

# Felipe Vallini, Felipe Valini

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3231755/publications.pdf>

Version: 2024-02-01

51  
papers

1,165  
citations

566801

15  
h-index

414034

32  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1512  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nonreciprocal lasing in topological cavities of arbitrary geometries. <i>Science</i> , 2017, 358, 636-640.	6.0	536
2	Reconfigurable silicon thermo-optical ring resonator switch based on Vernier effect control. <i>Optics Express</i> , 2012, 20, 14722.	1.7	60
3	Purcell effect in sub-wavelength semiconductor lasers. <i>Optics Express</i> , 2013, 21, 15603.	1.7	57
4	Dynamic hysteresis in a coherent high- $\hat{I}^2$ nanolaser. <i>Optica</i> , 2016, 3, 1260.	4.8	57
5	Programmable plasmonic phase modulation of free-space wavefronts at gigahertz rates. <i>Nature Photonics</i> , 2019, 13, 431-435.	15.6	48
6	Amorphous Al <sub>2</sub> O <sub>3</sub> Shield for Thermal Management in Electrically Pumped Metallo-Dielectric Nanolasers. <i>IEEE Journal of Quantum Electronics</i> , 2014, 50, 499-509.	1.0	36
7	Dynamically tunable and active hyperbolic metamaterials. <i>Advances in Optics and Photonics</i> , 2018, 10, 354.	12.1	34
8	Embedded coupled microrings with high-finesse and close-spaced resonances for optical signal processing. <i>Optics Express</i> , 2014, 22, 10430.	1.7	31
9	Modal amplification in active waveguides with hyperbolic dispersion at telecommunication frequencies. <i>Optics Express</i> , 2014, 22, 21088.	1.7	27
10	Observation of second-harmonic generation in silicon nitride waveguides through bulk nonlinearities. <i>Optics Express</i> , 2016, 24, 16923.	1.7	26
11	Spectral Engineering With CMOS Compatible SOI Photonic Molecules. <i>IEEE Photonics Journal</i> , 2013, 5, 2202717-2202717.	1.0	25
12	Effect of dielectric claddings on the electro-optic behavior of silicon waveguides. <i>Optics Letters</i> , 2016, 41, 1185.	1.7	22
13	Characterizing the effects of free carriers in fully etched, dielectric-clad silicon waveguides. <i>Applied Physics Letters</i> , 2015, 106, 241104.	1.5	21
14	Multichannel Bragg gratings in silicon waveguides with asymmetric sidewall modulation. <i>Optics Letters</i> , 2015, 40, 379.	1.7	19
15	Gain-enhanced high-k transmission through metal-semiconductor hyperbolic metamaterials. <i>Optical Materials Express</i> , 2015, 5, 2300.	1.6	18
16	Silicon technology compatible photonic molecules for compact optical signal processing. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	17
17	Effects of Ga <sup>+</sup> milling on InGaAsP quantum well laser with mirrors milled by focused ion beam. <i>Journal of Vacuum Science &amp; Technology B</i> , 2009, 27, L25.	1.3	14
18	Low-roughness active microdisk resonators fabricated by focused ion beam. <i>Journal of Vacuum Science &amp; Technology B</i> , 2009, 27, 2979.	1.3	13

#	ARTICLE	IF	CITATIONS
19	Amplification and Lasing of Plasmonic Modes. Proceedings of the IEEE, 2016, 104, 2323-2337.	16.4	13
20	Carrier saturation in multiple quantum well metallo-dielectric semiconductor nanolaser: Is bulk material a better choice for gain media?. Optics Express, 2013, 21, 25985.	1.7	12
21	Thermal considerations in electrically-pumped metallo-dielectric nanolasers. , 2014, , .		10
22	Lasing action in low-resistance nanolasers based on tunnel junctions. Optics Letters, 2019, 44, 3669.	1.7	9
23	Electronic Metamaterials with Tunable Second-order Optical Nonlinearities. Scientific Reports, 2017, 7, 9983.	1.6	8
24	On the observation of dispersion in tunable second-order nonlinearities of silicon-rich nitride thin films. APL Photonics, 2019, 4, 036101.	3.0	8
25	Extremely compact hybrid III-V/SOI lasers: design and fabrication approaches. Optics Express, 2015, 23, 2696.	1.7	6
26	Real-time dynamic wavelength tuning and intensity modulation of metal-clad nanolasers. Optics Express, 2020, 28, 27346.	1.7	6
27	Silicon nanoridge array waveguides for nonlinear and sensing applications. Optics Express, 2015, 23, 28224.	1.7	5
28	Simple Nanoimprinted Polymer Nanostructures for Uncooled Thermal Detection by Direct Surface Plasmon Resonance Imaging. ACS Applied Materials & Interfaces, 2017, 9, 8327-8335.	4.0	4
29	Synthesis of second-order nonlinearities in dielectric-semiconductor-dielectric metamaterials. Applied Physics Letters, 2017, 110, .	1.5	4
30	Low Resistance Tunnel Junctions for Efficient Electrically Pumped Nanolasers. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-6.	1.9	4
31	Detection of optical activity with diode-integrated hyperbolic metasurfaces. Biomedical Optics Express, 2017, 8, 5594.	1.5	3
32	a-SiO <sub>x</sub> active photonic crystal resonator membrane fabricated by focused Ga <sup>+</sup> ion beam. Optics Express, 2012, 20, 18772.	1.7	2
33	Highly Luminescent $\text{SiO}_x$ $\langle \text{Er} \rangle$ Multilayer Structure. IEEE Photonics Journal, 2012, 4, 1115-1123.	1.0	2
34	Erbium Doped Al <sub>2</sub> O <sub>3</sub> films for integrated III&#x2013;V photonics. , 2013, , .		2
35	Enhanced Q with Internally Coupled Microring Resonators. , 2013, , .		2
36	Electrically pumped metallo-dielectric pedestal nanolasers. , 2013, , .		1

#	ARTICLE	IF	CITATIONS
37	Multichannel Optical Filters in Nanoscale Silicon Waveguides. , 2015, , .		1
38	Practical realization of deeply subwavelength multilayer metal-dielectric nanostructures based on InGaAsP (Presentation Recording). , 2015, , .		1
39	Photonics for Smart Cities. , 2016, , .		1
40	Mode pattern dependence on the eccentricity of microstadium resonators. Journal of Applied Physics, 2010, 107, 083107.	1.1	0
41	Analysis of Focused Ion Beam Damages in Optoelectronic Devices Fabrication. ECS Transactions, 2011, 39, 299-305.	0.3	0
42	Electrically pumped metallo-dielectric pedestal nanolasers with high thermal-conductivity shield. , 2014, , .		0
43	Nanoscale engineering optical nonlinearities and nanolasers. , 2014, , .		0
44	Free carrier effects as a complicating variable in the analysis of strained silicon. , 2015, , .		0
45	General Conditions for Lossless Propagation in Near-Infrared Hyperbolic Metamaterial Waveguides. , 2015, , .		0
46	Gain-enhanced hyperbolic metamaterials at telecommunication frequencies (Presentation Recording). Proceedings of SPIE, 2015, , .	0.8	0
47	Low-power four-channel wavelength multicasting in embedded microring resonators. , 2014, , .		0
48	Cladding-Dependent Nature of Electro-Optic Effects in Silicon Waveguides. , 2016, , .		0
49	Light-Emitting Hyperbolic Metasurfaces at Telecom Frequencies. , 2016, , .		0
50	Nanoridge Arrays for Integrated and Free-Space Nonlinear Optical Applications. , 2016, , .		0
51	Extreme Anisotropy, Spectral Modification, and Intensity Enhancement in Luminescent Hyperbolic Metasurfaces. , 2017, , .		0