Evgueni F Martynovich

List of Publications by Year
in descending order

109	485	759233 12	794594 19
papers	citations	h-index	g-index

109	109	109	246
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tonoplast of Beta vulgaris L. contains detergent-resistant membrane microdomains. Planta, 2013, 237, 859-871.	3.2	45
2	Formation of luminescent emitters by intense laser radiation in transparent media. Quantum Electronics, 2013, 43, 463-466.	1.0	39
3	Nanocomposites with Magnetic, Optical, Catalytic, and Biologically Active Properties Based on Arabinogalactan. Doklady Chemistry, 2003, 393, 287-288.	0.9	34
4	Lasing in Al2O3 color centers at room temperature in the visible. Optics Communications, 1985, 53, 257-258.	2.1	25
5	Formation and properties of metallic nanoparticles in lithium and sodium fluorides with radiation-induced color centers. Physics of the Solid State, 2012, 54, 2374-2379.	0.6	19
6	Color centers aggregation kinetics in lithium fluoride after gamma irradiation. Journal of Luminescence, 2013, 143, 207-214.	3.1	17
7	Multiple growth events in diamonds with cloudy microinclusions from the Mir kimberlite pipe: evidence from the systematics of optically active defects. Russian Geology and Geophysics, 2015, 56, 330-343.	0.7	15
8	Highly nonlinear fundamental mechanisms of excitation and coloring of wide-gap crystals by intense femtosecond laser pulses. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2008, 105, 348-351.	0.6	14
9	Formation of color centers and light scattering structures by femtosecond laser pulses in sodium fluoride. Optics Communications, 2014, 330, 56-60.	2.1	14
10	Al2O3 color center lasing in near infrared at 300 K. Optics Communications, 1985, 53, 254-256.	2.1	13
11	Simulation of filamentation of single femtosecond laser pulses in LiF. Laser Physics, 2014, 24, 074001.	1.2	13
12	Fabrication of metal-dielectric nanocomposites using a table-top ion implanter. Surface and Coatings Technology, 2020, 393, 125742.	4.8	13
13	Radiation defect formation processes as a method for activation of red phosphorus in the Trofimov-Gusarova reaction. Arkivoc, 2003, 2003, 196-204.	0.5	13
14	Structural changes accompanying color center formation in lithium fluoride exposed to femtosecond laser pulses. Inorganic Materials, 2014, 50, 625-630.	0.8	12
15	Creating of luminescent defects in crystalline media by a scanning laser beam. Applied Physics Letters, 2019, 114, .	3.3	12
16	Photoinduced formation of metal nanoparticles in Î³-irradiated sodium-fluoride crystals. Journal of Surface Investigation, 2013, 7, 617-621.	0.5	11
17	The aggregation and characteristics of radiation-induced defects in lithium fluoride nanocrystals. Radiation Effects and Defects in Solids, 2013, 168, 130-136.	1.2	11
18	Luminescent properties of radiation induced defects in sodium and magnesium fluorides nanocrystals. Journal of Luminescence, 2018, 201, 57-64.	3.1	11

#	Article	IF	Citations
19	Aggregate color center formation processes in lithium fluoride crystals after irradiation. Journal of Applied Spectroscopy, 2011, 77, 857-868.	0.7	9
20	Laser recording of color voxels in lithium fluoride. Optics and Laser Technology, 2020, 131, 106430.	4.6	8
21	Highly sensitive nonlinear luminescent ceramics for volumetric and multilayer data carriers. Quantum Electronics, 2015, 45, 953-958.	1.0	7
22	X-ray luminescence in diamonds and its application in industry. AIP Conference Proceedings, 2021, , .	0.4	7
23	Complex cylindrical vector beam excludes the orientation dependence of the intensity of scanning fluorescence images of single molecules. JETP Letters, 2013, 97, 52-56.	1.4	6
24	Luminescence in diamonds of the SÃ£o Luiz placer (Brazil). Russian Geology and Geophysics, 2015, 56, 729-736.	0.7	6
25	Luminescent centers in nanolayers of LiF crystals with embedded silver ions. Journal of Physics: Conference Series, 2017, 830, 012145.	0.4	6
26	Generation of laser radiation by color centers in diamond crystals (review). AIP Conference Proceedings, 2021, , .	0.4	6
27	Application of lasers utilizing color centers in alkali halide crystals to intracavity laser spectroscopy. Soviet Journal of Quantum Electronics, 1979, 9, 51-54.	0.1	5
28	Modulation of luminescence intensity in anisotropic crystals under excitation by ultrashort pulses. Optical and Quantum Electronics, 1995, 27, 725-734.	3.3	5
29	Point defects isomerism in lithium fluoride crystals and nanocrystals. Crystal Research and Technology, 2013, 48, 381-386.	1.3	5
30	Creation of luminescent defects in crystals by coherent pairs of femtosecond laser pulses. Journal of Luminescence, 2021, 234, 117989.	3.1	5
31	Luminescence Properties of Surface Radiation-Induced Defects in Lithium Fluoride. Journal of Applied Spectroscopy, 2013, 80, 731-736.	0.7	4
32	Properties of femtosecond laser-induced defects in alkali metal fluoride crystals. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 1374-1378.	0.6	4
33	Formation of color centers in a thin layer of LiF crystals under VUV radiation from a barrier discharge. Technical Physics Letters, 2014, 40, 393-396.	0.7	4
34	Formation of a Thin Luminescent Layer in LiF Crystals under Glow Discharge Radiation. Technical Physics Letters, 2018, 44, 659-662.	0.7	4
35	Systematic features of diffusion and aggregation of intrinsic defects in dielectric crystals. Physics of the Solid State, 2012, 54, 1768-1775.	0.6	3
36	Study of the fluorescence blinking behavior of single F₂color centers in LiF crystal. Journal of Physics: Conference Series, 2014, 552, 012048.	0.4	3

#	Article	IF	Citations
37	Diffusion and aggregation of subsurface radiation defects in lithium fluoride nanocrystals. Physics of the Solid State, 2015, 57, 1752-1758.	0.6	3
38	Storing energy in lithium fluoride crystals irradiated with femtosecond laser pulses. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 85-88.	0.6	3
39	Temperature quenching of the luminescence of SiV centers in CVD diamond films. Bulletin of the Russian Academy of Sciences: Physics, 2017, 81, 1154-1158.	0.6	3
40	Localization of 523 and 794 defects in diamond. Bulletin of the Russian Academy of Sciences: Physics, 2017, 81, 1099-1104.	0.6	3
41	Temperature Dependence of the Red Photoluminescence Spectra of Diamonds. Bulletin of the Russian Academy of Sciences: Physics, 2019, 83, 310-313.	0.6	3
42	Monitoring the Heat of a Material during the Laser Formation of Defects. Bulletin of the Russian Academy of Sciences: Physics, 2020, 84, 811-814.	0.6	3
43	Luminescent properties of carbon quantum dots synthesized by microplasma method. Journal of Luminescence, 2022, 246, 118806.	3.1	3
44	X-ray and thermally stimulated luminescence in YAG. Journal of Applied Spectroscopy, 1987, 46, 44-46.	0.7	2
45	Miniature active elements for color-center lasers with an extremely low lasing threshold. Soviet Journal of Quantum Electronics, 1988, 18, 26-28.	0.1	2
46	Effect of the dispersion spread of an ultrashort pulse on the results of measurements with a femtosecond crystal interferometer. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 377	0.6	2
47	A method for studying the multipolarity and orientation of elementary oscillators in cubic crystals on the basis of axially periodic dependence of the luminescence intensity. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2004, 96, 857-861.	0.6	2
48	Luminescent scanning confocal microscope modified for observation of arbitrarily oriented single quantum systems. Technical Physics Letters, 2012, 38, 387-391.	0.7	2
49	Peculiar properties of some components in a plant cell vacuole morphological structure revealed by confocal microscopy. Cell and Tissue Biology, 2015, 9, 406-414.	0.4	2
50	Formation of defects in lithium fluoride ceramics upon irradiation with femtosecond laser pulses. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 60-63.	0.6	2
51	Quantum trajectories of photoluminescence of F 2 centers in a LiF crystal. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 81-84.	0.6	2
52	Formation of aggregate color centers under the action of femtosecond laser pulses. Journal of Physics: Conference Series, 2018, 1115, 052029.	0.4	2
53	Infrared luminescence and stimulated emission from color centers. Journal of Applied Spectroscopy, 1983, 39, 1033-1037.	0.7	1
54	Intraband radioluminescence of LiF crystals. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.6	1

#	Article	IF	Citations
55	Title is missing!. Doklady Chemistry, 2002, 382, 19-20.	0.9	1
56	A Femtosecond Crystal Interferometric Autocorrelometer. Instruments and Experimental Techniques, 2003, 46, 814-817.	0.5	1
57	The piezomodulation method for investigating the multipolarity of elementary oscillators in cubic crystals. Optics Communications, 2003, 224, 263-267.	2.1	1
58	Modulation frequency doubling in the axially periodic dependence of the luminescence of F 3 + centers in LiF crystals. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2006, 101, 265-270.	0.6	1
59	Elementary-oscillator model for color centers with degenerate levels. Physics of the Solid State, 2008, 50, 1761-1765.	0.6	1
60	Luminescent method for determining low concentrations of a substance in optically dense media. Journal of Applied Spectroscopy, 2011, 78, 725-732.	0.7	1
61	3D Fluorescent Imaging with Highly Nonlinear Photosensitive Materials. , 2011, , .		1
62	The accumulation of femtosecond laser radiation energy in crystals of lithium fluoride. , 2015, , .		1
63	Differentiation of types of single radiation defects in crystals through the properties of their fluorescence intensity trajectories. , 2015, , .		1
64	Red luminescence decay kinetics in Brazilian diamonds. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 74-77.	0.6	1
65	Investigation of single defects created in crystals by laser emission and hard radiation. Journal of Physics: Conference Series, 2017, 793, 012018.	0.4	1
66	The role of heat effects in the process of formation of color centers in LiF during filamentation of femtosecond laser pulses. EPJ Web of Conferences, 2019, 220, 02007.	0.3	1
67	The formation of surface periodic structures based on alkali halide crystals containing metal nanoparticles by ion implantation. AIP Conference Proceedings, 2021, , .	0.4	1
68	Luminescent properties of nanoparticles created by laser ablation of natural diamond single crystals. AIP Conference Proceedings, 2021, , .	0.4	1
69	Fluorescent carbon quantum dots formed from glucose solution by microplasma treatment. AIP Conference Proceedings, 2021, , .	0.4	1
70	The Memorizing Luminescent Crystalline Materials Based on Color Centers for Investigation the Highly Nonlinear Interaction of Light and Matter and for Other Applications. , 2017, , .		1
71	Luminescence of enrichment centers in yttrium-aluminum garnet crystals. Soviet Physics Journal (English Translation of Izvestiia Vysshykh Uchebnykh Zavedenii, Fizika), 1984, 27, 73-76.	0.0	0
72	Spatial modulation phenomena in lasing media and saturable absorbers based on color centers crystals. , 1992, , .		0

#	Article	IF	Citations
73	Nonlinear-absorbing medium for passive laser shutter in 0.8-1.08 um spectral region based on color center alpha-Al2O3 monocrystal. , 1992, 1839, 274.		0
74	<title>Decay of the spatial intensity modulation of luminescence in crystals excited by ultrashort pulses</title>. , 1996, , .		0
75	Space-temporal transient phenomena under coherent excitation of quantum systems in anisotropic crystals. , 1998, 3485, 116.		0
76	Luminescence, intrinsic photoeffect, and color-center conversion in anisotropic crystals under femtosecond laser excitation. Russian Physics Journal, 2000, 43, 193-204.	0.4	0
77	On a Spatially Selective Phototransformation Method for Investigation of Diffusion of Quantum Systems. Russian Physics Journal, 2003, 46, 984-990.	0.4	0
78	First Organophosphorus Nonlinear-Optical Media. Doklady Chemistry, 2004, 394, 34-35.	0.9	0
79	<title>Spatially periodical structures under femtosecond pulsed excitation of crystals</title>. , 2004, , .		0
80	Static multislit dispersive optical spectrometer based on complementary Golay sequences. Technical Physics Letters, 2008, 34, 453-455.	0.7	0
81	Spatially periodic modulation of the level population upon saturation for centers with weak and strong electron-phonon interactions. Physics of the Solid State, 2008, 50, 1779-1783.	0.6	0
82	Static multislit dispersive optical spectrometers for solid-state spectroscopy. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2008, 105, 478-479.	0.6	0
83	Complementary Golay series in multislit dispersion optical spectroscopy. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2008, 75, 289.	0.4	0
84	On the influence of dispersion on the spatial distribution of the intensity of luminescence excited by opposing laser pulses. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2009, 106, 121-126.	0.6	0
85	Determining the orientation of single quantum systems by means of scanning fluorescence microscopy. Bulletin of the Russian Academy of Sciences: Physics, 2013, 77, 36-38.	0.6	0
86	Comment on â€œFeatures of propagation of high-intensity laser pulses in Magnesium and Sodium fluoride crystalsâ€•by L. Bryukvina, Journal of Luminescence, 162 (2015) 145â€“148. Journal of Luminescence, 2016, 171, 259-264.	3.1	0
87	Quantum trajectories of the photoluminescence of F 2 centers in a LiF crystal. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 89-92.	0.6	0
88	Stochastic model of a nanocluster of a smoky quartz composition. Glass Physics and Chemistry, 2016, 42, 480-483.	0.7	0
89	Transformation of the microstructure and luminescence characteristics of LiF films during annealing. Physics of the Solid State, 2016, 58, 1772-1776.	0.6	0
90	Multiple filamentation of femtosecond laser pulses. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 64-67.	0.6	0

#	Article	IF	Citations
91	Spectral properties of a Nd3+-doped Li3Ba2Gd3(MoO4)8 crystal. Bulletin of the Russian Academy of Sciences: Physics, 2016, 80, 78-80.	0.6	0
92	Laser luminescent polarization microscopy of defects induced in lithium fluoride crystals by femtosecond pulses. Journal of Physics: Conference Series, 2018, 1115, 052028.	0.4	0
93	Table-Top Ion Implanter Based on Low-Voltage Vacuum Spark. , 2018, , .		0
94	Laser writing of full-color luminescent images in the volume of an optical carriers. , 2018, , .		0
95	The axial VUV radiation intensity distribution of a glow discharge and its application for creation luminescence centers in crystalline media. AIP Conference Proceedings, 2019, , .	0.4	0
96	Synthesis of a luminescent metamaterial layer in an alkali halide matrix by implanting metal ions emitted by a low-voltage vacuum spark. AIP Conference Proceedings, 2019, , .	0.4	0
97	Preface: XVI International Conference on Luminescence and Laser Physics Devoted to the 100th Anniversary of Irkutsk State University. AIP Conference Proceedings, 2019, , .	0.4	0
98	Luminescence of single color centers created in LiF crystals at low dose of irradiation. AIP Conference Proceedings, 2021, , .	0.4	0
99	Luminescence of body tissues of Epischura baikalensis. AIP Conference Proceedings, 2021, , .	0.4	0
100	The conversion of color centers in lithium fluoride crystals at temperatures of 50â€“490Â°C. AIP Conference Proceedings, 2021, , .	0.4	0
101	Synthesis and optical properties of lithium nanoparticles in wide-gap dielectrics. AIP Conference Proceedings, 2021, , .	0.4	0
102	The theoretical substantiation of the spatial-modulation luminescent method for studying the orientations of quantum systems in crystals. Journal of Luminescence, 2021, 240, 118469.	3.1	0
103	Luminescence of zircons from highly diamondiferous kimberlites of Yakutia. AIP Conference Proceedings, 2021, , .	0.4	0
104	Polarization-interferometric method for measuring the pedestal of femtosecond radiation. AIP Conference Proceedings, 2021, , .	0.4	0
105	Characterization of fiber supercontinuum by chromatic scattering. , 2011, , .		0
106	<title>Laser for stimulation of self-propagating high-temperature synthesis reactions</title>. , 1996, , .		0
107	3D Fluorescent Carriers of Visual and Digital Information. , 2015, , .		0
108	The role of avalanche ionization in generation of defects in lithium fluoride crystals under the action of femtosecond laser pulses. , 2019, , .		0

#	Article	IF	Citations
109	Tunable laser radiation, nonlinear absorption, and â€œanti-stokesâ€•luminescence of color centers in Î±-Al2O3. Soviet Physics Journal (English Translation of Izvestiia Vysshykh Uchebnykh Zavedenii, Fizika), 1987, 30, 842-846.	0.0	0