chip Periodic Arrays of Optical Traps Based on the Superposition of Guided Modes in Silicon Waveguides. , 2019, , .		0
6	Optical Trapping and Gram-Type Differentiation of Living Bacteria in 2D Hollow Photonic Crystal Cavities. , 2019, , .		0
7	Gram-type differentiation of bacteria with 2D hollow photonic crystal cavities. <i>Applied Physics Letters</i> , 2018, 113, .	3.3	29
8	Optical tweezing using tunable optical lattices along a few-mode silicon waveguide. <i>Lab on A Chip</i> , 2018, 18, 1750-1757.	6.0	31
9	Gram-type Differentiation of Bacteria with 2D Hollow Photonic Crystal Cavities. , 2018, , .		1
10	On-chip photonic tweezers for photonics, microfluidics, and biology. <i>Proceedings of SPIE</i> , 2017, , .	0.8	3
11	Single-cell bacterium identification with a SOI optical microcavity. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	36
12	Reduction of phonon mean free path: From low-temperature physics to room temperature applications in thermoelectricity. <i>Comptes Rendus Physique</i> , 2016, 17, 1154-1160.	0.9	38
13	Degenerate epitaxy-driven defects in monolayer silicon oxide on ruthenium. <i>Physical Review B</i> , 2015, 92, .	3.2	11
14	Table-top deterministic and collective colloidal assembly using videoprojector lithography. <i>Applied Surface Science</i> , 2015, 349, 452-458.	6.1	3
15	Optofluidic Near-Field Optical Microscopy: Near-Field Mapping of a Silicon Nanocavity Using Trapped Microbeads. <i>ACS Photonics</i> , 2015, 2, 1410-1415.	6.6	21
16	Optofluidic taming of a colloidal dimer with a silicon nanocavity. <i>Applied Physics Letters</i> , 2014, 105, 171108.	3.3	10
17	Sensitive 3-omega measurements on epitaxial thermoelectric thin films. <i>IOP Conference Series: Materials Science and Engineering</i> , 2014, 68, 012005.	0.6	5
18	On chip shapeable optical tweezers. <i>Scientific Reports</i> , 2013, 3, 2290.	3.3	56

#	ARTICLE	IF	CITATIONS
19	Highly N-doped Silicon Nanowires as a Possible Alternative to Carbon for On-chip Electrochemical Capacitors. <i>Electrochemistry</i> , 2013, 81, 777-782.	1.4	18
20	Influence of dimensional fluctuations on the optical coupling between nanobeam twin cavities. <i>Physical Review B</i> , 2012, 85, .	3.2	5
21	Assembly of microparticles by optical trapping with a photonic crystal nanocavity. <i>Applied Physics Letters</i> , 2012, 100, 101103.	3.3	41
22	Highly doped silicon nanowires based electrodes for micro-electrochemical capacitor applications. <i>Electrochemistry Communications</i> , 2012, 25, 109-111.	4.7	75
23	In a nanoscience lab. <i>Comptes Rendus Physique</i> , 2011, 12, 614-619.	0.9	0
24	Extraordinary tuning of a nanocavity by a near-field probe. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2011, 9, 269-275.	2.0	0
25	High-Qsilica microcavities on a chip: From microtoroid to microsphere. <i>Applied Physics Letters</i> , 2011, 99, 181123.	3.3	26
26	Addressable subwavelength grids of confined light in a multislotting nanoresonator. <i>Applied Physics Letters</i> , 2011, 98, 081101.	3.3	9
27	Optical near field interactions. <i>Proceedings of SPIE</i> , 2010, , .	0.8	0
28	Influence of a NSOM probe shape on a photonic crystal microcavity mode coupling. , 2009, , .		0
29	An air-slotted nanoresonator relying on coupled high Q small V Fabryâ€“Perot nanocavities. <i>Applied Physics Letters</i> , 2009, 94, .	3.3	30
30	Whispering gallery modes in Er-doped silicon-rich oxide toroidal microcavities on chip. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2009, 41, 1127-1129.	2.7	3
31	Tuning of an active photonic crystal cavity by an hybrid silica/silicon near-field probe. <i>Optics Express</i> , 2009, 17, 21672.	3.4	10
32	Nano-manipulation of confined electromagnetic fields with a near-field probe. <i>Comptes Rendus Physique</i> , 2008, 9, 24-30.	0.9	3
33	A near-field actuated optical nanocavity. <i>Optics Express</i> , 2008, 16, 279.	3.4	17
34	Near-field modal microscopy of subwavelength light confinement in multimode silicon slot waveguides. <i>Applied Physics Letters</i> , 2008, 93, 251103.	3.3	19
35	Subwavelength imaging of light confinement in high-Q/small-V photonic crystal nanocavity. <i>Applied Physics Letters</i> , 2008, 92, 111111.	3.3	28
36	Temperature tuning of ultra-high Q/V SOI microcavities. <i>Proceedings of SPIE</i> , 2008, , .	0.8	0

#	ARTICLE	IF	CITATIONS
37	Active near-field optical microscopy. , 2008, , .		0
38	Near-field interactions between a subwavelength tip and a small-volume photonic-crystal nanocavity. Physical Review B, 2007, 76, .	3.2	55
39	Imaging and manipulating confined electromagnetic fields in photonic crystal nanocavities with SNOM probes. , 2007, , .		0
40	Ultra-High Q/V Fabry-Perot microcavity on SOI substrate. Optics Express, 2007, 15, 16090.	3.4	106
41	Optronics. , 2007, , 619-664.		0
42	Erbium-Doped Photonic Crystal Microcavity for Light Extraction Enhancement at 300 K. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1592-1595.	2.9	5
43	Two-Dimensional Photonic Crystals Coupled to One-Dimensional Bragg Mirrors. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1534-1538.	2.9	1
44	Ultra-compact microdisk resonator filters on SOI substrate. Optics Express, 2006, 14, 12814.	3.4	42
45	Compact add-and-drop and wavelength filter based on microdisk on SOI substrate. , 2006, 6125, 192.		1
46	Room temperature emission from Er-doped silicon-rich oxide microtorus. EPJ Applied Physics, 2006, 34, 81-84.	0.7	4
47	Photoluminescence from Er-doped silicon rich oxide thin films. Journal of Luminescence, 2006, 121, 242-244.	3.1	4
48	Si-based two-dimensional photonic crystals coupled to one-dimensional Bragg mirrors. Journal of Luminescence, 2006, 121, 286-289.	3.1	0
49	Properties of Coupling a 2D SOI Photonic Crystal to a Bragg Mirror. , 2006, , .		0
50	Tracking light in high Q low V nanocavities. , 2006, , MB5.		0
51	Recycling losses and tapered lineic microcavities on SOI. , 2006, 6195, 427.		0
52	Ultra-high-reflectivity photonic-bandgap mirrors in a ridge SOI waveguide. New Journal of Physics, 2006, 8, 204-204.	2.9	45
53	Quality factor control of Si-based two-dimensional photonic crystals with a Bragg mirror. Applied Physics Letters, 2006, 88, 091122.	3.3	16
54	Ultracompact silicon-on-insulator ridge-waveguide mirrors with high reflectance. Applied Physics Letters, 2006, 89, 171121.	3.3	33

#	ARTICLE	IF	CITATIONS
55	Nanobox array for silicon-on-insulator luminescence enhancement at room temperature. Applied Physics Letters, 2006, 88, 133120.	3.3	10
56	Single-mode room-temperature emission with a silicon rod lattice. Applied Physics Letters, 2006, 89, 201111.	3.3	15
57	Near-field spectroscopy of low-loss waveguide integrated microcavities. Applied Physics Letters, 2006, 88, 051112.	3.3	8
58	SUB-WAVELENGTH IMAGING OF LIGHT CONFINEMENT AND PROPAGATION IN SOI BASED PHOTONIC CRYSTAL DEVICES. , 2006, , .		0
59	Resonant microcavity light emitters for onboard exhaust emissions IR sensor. , 2005, , .		0
60	Room temperature operation of Er-doped silicon-rich oxide microcavities supporting high-Q whispering-gallery modes. , 2005, , .		2
61	Microcavity light emitters and microbolometer detectors for gas monitoring in the 2-5 $\mu\text{m}$ range. , 2005, 5739, 134.		0
62	Subwavelength imaging of field confinement in a waveguide-integrated photonic crystal cavity. Journal of Applied Physics, 2005, 98, 086109.	2.5	15
63	Silicon-on-insulator based quasi 3D photonic crystal structures. , 2005, 5733, 23.		3
64	Efficient coupling of Er-doped silicon-rich oxide to microdisk whispering gallery modes. Applied Physics Letters, 2005, 86, 111117.	3.3	19
65	Bloch Modes Coupling in Photonic Crystal Waveguides. , 2005, , .		0
66	Broadband optical characterization and modeling of photonic crystal waveguides for silicon optical interconnects. Journal of Applied Physics, 2004, 95, 1606-1608.	2.5	18
67	Experimental demonstration of Bloch mode parity change in photonic crystal waveguide. Applied Physics Letters, 2004, 85, 2682-2684.	3.3	25
68	Silicon-on-insulator photonic bandgap structures for future microphotonic devices. , 2004, , .		1
69	Bloch mode coupling investigation in silicon-on-insulator W1 photonic crystal waveguide. , 2004, , .		0
70	Far- and near-field characterization of a photonic-crystal-based microcavity on silicon-on-insulator. , 2004, , .		0
71	HgCdTe molecular beam epitaxy material for microcavity light emitters: Application to gas detection in the 2-6 $\mu\text{m}$ range. Journal of Electronic Materials, 2003, 32, 602-607.	2.2	23
72	Seventy-fold enhancement of light extraction from a defectless photonic crystal made on silicon-on-insulator. Applied Physics Letters, 2003, 83, 2542-2544.	3.3	75

#	ARTICLE	IF	CITATIONS
73	Resonant optical microcavity based on crystalline silicon active layer. Journal of Applied Physics, 2002, 92, 2207-2209.	2.5	10
74	Transmission spectroscopy of photonic crystals in a silicon-on-insulator waveguide structure. Applied Physics Letters, 2002, 81, 2340-2342.	3.3	15
75	Realization of two-dimensional optical devices using photonic band gap structures on silicon-on-insulator. Microelectronic Engineering, 2002, 61-62, 545-548.	2.4	5
76	Type-I quantum-well VCSEL structure on GaSb emitting in the 2.5 $\mu\text{m}$ range. IEE Proceedings: Optoelectronics, 2002, 149, 22-26.	0.8	3
77	Confinement induced enhancement of the emission in Er-implanted Si/SiO <sub>2</sub> quantum wells fabricated on SOI substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 81, 43-45.	3.5	2
78	Luminescence of silicon thin film and SiGe multiple quantum wells realized on SOI. Optical Materials, 2001, 17, 107-110.	3.6	3
79	33- $\mu\text{m}$ microcavity light emitter for gas detection. Optics Letters, 2000, 25, 725.	3.3	10
80	Room-temperature optically pumped CdHgTe vertical-cavity surface-emitting laser for the 1.5 $\mu\text{m}$ range. Applied Physics Letters, 1999, 75, 1661-1663.	3.3	18
81	2.6 $\mu\text{m}$ optically pumped vertical-cavity surface-emitting laser in the CdHgTe system. Applied Physics Letters, 1999, 75, 3763-3765.	3.3	23
82	Resonant-cavity infrared optoelectronic devices. Journal of Electronic Materials, 1997, 26, 667-672.	2.2	15
83	Mercury cadmium telluride-based resonant cavity light emitting diode. Journal of Electronic Materials, 1996, 25, 1388-1393.	2.2	4
84	Resonant cavity light emitting diodes for the 5 $\mu\text{m}$ range. Solid-State Electronics, 1996, 40, 473-476.	1.4	9
85	Photopumped infrared vertical-cavity surface-emitting laser. Applied Physics Letters, 1996, 68, 2480-2482.	3.3	47
86	3.2 $\mu\text{m}$ infrared resonant cavity light emitting diode. Applied Physics Letters, 1995, 67, 2591-2593.	3.3	64
87	Room temperature emission from Er-doped silicon-rich oxide toroidal microcavities. , 0, , .		0
88	Strong light extraction enhancement in erbium doped SOI based photonic crystals. , 0, , .		0