Marilou Cadatal-Raduban

List of Publications by Year
in descending order

102 papers	863 citations	430874 18 h-index	642732 23 g-index
102 all docs	102 docs citations	102 times ranked	491 citing authors

#	Article	IF	Citations
1	Proposed design principle of fluoride-based materials for deep ultraviolet light emitting devices. Optical Materials, 2007, 30, 15-17.	3.6	45
2	Response-time-improved ZnO scintillator by impurity doping. Journal of Crystal Growth, 2011, 318, 788-790.	1.5	34
3	Vacuum ultraviolet luminescence from a micro-pulling-down method grown Nd3+:(La0.9,Ba0.1)F2.9. Journal of Luminescence, 2009, 129, 1629-1631.	3.1	28
4	Effects of Pulse Rate and Temperature on Nonlinear Absorption of Pulsed 262-nm Laser Light in Î²-BaB2O4. Japanese Journal of Applied Physics, 2010, 49, 080211.	1.5	28
5	Perovskite fluoride crystals as light emitting materials in vacuum ultraviolet region. Optical Materials, 2014, 36, 769-772.	3.6	27
6	${hbox {Nd}}^{3+}{hbox {:LaF}}_{3}$ as a Step-Wise Excited Scintillator for Femtosecond Ultraviolet Pulses. IEEE Transactions on Nuclear Science, 2010, 57, 1208-1210.	2.0	25
7	Strong enhancement of terahertz emission from GaAs in InAs/GaAs quantum dot structures. Applied Physics Letters, 2009, 94, 232104.	3.3	24
8	Er:LiCAF as Potential Vacuum Ultraviolet Laser Material at 163 nm. IEEE Transactions on Nuclear Science, 2010, 57, 1204-1207.	2.0	24
9	Nd³⁺:(La_{1-x}Ba_x)F_{3-x} Grown by Micro-Pulling Down Method as Vacuum Ultraviolet Scintillator and Potential Laser Material. Japanese Journal of Applied Physics, 2007, 46, L985.	1.5	23
10	Micro-pulling down method-grown Er3+:LiCaAlF6 as prospective vacuum ultraviolet laser material. Journal of Crystal Growth, 2013, 362, 167-169.	1.5	23
11	Laser Quality Ce³⁺:LiCaAlF₆ Grown by Micro-Pulling-Down Method. Japanese Journal of Applied Physics, 2008, 47, 5605.	1.5	22
12	Development of Vacuum Ultraviolet Streak Camera System for the Evaluation of Vacuum Ultraviolet Emitting Materials. Japanese Journal of Applied Physics, 2009, 48, 096503.	1.5	21
13	Response Time-Shortened Zinc Oxide Scintillator for Accurate Single-Shot Synchronization of Extreme Ultraviolet Free-Electron Laser and Short-Pulse Laser. Applied Physics Express, 2011, 4, 062701.	2.4	21
14	Spectroscopic properties of Pr3+-doped 20Al(PO3)3-80LiF glasses as potential scintillators for neutron detection. Journal of Luminescence, 2018, 193, 13-21.	3.1	21
15	Pr or Ce-doped, fast-response and low-afterglow cross-section-enhanced scintillator with 6Li for down-scattered neutron originated from laser fusion. Journal of Crystal Growth, 2013, 362, 288-290.	1.5	20
16	Birefringence of Î²-BaB2O4 crystal in the terahertz region for parametric device design. Applied Physics Letters, 2008, 92, .	3.3	19
17	Luminescence properties of Nd3+ and Er3+ doped glasses in the VUV region. Optical Materials, 2013, 35, 1962-1964.	3.6	19
18	First-principles calculations of electronic and optical properties of LiCaAlF 6 and LiSrAlF 6 crystals as VUV to UV solid-state laser materials. Optical Materials, 2017, 65, 15-20.	3.6	19

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19	Vacuum ultraviolet optical properties of a micro-pulling-down-method grown Nd^3+:(La_09,Ba_01)F_29. Journal of the Optical Society of America B: Optical Physics, 2008, 25, B27.	2.1	18
20	Improved fourth harmonic generation in Î^{2}-BaB2O4 by tight elliptical focusing perpendicular to walk-off plane. Journal of Crystal Growth, 2011, 318, 606-609.	1.5	17
21	High pressure band gap modification of LiCaAlF6. Applied Physics Letters, 2017, 110, .	3.3	15
22	Reduction of Nonlinear Absorption in Li₂B₄O₇by Temperature- and Repetition Rate-Control. Japanese Journal of Applied Physics, 2009, 48, 112502.	1.5	14
23	Note: Light output enhanced fast response and low afterglow L6i glass scintillator as potential down-scattered neutron diagnostics for inertial confinement fusion. Review of Scientific Instruments, 2010, 81, 106105.	1.3	14
24	Fast-response, Low-Afterglow 4,4'''-Bis[(2-butyloctyl)oxy]-1,1':4',1'':4'',1'''-quarterphenyl Dye-Based Liquid Scintillator for High-Contrast Detection of Laser Fusion-Generated Neutrons. Japanese Journal of Applied Physics, 2011, 50, 080208.	1.5	14
25	Numerical simulation of ultraviolet picosecond Ce:LiCAF laser emission by optimized resonator transients. Japanese Journal of Applied Physics, 2014, 53, 062701.	1.5	14
26	Comparison of the electronic band structures of LiCaAlF₆and LiSrAlF₆ultraviolet laser host media from ab initio calculations. Japanese Journal of Applied Physics, 2015, 54, 122602.	1.5	13
27	Spectroscopic investigation of praseodymium and cerium co-doped 20Al(PO3)3-80LiF glass for potential scintillator applications. Journal of Non-Crystalline Solids, 2019, 521, 119495.	3.1	13
28	VUV fluorescence from Nd3+:LuLiF4 by two photon excitation using femtosecond laser. Optical Materials, 2013, 35, 2030-2033.	3.6	12
29	Fabrication of In-Doped ZnO Scintillator Mounted on a Vacuum Flange. IEEE Transactions on Nuclear Science, 2012, 59, 2290-2293.	2.0	11
30	Pulsed full-color digital holography with a hydrogen Raman shifter. Applied Optics, 2004, 43, 2267.	2.1	10
31	Excitonic luminescence in two-dimensionally confined layered sulfide oxides. Applied Physics Letters, 2012, 101, 191901.	3.3	10
32	Optical properties of hydrothermal-method-grown ZnO crystal as EUV laser diagnostics material. Journal of Crystal Growth, 2013, 362, 264-267.	1.5	10
33	Significant blue-shift in photoluminescence excitation spectra of Nd3+:LaF3 potential laser medium at low-temperature. Optical Materials, 2015, 47, 462-464.	3.6	10
34	Filterless tunable photoconductive ultraviolet radiation detector using CeF3 thin films grown by pulsed laser deposition. AIP Advances, 2020, 10, .	1.3	10
35	Effect of Substrate and Thickness on the Photoconductivity of Nanoparticle Titanium Dioxide Thin Film Vacuum Ultraviolet Photoconductive Detector. Nanomaterials, 2022, 12, 10.	4.1	10
36	Optical Characteristic Improvement of Neodymium-Doped Lanthanum Fluoride Thin Films Grown by Pulsed Laser Deposition for Vacuum Ultraviolet Application. Japanese Journal of Applied Physics, 2012, 51, 022603.	1.5	9

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37	Amplification of Ultraviolet Femtosecond Pulse by a Micro-Pulling Down Method-Grown Ce:LiCAF Crystal in a Prismatic Cell-Type, Side-Pumping Configuration. Japanese Journal of Applied Physics, 2009, 48, 120213.	1.5	8
38	Intense terahertz emission from undoped GaAs/n-type GaAs andÂInAs/AlSb structures grown on Si substrates in the transmission-geometry excitation. Applied Physics B: Lasers and Optics, 2011, 103, 825-829.	2.2	8
39	Potential High-Spatial Resolution In-Situ Imaging of Soft X-Ray Laser Pulses With ZnO Crystal. IEEE Transactions on Nuclear Science, 2012, 59, 2294-2297.	2.0	8
40	Temperature-dependent evaluation of Nd:LiCAF optical properties as potential vacuum ultraviolet laser material. Optical Materials, 2016, 58, 5-8.	3.6	8
41	Titanium dioxide thin films as vacuum ultraviolet photoconductive detectors with enhanced photoconductivity by gamma-ray irradiation. Thin Solid Films, 2021, 726, 138637.	1.8	8
42	Optical Characteristic Improvement of Neodymium-Doped Lanthanum Fluoride Thin Films Grown by Pulsed Laser Deposition for Vacuum Ultraviolet Application. Japanese Journal of Applied Physics, 2012, 51, 022603.	1.5	8
43	The influence of CeF3 on radiation hardness and luminescence properties of Gd2O3â€"B2O3 glass scintillator. Scientific Reports, 2022, 12, .	3.3	8
44	Micro-pulling-down-method-grown Ce:LiCAF crystal for side-pumped laser amplifier. Journal of Crystal Growth, 2011, 318, 737-740.	1.5	7
45	Tunable narrow linewidth picosecond pulses from a single grating gain-switched Ce:LiCAF laser. Laser Physics, 2018, 28, 085802.	1.2	7
46	Band gap engineering of CaxSr1-xF2 and its application as filterless vacuum ultraviolet photodetectors with controllable spectral responses. Optical Materials, 2019, 88, 576-579.	3.6	7
47	Fast-Response and Low-Afterglow Cerium-Doped Lithium 6 Fluoro-Oxide Glass Scintillator for Laser Fusion-Originated Down-Scattered Neutron Detection. IEEE Transactions on Nuclear Science, 2012, 59, 2256-2259.	2.0	6
48	Indium-Doped ZnO Scintillator With 3-Ps Response Time for Accurate Synchronization of Optical and X-Ray Free Electron Laser Pulses. IEEE Transactions on Nuclear Science, 2012, 59, 2298-2300.	2.0	6
49	Electronic States of Trivalent Praseodymium Ion Doped in 20Al(PO3)3â€"80LiF Glass. Japanese Journal of Applied Physics, 2013, 52, 062402.	1.5	6
50	Direct band gap tunability of the LiYF4 crystal through high-pressure applications. Computational Materials Science, 2018, 153, 431-437.	3.0	6
51	Investigation of cross luminescence in lanthanum fluoride as a potential fast-response scintillator. Japanese Journal of Applied Physics, 2020, 59, 052005.	1.5	6
52	Investigations on the electric-dipole allowed 4f25d â†' 4f3 broadband emission of Nd3+-doped 20Al(PO3)3-80LiF glass for potential VUV scintillator application. Journal of Alloys and Compounds, 2021, 856, 158096.	5.5	6
53	Evaluation of Soft X-ray Laser with In situ Imaging Device of High Spatial Resolution ZnO Scintillator. Japanese Journal of Applied Physics, 2011, 50, 122202.	1.5	5
54	Total internal reflection-based side-pumping configuration for terawatt ultraviolet amplifier and laser oscillator development. Applied Physics B: Lasers and Optics, 2018, 124, 1.	2.2	5

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55	Crystal growth of ultra-large MgF2 and LiCaAlF6 single crystals by a double-crucible Czochralski technique. Journal of Crystal Growth, 2021, 571, 126260.	1.5	5
56	Evaluation of Soft X-ray Laser withIn situImaging Device of High Spatial Resolution ZnO Scintillator. Japanese Journal of Applied Physics, 2011, 50, 122202.	1.5	5
57	Femtosecond PLD-grown YF₃ nanoparticle thin films as improved filterless VUV photoconductive detectors. Nanotechnology, 2021, 32, 015501.	2.6	5
58	Vacuum ultraviolet photoluminescence of NaMgF₃:Sm and NaMgF₃:Sm,Ce: energy levels of the lanthanides in NaMgF₃:Ln compounds. Methods and Applications in Fluorescence, 2022, 10, 035006.	2.3	5
59	Vacuum Ultraviolet Fluorescence Spectroscopy of Nd3+:LaF3Using Femtosecond Extreme Ultraviolet Free Electron Laser. Applied Physics Express, 2013, 6, 022401.	2.4	4
60	Spatial Resolution Evaluation of ZnO Scintillator as an In-situ Imaging Device in EUV Region. IEEE Transactions on Nuclear Science, 2014, 61, 462-466.	2.0	4
61	Investigation of holmium-doped zirconium oxide ceramic phosphor as an ultraviolet wavelength-discriminating laser beam viewer. Optical Materials, 2018, 75, 347-349.	3.6	4
62	Observation of birefringence in BBO crystals in the terahertz regime. Journal of Crystal Growth, 2009, 311, 895-898.	1.5	3
63	Systematic Study on Ce:LuLiF4as a Fast Scintillator Using Storage Ring Free-Electron Lasers. Japanese Journal of Applied Physics, 2010, 49, 122602.	1.5	3
64	Direct measurement of refractive index and dispersion of optical glass by dual-prism configuration with imaging spectrograph. Japanese Journal of Applied Physics, 2019, 58, 096503.	1.5	3
65	Investigation of gamma-ray induced optical property changes in non-doped and Ce-doped lithium-rich oxide glass. Radiation Physics and Chemistry, 2021, 179, 109272.	2.8	3
66	Tunable vacuum ultraviolet cross-luminescence from KMgF under high pressure as potential fast-response scintillator. Journal of Chemical Physics, 2021, 154, 124707.	3.0	3
67	Tunable dual wavelength and narrow linewidth laser using a single solid-state gain medium in a double Littman resonator. Optics Communications, 2021, 496, 127131.	2.1	3
68	Fast-response, Low-Afterglow 4,4'''-Bis[(2-butyloctyl)oxy]-1,1':4',1'':4'',1'''-quarterphenyl Dye-Based Liquid Scintillator for High-Contrast Detection of Laser Fusion-Generated Neutrons. Japanese Journal of Applied Physics, 2011, 50, 080208.	1.5	3
69	Terahertz Emission from GaAs Films on Si(100) and Si(111) Substrates Grown by Molecular Beam Epitaxy. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 418-425.	2.2	2
70	Structural and optical properties of neodymium-doped lutetium fluoride thin films grown by pulsed laser deposition. Optical Materials, 2013, 35, 2329-2331.	3.6	2
71	Achromatic Deep Ultraviolet Lens Using Novel Optical Materials. Physica Status Solidi (B): Basic Research, 2020, 257, 1900480.	1.5	2
72	Fabrication of disk-shaped, deuterated resorcinol/formaldehyde foam target for laserâ€“plasma experiments. High Power Laser Science and Engineering, 2021, 9, .	4.6	2

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73	Terahertz-Radiation Photoconductive Antenna in Sputtered Zinc Oxide Thin Film. Japanese Journal of Applied Physics, 2009, 48, 030209.	1.5	1
74	Investigation of the terahertz emission characteristics of MBE-grown GaAs-based nanostructures. Optical Materials, 2010, 32, 776-779.	3.6	1
75	Reduction of Thermal Dephasing by Tight Elliptical Focusing Perpendicular to Walk-off Plane Leading to Improved Fourth Harmonic Generation in Î²-BaB2O4. , 2010, , .		1
76	Multichannel down-scattered neutron detector for areal density measurement. EPJ Web of Conferences, 2013, 59, 13011.	0.3	1
77	Optical property of Ce3+-doped lutetium lithium fluoride for the short-wavelength device application. Optical Materials, 2014, 36, 1963-1965.	3.6	1
78	Lasing properties of Ce:LiCaAlF<inf>6</inf> single crystal on effects of the distribution of Ce Ion. , 2017, , .		1
79	Photodynamic Properties of CdSe/CdS Quantum Dots in Intracellular Media. Applied Sciences (Switzerland), 2020, 10, 3988.	2.5	1
80	Luminescence Properties of Nd 3+ â€Doped AlF 3 â€Based Fluoride Glass in the Vacuum Ultraviolet Region. Physica Status Solidi (B): Basic Research, 2020, 257, 1900475.	1.5	1
81	Mid-infrared imaging through up-conversion luminescence in trivalent lanthanide ion-doped self-organizing optical fiber array crystal. Optics Letters, 2021, 46, 941.	3.3	1
82	Effect of doping distribution on the lasing performance of a cerium-doped lithium calcium aluminum fluoride ultraviolet laser crystal. Journal of Crystal Growth, 2021, 574, 126326.	1.5	1
83	Numerical investigation of the electronic and optical properties of LiLuF₄ vacuum ultraviolet material. Japanese Journal of Applied Physics, 2020, 59, 072001.	1.5	1
84	Studying the Nonlinear Optical Properties of Fluoride Laser Host Materials in the Ultraviolet Wavelength Region. Applied Sciences (Switzerland), 2022, 12, 372.	2.5	1
85	Terahertz - time domain spectroscopy of microstructured poly(methylmetacrylate) polymer fiber. , 2006, , .		0
86	Terahertz transmission spectroscopic analysis of mono- and di-substituted hydroxynaphthalenes in the 0.5- to 6- THz region using GaP THz wave generator. , 2006, , .		0
87	Nd³⁺: (La<inf>1-x</inf>,Ba<inf>x</inf>)F<inf>3-x</inf> as Vacuum Ultraviolet Scintillator and New Laser Material. , 2007, , .		0
88	Accurate modeling of inter- and intra-molecular interactions in 1,4-dihydroxynaphthalene in the 0.5-6 terahertz region. , 2007, , .		0
89	Numerical calculations of the Frequency Spectra of naphthalene and 1,4-dihydroxynaphthalene in the 0.5-to 6 terahertz region. , 2007, , .		0
90	Nd3+: (La1-x, Bax)F3-x Grown via Micro-PD as New Vacuum Ultraviolet Scintillator and Potential Laser Material. , 2007, , .		0

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91	Terahertz birefringence of β-BaB2O4 (BBO) crystal. , 2008, , .		0
92	Enhanced terahertz emission from GaAs in MBE-grown InAs/GaAs quantum dot structures. , 2009, , .		0
93	Observation of Complex Optical Processes in ZnSe under Extreme Optical Excitation from a Kilojoule-Class Nd:Glass Laser. Japanese Journal of Applied Physics, 2010, 49, 062601.	1.5	0
94	Imaging of Radiation Accidents and Radioactive Contamination Using Scintillators. , 0, , .		0
95	Time-Resolved Pump and Probe Experiment for Wide-Gap Semiconductors Using Free Electron Laser and Synchronously-Operated Femtosecond Laser. Japanese Journal of Applied Physics, 2013, 52, 040203.	1.5	0
96	Development of time-of-flight neutron detector with fast-decay and low-afterglow scintillator for fast ignition experiment. EPJ Web of Conferences, 2013, 59, 13012.	0.3	0
97	Optical characterization of Nd³⁺:LiCaAlF<inf>6</inf> in the vacuum ultraviolet region at low temperature. , 2017, , .		0
98	Ultrashort Pulse Generation in Ce:LiCAF Ultraviolet Laser. , 0, , .		0
99	Micro-pulling down method grown Ce:LiCAF as ultraviolet laser. , 2008, , .		0
100	Characterization of Ce:LuLiF<inf>4</inf> as fast scintillator using storage ring free-electron lasers. , 2008, , .		0
101	Temperature Dependence of the Ultraviolet Luminescence of Pr3+-Doped 20Al(PO3)3-80LiF Glass Scintillator. The Review of Laser Engineering, 2017, 45, 181.	0.0	0
102	Optimized Ce:LiCAF amplifier pumping configurations. , 2018, , .		0