Crina Cojocaru

List of Publications by Year in descending order

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126 papers	1,294 citations	361296 20 h-index	395590 33 g-index
126 all docs	126 docs citations	126 times ranked	948 citing authors

#	Article	IF	Citations
1	Observation of azimuthal modulational instability and formation of patterns of optical solitons in a quadratic nonlinear crystal. Optics Letters, 1998, 23, 1444.	1.7	125
2	Ferroelectric domain engineering by focused infrared femtosecond pulses. Applied Physics Letters, 2015, 107, .	1.5	74
3	Ultrafast dynamics of the third-order nonlinear response in a two-dimensional InP-based photonic crystal. Applied Physics Letters, 2004, 85, 1880-1882.	1.5	73
4	Second-harmonic parametric scattering in ferroelectric crystals with disordered nonlinear domain structures. Optics Express, 2007, 15, 15868.	1.7	62
5	Flat lensing in the visible frequency range by woodpile photonic crystals. Optics Letters, 2013, 38, 2376.	1.7	60
6	Signatures of light-beam spatial filtering in a three-dimensional photonic crystal. Physical Review A, 2010, 82, .	1.0	53
7	Tuning a two-dimensional photonic crystal resonance via optical carrier injection. Optics Letters, 2005, 30, 64.	1.7	47
8	Formation of collimated beams behind the woodpile photonic crystal. Physical Review A, 2011, 84, .	1.0	44
9	Study of second and third harmonic generation from an indium tin oxide nanolayer: Influence of nonlocal effects and hot electrons. APL Photonics, 2020, 5, .	3.0	42
10	Planar second-harmonic generation with noncollinear pumps in disordered media. Optics Express, 2008, 16, 14192.	1.7	40
11	Third-harmonic generation via broadband cascading in disordered quadratic nonlinear media. Optics Express, 2009, 17, 20117.	1.7	33
12	Theoretical study of ÄŒerenkov-type second-harmonic generation in periodically poled ferroelectric crystals. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 312.	0.9	32
13	Defect reconstruction by non-destructive testing with laser induced ultrasonic detection. Ultrasonics, 2020, 101, 106000.	2.1	31
14	Nonadiabatic Dynamics of the Electromagnetic Field and Charge Carriers in High-QPhotonic Crystal Resonators. Physical Review Letters, 2006, 96, 093901.	2.9	28
15	Unified approach to ÄŒerenkov second harmonic generation. Optics Express, 2013, 21, 25715.	1.7	26
16	Field localization and enhancement of phase-locked second- and third-order harmonic generation in absorbing semiconductor cavities. Physical Review A, 2009, 80, .	1.0	25
17	Flat Focusing Mirror. Scientific Reports, 2015, 4, 6326.	1.6	25
18	The role of ferroelectric domain structure in second harmonic generation in random quadratic media. Optics Express, 2010, 18, 4012.	1.7	24

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19	Tailoring ÄŒerenkov second-harmonic generation in bulk nonlinear photonic crystal. Optics Letters, 2011, 36, 2593.	1.7	22
20	Controllable light diffraction in woodpile photonic crystals filled with liquid crystal. Applied Physics Letters, 2015, 106, 021113.	1.5	21
21	Efficient parametric amplification of narrow beams in photonic crystals. Optics Letters, 2007, 32, 1992.	1.7	20
22	Electrodynamics of conductive oxides: Intensity-dependent anisotropy, reconstruction of the effective dielectric constant, and harmonic generation. Physical Review A, 2020, 101, .	1.0	20
23	Second-harmonic generation of narrow beams in subdiffractive photonic crystals. Physical Review A, 2008, 78, .	1.0	18
24	Characterization of femtosecond pulses via transverse second-harmonic generation in random nonlinear media. Applied Physics B: Lasers and Optics, 2009, 95, 609-615.	1.1	18
25	Beam focalization in reflection from flat dielectric subwavelength gratings. Optics Letters, 2014, 39, 6086.	1.7	18
26	Photonic crystal spatial filtering in broad aperture diode laser. Applied Physics Letters, 2019, 115, .	1.5	17
27	Active reflection via a phase-insensitive quadratic nonlinear interaction within a microcavity. Applied Physics Letters, 1999, 74, 504-506.	1.5	16
28	Subdiffractive light pulses in photonic crystals. Physical Review E, 2006, 74, 016605.	0.8	16
29	Second harmonic generation in a generic negative index medium. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 1671.	0.9	16
30	Beam focusing in reflection from flat chirped mirrors. Physical Review A, 2013, 87, .	1.0	15
31	Laser Ultrasound Inspection Based on Wavelet Transform and Data Clustering for Defect Estimation in Metallic Samples. Sensors, 2019, 19, 573.	2.1	14
32	Optical amplification in two-dimensional photonic crystals. Applied Physics Letters, 2005, 86, 091111.	1.5	13
33	Ultrashort pulse chirp measurement via transverse second-harmonic generation in strontium barium niobate crystal. Applied Physics Letters, 2015, 106, .	1.5	13
34	Fully Noncontact Hybrid NDT for 3D Defect Reconstruction Using SAFT Algorithm and 2D Apodization Window. Sensors, 2019, 19, 2138.	2.1	13
35	Second- and third-harmonic parametric scattering in disordered quadratic media. Journal of Physics B: Atomic, Molecular and Optical Physics, 2010, 43, 215404.	0.6	12
36	Transverse single-shot cross-correlation scheme for laser pulse temporal measurement via planar second harmonic generation. Optics Express, 2016, 24, 22210.	1.7	12

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37	Harmonic generation from metal-oxide and metal-metal boundaries. Physical Review A, 2018, 98, .	1.0	12
38	Resonant, broadband, and highly efficient optical frequency conversion in semiconductor nanowire gratings at visible and UV wavelengths. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 2346.	0.9	11
39	Enhanced efficiency of the second harmonic inhomogeneous component in an opaque cavity. Optics Letters, 2011, 36, 1809.	1.7	9
40	Type I and type II second harmonic generation of conically refracted beams. Optics Letters, 2013, 38, 2484.	1.7	9
41	Harmonic generation in the opaque region of GaAs: the role of the surface and magnetic nonlinearities. Optics Express, 2019, 27, 26120.	1.7	8
42	Single-shot d-scan technique for ultrashort laser pulse characterization using transverse second-harmonic generation in random nonlinear crystals. Optics Letters, 2020, 45, 3925.	1.7	8
43	Observation of azimuthal modulation instability and formation of patterns of optical solitons in a quadratic crystal:?errata. Optics Letters, 1998, 23, 1787.	1.7	7
44	Harmonic generation from gold nanolayers: bound and hot electron contributions to nonlinear dispersion. Optics Express, 2021, 29, 8581.	1.7	7
45	Induced group and phase velocity changes by a cascaded quadratic nonlinear interaction within a one-dimensional photonic crystal. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 2141.	0.9	6
46	Multi-directional ÄŒerenkov second harmonic generation in two-dimensional nonlinear photonic crystal. Optics Express, 2012, 20, 3948.	1.7	6
47	Actively induced transmission via a quadratic nonlinear optical interaction in a potassium titanyl phosphate microcavity. Applied Physics Letters, 2001, 79, 4479-4481.	1.5	5
48	Lossless backward second-harmonic generation of extremely narrow subdiffractive beams in two-dimensional photonic crystals. Physical Review A, 2010, 82, .	1.0	5
49	Broad angle phase matching in subdiffractive photonic crystals. Optics Communications, 2010, 283, 3533-3535.	1.0	5
50	Comparative analysis of ferroelectric domain statistics via nonlinear diffraction in random nonlinear materials. Optics Express, 2018, 26, 1083.	1.7	5
51	Second-order optical nonlinearity generated by doping the surface layer of silica with anions or cations. Journal of Applied Physics, 2000, 88, 4666.	1.1	4
52	Phase matched second harmonic generation in planar two-dimensional photonic crystals. Journal of Optics, 2009, 11, 114016.	1.5	4
53	Cavity behavior of second and third harmonic inhomogeneous solutions of Maxwell's equations. Waves in Random and Complex Media, 2010, 20, 319-331.	1.6	4
54	Retrieving Linear and Nonlinear Optical Dispersions of Matter: Combined Experiment-Numerical Ellipsometry in Silicon, Gold and Indium Tin Oxide. Frontiers in Photonics, 2021, 2, .	1.1	4

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55	Determination of refractive indices of quarter-wavelength Bragg reflectors by reflectance measurements in wavelength and angular domains. Applied Optics, 2002, 41, 5172.	2.1	3
56	Room-temperature simultaneous in-plane and vertical laser operation in a deep-etched InP-based two-dimensional photonic crystal. IEE Proceedings: Optoelectronics, 2005, 152, 86.	0.8	3
57	Towards observation of sub-diffractive pulse propagation in photonic crystals. Optics Communications, 2007, 279, 377-383.	1.0	3
58	Second harmonic generation of narrow beams in subdiffractive photonic crystals. , 2008, , .		3
59	Controllable coherent backscattering of light in disordered media filled with liquid crystal. Optics Letters, 2018, 43, 2300.	1.7	3
60	Wavelet Transform Applied to Internal Defect Detection by Means of Laser Ultrasound. , 0, , .		3
61	Directional Ultrasound Source for Solid Materials Inspection: Diffraction Management in a Metallic Phononic Crystal. Sensors, 2020, 20, 6148.	2.1	3
62	Spatial filtering in edge-emitting lasers by intracavity chirped photonic crystals. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 2856.	0.9	3
63	Nondiffractive propagation of light in photonic crystals. , 0, , .		2
64	Material Defect Reconstruction by Non-Destructive Testing with Laser Induced Ultrasonics. Journal of Physics: Conference Series, 2018, 1149, 012011.	0.3	2
65	Nonlinear optical manipulation of Fano resonances in 2d photonle crystal slabs. , 2003, , .		1
66	Multifunction operation in two-dimensional semiconductor photonic crystal slabs. , 2004, , .		1
67	Second harmonic generation of narrow beams in subdiffractive photonic crystals. , 2009, , .		1
68	Ultrashort pulse chirp measurement via transverse second-harmonic generation in random nonlinear crystals. , 2015, , .		1
69	Transverse cross-correlation scheme for pulse shape measurement in random nonlinear crystals. , 2016, , .		1
70	Reevaluation of radiation reaction and consequences for light-matter interactions at the nanoscale. Optics Express, 2018, 26, 18055.	1.7	1
71	Femtosecond Pulse Duration Measurements By Transverse Second Harmonic Generation In Random Nonlinear Media. , 2009, , .		1
72	Phase Locked Second Harmonic Efficiency in Opaque Cavity Environment. , 2010, , .		1

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73	1 kW cw fiber-coupled diode laser with enhanced brightness. , 2020, , .		1
74	Low-intensity optical bistability in an active Fabry-Perot mirror induced by input-phase-insensitive parametric downconversion. Applied Optics, 2002, 41, 2935.	2.1	0
75	Nonlinear optical manipulation of Fano resonances in 2D photonic crystal slabs. , 2003, , .		0
76	All-optical controlled multifunction operation in two-dimensional photonic crystals. , 0, , .		0
77	Actively Induced Reflection via a Quadratic Nonlinear Optical Interaction in a Semiconductor Photonic Crystal: Application to Ultra Fast All-Optical Modulation and Switching. , 2006, , .		0
78	Subdiffractive Pulses in Photonic Crystals. , 2006, , .		0
79	Subdiffractive pulses in photonic crystals. , 2007, , .		0
80	Optical Parametric Amplification of Narrow Beams under Subdiffractive Propagation in Photonic Crystals. , 2007, , .		0
81	Broadband second harmonic parametric scattering in ferroelectric crystals with random domains structure. , 2008, , .		0
82	Phase locked harmonics etalon localization in opaque materials. , 2009, , .		0
83	Second harmonic generation in planar two-dimensional photonic crystals without out-of-plane losses. , 2009, , .		0
84	Phase locked harmonic localization and enhancement in an absorbing semiconductor cavity. Proceedings of SPIE, 2009, , .	0.8	0
85	roadband phase-matched second-harmonic generation for narrow beams in planar two-dimensional photonic crystals. , 2010, , .		0
86	Second-Harmonic Generation in Disordered Quadratic Media: Role of a Ferroelectric Domain Structure. , 2010, , .		0
87	Second and third harmonic generation in disordered quadratic nonlinear media: Application to short-pulse characterization. , 2010, , .		0
88	Second-harmonic generation in disordered quadratic media: Role of a ferroelectric domain structure. , 2010, , .		0
89	Efficient generation of the second harmonic inhomogeneous component in opaque cavities. , 2011, , .		0
90	Three dimensional Woodpile Photonic Crystal for collimation of light beams. , 2011, , .		0

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91	Broad spectral range phase matched second harmonic generation in sub-diffractive two-dimensional photonic crystals. , 2011, , .		0
92	Vertically confined phase matched second harmonic generation in sub-diffractive planar two-dimensional photonic crystals. , 2011, , .		0
93	Manifestation of spatial filtering performed by 3D photonic crystals. Proceedings of SPIE, 2012, , .	0.8	0
94	Woodpile photonic crystal for beam collimation. , 2012, , .		0
95	Collimation and imaging behind a woodpile photonic crystal. , 2012, , .		0
96	Diffraction control of reflected beam by chirped mirror. , 2013, , .		0
97	Managing light in nonlinear disordered media. , 2013, , .		0
98	Focusing by a flat woodpile 3D photonic crystal. , 2013, , .		0
99	Focussing by a flat woodpile 3D photonic crystal. , 2013, , .		0
100	Near field focusing of beams reflected by flat mirror. , 2013, , .		0
101	Beam focalization by chirped mirrors. , 2014, , .		0
102	Flat focusing mirrors. , 2015, , .		0
103	Flat focusing mirrors with two-dimensional chirped photonic crystals. , 2017, , .		0
104	Domain statistics analysis of random nonlinear crystals via second harmonic generation. , 2017, , .		0
105	Analysis of domain statistics of disordered structures via second harmonic diffraction. , 2017, , .		0
106	Spatial Filtering in Broad Area Diode Lasers using Photonic Crystals. , 2019, , .		0
107	Surface and Bulk Harmonic Generation in the Opaque Region of GaAs. , 2019, , .		0
108	Phase Locked Harmonic Generation in the Opaque Region of GaAs. , 2019, , .		0

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109	Experimental and Theoretical Study of Second Harmonic Generation from an ITO Nanolayer. , 2020, , .		0
110	Quadratic Nonlinear Interactions in 1-Dimensional Photonic Crystals. , 2001, , 577-587.		0
111	Subdiffractive Pulses in Photonic Crystals. , 2005, , .		0
112	Reconstruction of Short Pulses via Transverse Second-Harmonic Generation in Disordered Media. , 2008, , .		0
113	The Effect of Domain Distribution on Second Harmonic Generation in Disordered Nonlinear Media. , 2009, , .		0
114	The Role of the Phase Locking Phenomenon in the Second and Third Harmonics Cavity Localization. , 2009, , .		0
115	Broadband Third Harmonic Generation in Quadratic Media with Disordered Ferroelectric Domains. , 2010, , .		0
116	Cascaded Third Harmonic Generation in Random Media. , 2010, , .		0
117	Two-dimensional domain structures in Lithium Niobate via domain inversion with ultrafast light. Photonics Letters of Poland, 2016, 8, .	0.2	0
118	The Role of a Discontinuous Free-Electron Density in Harmonic Generation from Metal Surfaces. , 2018, , .		0
119	Analysis of disordered nonlinear domain statistics via second harmonic diffraction. , 2018, , .		0
120	Vertical emission of second and third harmonic light from GaAs nanowires below the band edge. , 2019, , .		0
121	Surface and bulk harmonic generation in the opaque region of GaAs. , 2019, , .		0
122	Spatial filtering in broad area semiconductor laser using photonic crystal. , 2020, , .		0
123	1 kW CW Fiber-coupled Diode Laser with Enhanced Brightness. , 2020, , .		0
124	Second harmonic generation from an ITO nanolayer: experiment versus theory. , 2020, , .		0
125	Ultra-fast Optical Reconfiguration via Nonlinear Effects in Semiconductor Photonic Crystals. , 2008, , 79-96.		0
126	Second and third harmonic generation from gold nanolayers: experiment versus theory. EPJ Web of Conferences, 2021, 255, 07003.	0.1	0