Ivan V Timofeev

List of Publications by Year
in descending order

117	1,416	394421	414414
papers	citations	19 h-index	32 g-index

121	121	121	820
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Metalâ€“Dielectric Polarization-Preserving Anisotropic Mirror for Chiral Optical Tamm State. Nanomaterials, 2022, 12, 234.	4.1	4
2	Germanium Metasurfaces with Lattice Kerker Effect in Near-Infrared Photodetectors. ACS Nano, 2022, 16, 5994-6001.	14.6	26
3	Investigation of Spectral Properties of Chloroplast Grana System by Effective Medium Theory. Doklady Physics, 2022, 67, 44-46.	0.7	0
4	Bound state in the continuum in an anisotropic photonic crystal supported by a full-wave phase plate. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 968.	2.1	6
5	Optical Properties of Multilayer Photon Structures Containing Twisted Nematic Components. Zhidkie Kristally I Ikh Prakticheskoe Ispol'zovanie, 2022, 22, 94-99.	0.1	0
6	Broadband Tamm Plasmons in Chirped Photonic Crystals for Light-Induced Water Splitting. Nanomaterials, 2022, 12, 928.	4.1	6
7	Electrically Controlled Ionic Modification of Surface Anchoring in Liquid Crystal Materials. Zhidkie Kristally I Ikh Prakticheskoe Ispol'zovanie, 2022, 22, 89-93.	0.1	0
8	Critical coupling vortex with grating-induced high Q-factor optical Tamm states. Optics Express, 2021, 29, 4672.	3.4	14
9	Quasiâ€Bound States in the Continuum with Temperatureâ€Tunable Q Factors and Critical Coupling Point at Brewster's Angle. Laser and Photonics Reviews, 2021, 15, 2000290.	8.7	18
10	Strain Sensor via Wood Anomalies in 2D Dielectric Array. Nanomaterials, 2021, 11, 1022.	4.1	1
11	Cholesteric layers with tangential-conical surface anchoring for an electrically controlled polarization rotator. Optical Materials Express, 2021, 11, 1527.	3.0	3
12	Photosensitivity and reflectivity of the active layer in a Tamm-plasmon-polariton-based organic solar cell. Applied Optics, 2021, 60, 3338.	1.8	19
13	Splitting of a Tamm plasmon polariton at the interface between a metal and a resonant nanocomposite layer conjugated with a photonic crystal. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1792.	2.1	4
14	Chiral-Selective Tamm Plasmon Polaritons. Materials, 2021, 14, 2788.	2.9	11
15	Lowâ€Threshold Bound State in the Continuum Lasers in Hybrid Lattice Resonance Metasurfaces. Laser and Photonics Reviews, 2021, 15, 2100118.	8.7	59
16	Experimental implementation of tunable hybrid Tamm-microcavity modes. Applied Physics Letters, 2021, 119, 161107.	3.3	7
17	Liquid Crystal Materials under Conical Boundary Conditions. Zhidkie Kristally I Ikh Prakticheskoe Ispol'zovanie, 2021, 21, 99-102.	0.1	1
18	Optical modes of multilayered photonic structure containing nematic layer with abnormal electroconvective rolls. Optical Materials, 2020, 100, 109630.	3.6	4

#	Article	IF	Citations
19	Eigenmodes in a photonic structure with a torsion-deformed nematic liquid crystal exposed to a magnetic field. Physical Review E, 2020, 102, 042701.	2.1	0
20	Collective resonances in hybrid photonic-plasmonic nanostructures. Journal of Physics: Conference Series, 2020, 1461, 012046.	0.4	0
21	Chiral Optical Tamm States at the Interface between a Dye-Doped Cholesteric Liquid Crystal and an Anisotropic Mirror. Materials, 2020, 13, 3255.	2.9	6
22	Fano feature induced by a bound state in the continuum via resonant state expansion. Scientific Reports, 2020, 10, 13691.	3.3	14
23	Tamm Plasmon Polaritons for Light Trapping in Organic Solar Cells. Doklady Physics, 2020, 65, 161-163.	0.7	6
24	Hybrid Tamm and surface plasmon polaritons in resonant photonic structure. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 253, 107156.	2.3	8
25	Electrically induced transformations of defects in cholesteric layer with tangential-conical boundary conditions. Scientific Reports, 2020, 10, 4907.	3.3	6
26	Localized modes in chiral photonic structures. Physics-Uspekhi, 2020, 63, 33-56.	2.2	20
27	One-dimensional photonic bound states in the continuum. Communications Physics, 2020, 3, .	5.3	60
28	Hyperbolic metamaterial for the Tamm plasmon polariton application. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 2215.	2.1	33
29	Hybrid Tamm-cavity modes in photonic crystal with resonant nanocomposite defect layer. Computer Optics, 2020, 44, .	2.2	7
30	Model of a tunable hybrid Tamm modeâ€“liquid crystal device. Applied Optics, 2020, 59, 6347.	1.8	4
31	Nematic and Cholesteric Liquid Crystal Structures in Cells with Tangential-Conical Boundary Conditions. Crystals, 2019, 9, 249.	2.2	8
32	Epsilon-Near-Zero Absorber by Tamm Plasmon Polariton. Photonics, 2019, 6, 28.	2.0	30
33	Tamm plasmon in a structure with the nanocomposite containing spheroidal coreâ€“shell particles. Journal of Optics (United Kingdom), 2019, 21, 035103.	2.2	1
34	Chiral Optical Tamm States at the Interface between an All-Dielectric Polarization-Preserving Anisotropic Mirror and a Cholesteric Liquid Crystal. Crystals, 2019, 9, 502.	2.2	9
35	Engineering mode hybridization in regular arrays of plasmonic nanoparticles embedded in 1D photonic crystal. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 224, 303-308.	2.3	22
36	Broadband Tamm plasmon polariton. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 2299.	2.1	36

#	Article	IF	Citations
37	Transparent conductive oxides for the epsilon-near-zero Tamm plasmon polaritons. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 2817.	2.1	10
38	Optical defect mode with tunable<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Q</mml:mi></mml:math>factor in a one-dimensional anisotropic photonic crystal. Physical Review B, 2018, 97, .	3.2	48
39	Tunable hybrid optical modes in a bounded cholesteric liquid crystal with a twist defect. Physical Review E, 2018, 97, 032703.	2.1	5
40	Electro-optical and dielectric properties of polymer-stabilized blue phase liquid crystal impregnated with a fluorine-containing compound. Journal of Molecular Liquids, 2018, 267, 138-143.	4.9	17
41	Coupled Chiral Optical Tamm States in Cholesteric Liquid Crystals. Photonics, 2018, 5, 30.	2.0	3
42	Electric field-controlled transformation of the eigenmodes in a twisted-nematic Fabryâ€“PÃ©rot cavity. Scientific Reports, 2018, 8, 16869.	3.3	4
43	Two Types of Localized States in a Photonic Crystal Bounded by an Epsilon near Zero Nanocomposite. Photonics, 2018, 5, 22.	2.0	11
44	Experimental Demonstration of Broadband Optical Tamm States in Photonic Crystal. , 2018, , .		2
45	All-dielectric polarization-preserving anisotropic mirror. OSA Continuum, 2018, 1, 682.	1.8	6
46	Electro-thermally tunable reflective colors in a self-organized cholesteric helical superstructure. Photonics Research, 2018, 6, 1094.	7.0	36
47	Transformation of cholesteric orientational structures and optical textures induced by the electric fieldâ€“driven ionic modification of surface anchoring. Bulletin of the Russian Academy of Sciences: Physics, 2017, 81, 602-604.	0.6	0
48	Polarization-preserving anisotropic mirror on the basis of metalâ€“dielectric nanocomposite. Bulletin of the Russian Academy of Sciences: Physics, 2017, 81, 5-9.	0.6	11
49	The optical Tamm states at the interface between a photonic crystal and nanoporous silver. Journal of Optics (United Kingdom), 2017, 19, 015104.	2.2	16
50	Polarization exchange of optical eigenmode pair in twisted-nematic Fabry-PÃ©rot resonator. Physical Review E, 2017, 96, 022711.	2.1	7
51	Localized optical states in a liquid-crystal structure adjacent to a metal. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2017, 123, 189-192.	0.6	1
52	Coupled optical Tamm states at edges of a photonic crystal enclosed by a composite of core-shell nanoparticles. Physics of Wave Phenomena, 2017, 25, 170-174.	1.1	1
53	Optical Tamm states at the interface between a photonic crystal and an epsilon-near-zero nanocomposite. Journal of Optics (United Kingdom), 2017, 19, 085103.	2.2	13
54	Narrowband Wavelength Selective Thermal Emitters by Confined Tamm Plasmon Polaritons. ACS Photonics, 2017, 4, 2212-2219.	6.6	164

#	Article	IF	Citations
55	Orientational transition in the cholesteric layer induced by electrically controlled ionic modification of the surface anchoring. Liquid Crystals, 2017, 44, 484-489.	2.2	9
56	Localised optical states in a structure formed by two oppositely handed cholesteric liquid crystal layers and a metal. Liquid Crystals, 2017, 44, 674-678.	2.2	11
57	The optical Tamm states at the edges of a photonic crystal bounded by one or two layers of a strongly anisotropic nanocomposite. Optics Communications, 2017, 395, 275-281.	2.1	17
58	Quasiperiodic one-dimensional photonic crystals with adjustable multiple photonic bandgaps. Optics Letters, 2017, 42, 3602.	3.3	37
59	Chiral Optical Tamm States: Temporal Coupled-Mode Theory. Crystals, 2017, 7, 113.	2.2	14
60	Tunable hybrid Tamm-microcavity states. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 2633.	2.1	21
61	Localized optical modes in a defect-containing liquid-crystal structure adjacent to the metal. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 2011.	2.1	6
62	Optical Tamm states at the interface between a photonic crystal and a gyroid layer. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 2198.	2.1	21
63	Dynamic Tuning and Memory Switching of Defect Modes in a Hybrid Photonic Structure. Crystals, 2016, 6, 129.	2.2	3
64	Photo-manipulated photonic bandgap devices based on optically tristable chiral-tilted homeotropic nematic liquid crystal. Optics Express, 2016, 24, 25019.	3.4	16
65	Chiral optical Tamm states at the boundary of the medium with helical symmetry of the dielectric tensor. JETP Letters, 2016, 104, 380-383.	1.4	25
66	The optical Tamm states at the interface between a photonic crystal and a nanocomposite containing coreâ€“shell particles. Journal of Optics (United Kingdom), 2016, 18, 065106.	2.2	12
67	Hybrid states formed by the optical Tamm and defect modes in a one-dimensional photonic crystal. , 2016, , .		1
68	Spectral and polarization properties of a â€˜cholesteric liquid crystalâ€”phase plateâ€”metalâ€™ structure. Journal of Optics (United Kingdom), 2016, 18, 015103.	2.2	12
69	Geometric phase and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>o</mml:mi></mml:math>-mode blueshift in a chiral anisotropic medium inside a Fabry-PÃ©rot cavity. Physical Review E, 2015, 92, 052504.	2.1	12
70	Hybrid anchoring for a color-reflective dual-frequency cholesteric liquid crystal device switched by low voltages. Optical Materials Express, 2015, 5, 2715.	3.0	17
71	Specific features of the spectral properties of a photonic crystal with a nanocomposite defect with allowance for the size effects. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 9		
72	Spectral properties of one-dimensional photonic crystal with anisotropic defect layer of nanocomposite. Physics of Wave Phenomena, 2015, 23, 35-38.	1.1	1

#	Article	IF	Citations
73	Tunable narrow-bandpass filter based on an asymmetric photonic bandgap structure with a dual-mode liquid crystal. Optics Express, 2014, 22, 15097.	3.4	17
74	Peculiarities of spectral properties of a one-dimensional photonic crystal with an anisotropic defect layer of the nanocomposite with resonant dispersion. Quantum Electronics, 2014, 44, 881-884.	1.0	11
75	Photonic defect modes in a cholesteric liquid crystal with a resonant nanocomposite layer and a twist defect. Physical Review E, 2014, 90, 032505.	2.1	17
76	Surface modes in â€œphotonic cholesteric liquid crystalâ€“phase plateâ€“metalâ€•structure. Optics Letters, 2014, 39, 2743.	3.3	24
77	Spectral manifestation of an effective refraction index in a chiral optical medium inside a Fabry-Perot resonator with anisotropic mirrors. Bulletin of the Russian Academy of Sciences: Physics, 2014, 78, 1308-1312.	0.6	4
78	Optical Tamm states at the interface between a photonic crystal and a nanocomposite with resonance dispersion. Journal of Experimental and Theoretical Physics, 2013, 117, 988-998.	0.9	56
79	Optical properties of nanostructured 2D metal-dielectric photonic crystals with a lattice defect. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2013, 115, 660-665.	0.6	0
80	Specific features of the spectral properties of a cholesteric liquid crystal with a resonance defective nanocomposite layer. Physics of the Solid State, 2013, 55, 1697-1702.	0.6	8
81	Enhanced light absorption with a cholesteric liquid crystal layer. Optical Materials Express, 2013, 3, 496.	3.0	11
82	Spectral modulation of a bistable liquid-crystal photonic structure by the polarization effect. Optical Materials Express, 2013, 3, 821.	3.0	32
83	Voltage-induced defect mode coupling in a one-dimensional photonic crystal with a twisted-nematic defect layer. Physical Review E, 2012, 85, 011705.	2.1	26
84	Traveling of light through a 1D photonic crystal containing a defect layer with resonant dispersion. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2012, 113, 517-521.	0.6	7
85	Spectral properties of a two-dimensional resonant metal-dielectric photonic crystal. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2012, 112, 585-593.	0.6	1
86	Tunable bi-functional photonic device based on one-dimensional photonic crystal infiltrated with a bistable liquid-crystal layer. Optics Express, 2011, 19, 7349.	3.4	37
87	Spectral properties of a one-dimensional photonic crystal with a resonant defect nanocomposite layer. Journal of Experimental and Theoretical Physics, 2011, 113, 755-761.	0.9	47
88	Transmission of light through a plane-parallel plate of a two-dimensional resonant photonic crystal. Physics of the Solid State, 2011, 53, 141-146.	0.6	1
89	Band structure of a two-dimensional resonant photonic crystal. Physics of the Solid State, 2010, 52, 527-532.	0.6	6
90	Control of absorption spectrum of a one-dimensional resonant photonic crystal. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2010, 109, 106-111.	0.6	2

#	Article	IF	Citations
91	Features of a two-dimensional photonic crystal filled with resonance gas. Journal of Optical Technology (A Translation of Opticheskii Zhurnal), 2010, 77, 608.	0.4	0
92	Spectral properties of a one-dimensional resonant photonic crystal. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10 T	0.6	3
93	Anisotropy of nonlinear optical transmission at the edge of the photonic band gap of an apodized layered medium. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2008, 104, 751-755.	0.6	1
94	Effect of electromagnetically induced transparency on spectrum of defect modes of photonic crystal. Proceedings of SPIE, 2007, , .	0.8	1
95	Influence of cubic nonlinearity on laser radiation transmission in a photonic crystal with spatially modified media properties. Physica Status Solidi - Rapid Research Letters, 2007, 1, 92-94.	2.4	5
96	Photonic Crystals with Resonantly Absorbing Defects. , 2006, , .		0
97	The Self-Organisation of Tetrahedrally Close-Packed Structures in Magnetic Nanocrystalline Tb-Fe and Co-Pd Films. Solid State Phenomena, 2006, 115, 267-274.	0.3	0
98	<title>Preparation of maximal atomic coherence in space by fractional stimulated Raman adiabatic passage</title>. , 2006, 6259, 126.		0
99	Induction of the maximum Raman coherence in an extended medium through fractional adiabatic passage. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2006, 100, 433-436.	0.6	0
100	Temporal shape manipulation of intense light pulses by coherent population trapping. Physical Review A, 2006, 73, .	2.5	11
101	Electromagnetically induced transparency and controlling the time shape of laser pulses. Doklady Physics, 2005, 50, 165-168.	0.7	1
102	Recording and reading of intense optical pulses based on the induced transparency. Radiophysics and Quantum Electronics, 2004, 47, 811-817.	0.5	1
103	Stark-chirped rapid adiabatic passage: Propagation of laser pulses and spacetime evolution of populations and of two-photon coherence. Journal of Experimental and Theoretical Physics, 2003, 97, 711-721.	0.9	2
104	Similar-shaped pulse generation in double-lambda system. , 2003, , .		0
105	Electromagnetically induced transparency; writing, storing, and reading short optical pulses. JETP Letters, 2002, 76, 66-70.	1.4	4
106	<title>Pulse pair propagation under conditions of induced transparency: adiabatic approximation</title>. , 2001, , .		0
107	Spatial evolution of short laser pulses under coherent population trapping. Physical Review A, 2001, 64, .	2.5	20
108	Inversion in an extended three-level medium produced by adiabatic population transfer. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2001, 91, 810-814.	0.6	2

#	Article	IF	Citations
109	<title>Propagation of two short pulses under conditions of electromagnetically induced transparency: adiabatic following</title>. , 2000, 4002, 45.		1
110	Efficient selective excitation in optically thick extensive media by adiabatic population transfer. , 2000, 3886, 699.		0
111	<title>Pulse pair propagation under conditions of induced transparency</title>. , 2000, , .		0
112	Adiabatic propagation of short pulses under conditions of electromagnetically induced transparency. Quantum Electronics, 2000, 30, 180-184.	1.0	10
113	Long distance propagation of resonant pulses under conditions of induced transparency. , 0, , .		1
114	Adiabatons and compression of pulses. , 0, , .		0
115	Modeling of tetrahedrally close-packed structures in magnetic nanocrystallyne FE-C films. , 0, , .		0
116	Control of Laser Pulses Shape Using Coherent Population Trapping. , 0, , .		0
117	Nanostructured photosensitive layerfor Tamm-plasmon-polariton-based organic solar cells. Applied Optics, 0, , .	1.8	3