Felipe Vallini, Felipe Valini

List of Publications by Year
in descending order

51 papers	1,165 citations	567281 15 h-index	414414 32 g-index
51 all docs	51 docs citations	51 times ranked	1512 citing authors

#	Article	IF	Citations
1	Real-time dynamic wavelength tuning and intensity modulation of metal-clad nanolasers. Optics Express, 2020, 28, 27346.	3.4	6
2	On the observation of dispersion in tunable second-order nonlinearities of silicon-rich nitride thin films. APL Photonics, 2019, 4, 036101.	5.7	8
3	Programmable plasmonic phase modulation of free-space wavefronts at gigahertz rates. Nature Photonics, 2019, 13, 431-435.	31.4	48
4	Lasing action in low-resistance nanolasers based on tunnel junctions. Optics Letters, 2019, 44, 3669.	3.3	9
5	Dynamically tunable and active hyperbolic metamaterials. Advances in Optics and Photonics, 2018, 10, 354.	25.5	34
6	Simple Nanoimprinted Polymer Nanostructures for Uncooled Thermal Detection by Direct Surface Plasmon Resonance Imaging. ACS Applied Materials & Interfaces, 2017, 9, 8327-8335.	8.0	4
7	Synthesis of second-order nonlinearities in dielectric-semiconductor-dielectric metamaterials. Applied Physics Letters, 2017, 110, .	3.3	4
8	Low Resistance Tunnel Junctions for Efficient Electrically Pumped Nanolasers. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 1-6.	2.9	4
9	Nonreciprocal lasing in topological cavities of arbitrary geometries. Science, 2017, 358, 636-640.	12.6	536
10	Electronic Metamaterials with Tunable Second-order Optical Nonlinearities. Scientific Reports, 2017, 7, 9983.	3.3	8
11	Detection of optical activity with diode-integrated hyperbolic metasurfaces. Biomedical Optics Express, 2017, 8, 5594.	2.9	3
12	Extreme Anisotropy, Spectral Modification, and Intensity Enhancement in Luminescent Hyperbolic Metasurfaces. , 2017, , .		0
13	Photonics for Smart Cities. , 2016, , .		1
14	Observation of second-harmonic generation in silicon nitride waveguides through bulk nonlinearities. Optics Express, 2016, 24, 16923.	3.4	26
15	Dynamic hysteresis in a coherent high-Î² nanolaser. Optica, 2016, 3, 1260.	9.3	57
16	Amplification and Lasing of Plasmonic Modes. Proceedings of the IEEE, 2016, 104, 2323-2337.	21.3	13
17	Effect of dielectric claddings on the electro-optic behavior of silicon waveguides. Optics Letters, 2016, 41, 1185.	3.3	22
18	Cladding-Dependent Nature of Electro-Optic Effects in Silicon Waveguides. , 2016, , .		0

#	Article	IF	Citations
19	Light-Emitting Hyperbolic Metasurfaces at Telecom Frequencies. , 2016, , .		0
20	Nanoridge Arrays for Integrated and Free-Space Nonlinear Optical Applications. , 2016, , .		0
21	Free carrier effects as a complicating variable in the analysis of strained silicon. , 2015, , .		0
22	Silicon nanoridge array waveguides for nonlinear and sensing applications. Optics Express, 2015, 23, 28224.	3.4	5
23	Characterizing the effects of free carriers in fully etched, dielectric-clad silicon waveguides. Applied Physics Letters, 2015, 106, 241104.	3.3	21
24	Multichannel Optical Filters in Nanoscale Silicon Waveguides. , 2015, , .		1
25	Gain-enhanced high-k transmission through metal-semiconductor hyperbolic metamaterials. Optical Materials Express, 2015, 5, 2300.	3.0	18
26	General Conditions for Lossless Propagation in Near-Infrared Hyperbolic Metamaterial Waveguides. , 2015, , .		0
27	Multichannel Bragg gratings in silicon waveguides with asymmetric sidewall modulation. Optics Letters, 2015, 40, 379.	3.3	19
28	Extremely compact hybrid III-V/SOI lasers: design and fabrication approaches. Optics Express, 2015, 23, 2696.	3.4	6
29	Gain-enhanced hyperbolic metamaterials at telecommunication frequencies (Presentation Recording). Proceedings of SPIE, 2015, , .	0.8	0
30	Practical realization of deeply subwavelength multilayer metal-dielectric nanostructures based on InGaAsP (Presentation Recording). , 2015, , .		1
31	Electrically pumped metallo-dielectric pedestal nanolasers with high thermal-conductivity shield. , 2014, , .		0
32	Embedded coupled microrings with high-finesse and close-spaced resonances for optical signal processing. Optics Express, 2014, 22, 10430.	3.4	31
33	Modal amplification in active waveguides with hyperbolic dispersion at telecommunication frequencies. Optics Express, 2014, 22, 21088.	3.4	27
34	Thermal considerations in electrically-pumped metallo-dielectric nanolasers. , 2014, , .		10
35	Amorphous Al₂O₃ Shield for Thermal Management in Electrically Pumped Metallo-Dielectric Nanolasers. IEEE Journal of Quantum Electronics, 2014, 50, 499-509.	1.9	36
36	Nanoscale engineering optical nonlinearities and nanolasers. , 2014, , .		0

#	Article	IF	Citations
37	Low-power four-channel wavelength multicasting in embedded microring resonators. , 2014, , .		0
38	Silicon technology compatible photonic molecules for compact optical signal processing. Applied Physics Letters, 2013, 103, .	3.3	17
39	Erbium Doped Al2O3 films for integrated III–V photonics. , 2013, , .		2
40	Electrically pumped metallo-dielectric pedestal nanolasers. , 2013, , .		1
41	Spectral Engineering With CMOS Compatible SOI Photonic Molecules. IEEE Photonics Journal, 2013, 5, 2202717-2202717.	2.0	25
42	Purcell effect in sub-wavelength semiconductor lasers. Optics Express, 2013, 21, 15603.	3.4	57
43	Carrier saturation in multiple quantum well metallo-dielectric semiconductor nanolaser: Is bulk material a better choice for gain media?. Optics Express, 2013, 21, 25985.	3.4	12
44	Enhanced Q with Internally Coupled Microring Resonators. , 2013, , .		2
45	a-SiO_x<Er> active photonic crystal resonator membrane fabricated by focused Ga^+ ion beam. Optics Express, 2012, 20, 18772.	3.4	2
46	Reconfigurable silicon thermo-optical ring resonator switch based on Vernier effect control. Optics Express, 2012, 20, 14722.	3.4	60
47	Highly Luminescent $ahbox{-SiO}_{m x} langle hbox{Er} angle/hbox{SiO}_{2}/hbox{Si}$ Multilayer Structure. IEEE Photonics Journal, 2012, 4, 1115-1123.	2.0	2
48	Analysis of Focused Ion Beam Damages in Optoelectronic Devices Fabrication. ECS Transactions, 2011, 39, 299-305.	0.5	0
49	Mode pattern dependence on the eccentricity of microstadium resonators. Journal of Applied Physics, 2010, 107, 083107.	2.5	0
50	Low-roughness active microdisk resonators fabricated by focused ion beam. Journal of Vacuum Science & Technology B, 2009, 27, 2979.	1.3	13
51	Effects of Ga[sup +] milling on InGaAsP quantum well laser with mirrors milled by focused ion beam. Journal of Vacuum Science & Technology B, 2009, 27, L25.	1.3	14