Romain Blanchard

List of Publications by Year
in descending order

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51 papers	5,344 citations	257450 24 h-index	361022 35 g-index
52 all docs	52 docs citations	52 times ranked	5909 citing authors

#	Article	IF	Citations
1	Aberration-Free Ultrathin Flat Lenses and Axicons at Telecom Wavelengths Based on Plasmonic Metasurfaces. Nano Letters, 2012, 12, 4932-4936.	9.1	1,528
2	Nanometre optical coatings based on strong interference effects in highly absorbing media. Nature Materials, 2013, 12, 20-24.	27.5	841
3	Ultra-thin perfect absorber employing a tunable phase change material. Applied Physics Letters, 2012, 101, .	3.3	519
4	Ultra-thin plasmonic optical vortex plate based on phase discontinuities. Applied Physics Letters, 2012, 100, .	3.3	451
5	Flat Optics: Controlling Wavefronts With Optical Antenna Metasurfaces. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 4700423-4700423.	2.9	258
6	Large Enhancement of Nonlinear Optical Phenomena by Plasmonic Nanocavity Gratings. Nano Letters, 2010, 10, 4880-4883.	9.1	207
7	Thermal tuning of mid-infrared plasmonic antenna arrays using a phase change material. Optics Letters, 2013, 38, 368.	3.3	196
8	Giant birefringence in optical antenna arrays with widely tailorable optical anisotropy. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12364-12368.	7.1	176
9	Spoof plasmon analogue of metal-insulator-metal waveguides. Optics Express, 2011, 19, 14860.	3.4	145
10	Vanadium Dioxide as a Natural Disordered Metamaterial: Perfect Thermal Emission and Large Broadband Negative Differential Thermal Emittance. Physical Review X, 2013, 3, .	8.9	136
11	Controlled steering of Cherenkov surface plasmon wakes with a one-dimensional metamaterial. Nature Nanotechnology, 2015, 10, 804-809.	31.5	119
12	Modeling nanoscale V-shaped antennas for the design of optical phased arrays. Physical Review B, 2012, 85, .	3.2	96
13	Enhancement of absorption and color contrast in ultra-thin highly absorbing optical coatings. Applied Physics Letters, 2013, 103, .	3.3	81
14	Quantum cascade lasers with integrated plasmonic antenna-array collimators. Optics Express, 2008, 16, 19447.	3.4	54
15	Small divergence edge-emitting semiconductor lasers with two-dimensional plasmonic collimators. Applied Physics Letters, 2008, 93, .	3.3	51
16	Broadband detection of methane and nitrous oxide using a distributed-feedback quantum cascade laser array and quartz-enhanced photoacoustic sensing. Photoacoustics, 2020, 17, 100159.	7.8	47
17	Widely tunable mid-infrared quantum cascade lasers using sampled grating reflectors. Optics Express, 2012, 20, 23339.	3.4	42
18	Plasmonics for Laser Beam Shaping. IEEE Nanotechnology Magazine, 2010, 9, 11-29.	2.0	39

#	Article	IF	Citations
19	Generation of picosecond pulses and frequency combs in actively mode locked external ring cavity quantum cascade lasers. Applied Physics Letters, 2013, 103, .	3.3	39
20	Generation of two-dimensional plasmonic bottle beams. Optics Express, 2013, 21, 10295.	3.4	37
21	Nitrous oxide quartz-enhanced photoacoustic detection employing a broadband distributed-feedback quantum cascade laser array. Applied Physics Letters, 2018, 113, .	3.3	34
22	Multi-wavelength mid-infrared plasmonic antennas with single nanoscale focal point. Optics Express, 2011, 19, 22113.	3.4	29
23	Dipolar modeling and experimental demonstration of multi-beam plasmonic collimators. New Journal of Physics, 2011, 13, 053057.	2.9	29
24	Fluorescence-Detected Mid-Infrared Photothermal Microscopy. Journal of the American Chemical Society, 2021, 143, 10809-10815.	13.7	27
25	Portable standoff spectrometer for hazard identification using integrated quantum cascade laser arrays from 65 to 11 Âµm. Optics Express, 2018, 26, 12159.	3.4	25
26	High-brightness tapered quantum cascade lasers. Applied Physics Letters, 2013, 102, 053503.	3.3	24
27	External ring-cavity quantum cascade lasers. Applied Physics Letters, 2013, 102, .	3.3	21
28	High tuning stability of sampled grating quantum cascade lasers. Optics Express, 2015, 23, 15734.	3.4	21
29	Gratings with an aperiodic basis: single-mode emission in multi-wavelength lasers. New Journal of Physics, 2011, 13, 113023.	2.9	18
30	High-power low-divergence tapered quantum cascade lasers with plasmonic collimators. Applied Physics Letters, 2013, 102, .	3.3	14
31	Demonstration of a quick process to achieve buried heterostructure quantum cascade laser leading to high power and wall plug efficiency. Optical Engineering, 2014, 53, 087104.	1.0	11
32	Enhancement of optical processes in coupled plasmonic nanocavities [Invited]. Applied Optics, 2011, 50, G56.	2.1	9
33	Portable broadband photoacoustic spectroscopy for trace gas detection by quantum cascade laser arrays. Optics Letters, 2020, 45, 3248.	3.3	9
34	Double-waveguide quantum cascade laser. Applied Physics Letters, 2012, 100, 033502.	3.3	6
35	Mode switching in a multi-wavelength distributed feedback quantum cascade laser using an external micro-cavity. Applied Physics Letters, 2014, 104, 051102.	3.3	3
36	Broadband Infrared Gas Spectroscopy Using Quantum Cascade Laser Arrays. , 2019, , .		2

#	Article	IF	Citations
37	Wavefront engineering of semiconductor lasers using plasmonics. , 2010, , .		0
38	Coupled Nanocavity-Grating Resonances: Large Plasmonic Enhancement of Nonlinear Optical Phenomena. , 2011, , .		0
39	Off-axis and multi-directional plasmonic lenses. , 2011, , .		0
40	Phase elements for surface optics. , 2012, , .		0
41	Multi-stack quantum cascade lasers. , 2012, , .		0
42	Doubly-corrugated spoof-insulator-spoof waveguides. , 2012, , .		0
43	Modeling and design of Al<inf>0.25</inf>Ga<inf>0.75</inf>As/GaAs terahertz quantum cascade lasers with a realistic band structure. , 2017, , .		0
44	Broadband Gas QEPAS Detection Exploiting a Monolithic DFB-QCL Array. NATO Science for Peace and Security Series B: Physics and Biophysics, 2021, , 61-70.	0.3	0
45	Quantum Cascade Lasers with Integrated Multi-Beam Plasmonic Collimators. , 2011, , .		0
46	Vertical monolithic integration of quantum cascade lasers for high-power broadband applications. , 2012, , .		0
47	Plasmonic-based techniques to generate and detect optical vortex beams. , 2012, , .		0
48	Negative differential thermal emitter. , 2013, , .		0
49	Quartz-enhanced photoacoustic spectroscopy employing a distributed feedback-quantum cascade laser array for nitrous oxide and methane broadband detection. , 2019, , .		0
50	Sparse-sampling methods for hyperspectral infrared microscopy. , 2019, , .		0
51	Standoff hyperspectral imaging of CWAs and explosives using eyesafe quantum cascade laser arrays. , 2019, , .		0