Vladimir M Masalov

List of Publications by Year
in descending order

85 papers	927 citations	471061 17 h-index	500791 28 g-index
85 all docs	85 docs citations	85 times ranked	996 citing authors

#	Article	IF	Citations
1	Mechanism of formation and nanostructure of StÃ¶ber silica particles. Nanotechnology, 2011, 22, 275718.	1.3	135
2	Multiphonon resonant Raman scattering inZnOcrystals and nanostructured layers. Physical Review B, 2004, 70, .	1.1	113
3	Photoluminescence and resonant Raman scattering from ZnO-opal structures. Journal of Applied Physics, 2004, 96, 1001-1006.	1.1	44
4	The Intrinsic Structure of Spherical Particles of Opal. Physics of the Solid State, 2005, 47, 347.	0.2	32
5	Porous structure of synthetic opals. Colloid Journal, 2006, 68, 20-25.	0.5	31
6	Colloidal particles of silicon dioxide for the formation of opal-like structures. Physics of the Solid State, 2011, 53, 1135-1139.	0.2	31
7	Manipulating emission of CdTeSe nanocrystals embedded in three-dimensional photonic crystals. Journal of Applied Physics, 2009, 105, .	1.1	27
8	Adsorption of lanthanides and scandium ions by silica sol-gel material doped with novel bifunctional ionic liquid, trioctylmethylammonium 1-phenyl-3-methyl-4-benzoyl-5-onate. Journal of Environmental Chemical Engineering, 2016, 4, 3788-3796.	3.3	26
9	Enhanced third-harmonic generation in photonic crystals at band-gap pumping. Journal Physics D: Applied Physics, 2017, 50, 055105.	1.3	25
10	Structural modification of synthetic opals during thermal treatment. Physics of the Solid State, 2006, 48, 1280-1283.	0.2	23
11	Photoluminescence of ZnO layers grown on opals by chemical deposition from zinc nitrate solution. Semiconductor Science and Technology, 2004, 19, 851-854.	1.0	20
12	A novel sorbent for lanthanide adsorption based on tetraoctyldiglycolamide, modified carbon inverse opals. RSC Advances, 2015, 5, 529-535.	1.7	19
13	Study of the K2Ni(SO4)2 â^™ 6H2Oâ€"K2Co(SO4)2 â^™ 6H2Oâ€"H2O diagram and determination of the conditions for growing K2(Ni,Co)(SO4)2 â^™ 6H2O mixed crystals. Crystallography Reports, 2016, 61, 1027-1030.	0.1	19
14	Growth of high-perfect mixed K2NixCo1-x(SO4)2Â·6H2O crystals for fabrication of high-efficiency UV optical filters. Journal of Crystal Growth, 2018, 500, 98-103.	0.7	19
15	Adsorption of lanthanides(III), uranium(VI) and thorium(IV) from nitric acid solutions by carbon inverse opals modified with tetraphenylmethylenediphospine dioxide. Journal of Colloid and Interface Science, 2013, 405, 183-188.	5.0	18
16	Growth of mixed K2(Ni,Co)(SO4)2Â·6H2O crystals under stationary conditions of supercooling and forced convection of the aqueous solution. Journal of Crystal Growth, 2017, 475, 21-25.	0.7	17
17	Nanoporous SiO2 based on annealed artificial opals as a favorable material platform of terahertz optics. Optical Materials Express, 2020, 10, 2100.	1.6	17
18	The Problem of Formation of Mixed Crystals and High-Efficiency K2(Co, Ni)(SO4)2 â€¢ 6H2O Optical Filters. Crystals, 2019, 9, 390.	1.0	15

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19	Luminescent properties of synthetic opal. Inorganic Materials, 2008, 44, 159-164.	0.2	14
20	Anomalies of properties in a series of K2CoxNi1â˜x(SO4)2 Â· 6H2O mixed crystals. Crystallography Reports, 2017, 62, 928-939.	0.1	14
21	Photonic crystal microspheres. Optical Materials, 2015, 49, 208-212.	1.7	13
22	ZnO-infiltrated opal: influence of the stop-zone on the UV spontaneous emission. Journal of Optics, 2005, 7, S213-S218.	1.5	12
23	Effect of the geometric shape of Lu2O3: Eu spherical nanocrystals on their spontaneous luminescence. Physics of the Solid State, 2011, 53, 1895-1901.	0.2	12
24	DIRECT OBSERVATION OF THE SHELL-LIKE STRUCTURE OF SiO₂ PARTICLES SYNTHESIZED BY THE MULTISTAGE STÃ–BER METHOD. Nano, 2013, 08, 1350036.	0.5	11
25	Growth of HIGH-Tc superconductor single crystals and the effect of thermobaric treatment in oxygen on critical temperatures. Materials Letters, 1990, 9, 96-100.	1.3	10
26	Phase equilibria in La(Y)-Ba-Cu-O systems and growth of high-T/sub c/ superconductor bulk single crystals. IEEE Transactions on Magnetics, 1991, 27, 1146-1149.	1.2	10
27	Effect of nanosphere size on the luminescence of synthetic opal. Inorganic Materials, 2009, 45, 260-263.	0.2	10
28	Synthesis of Î±-SiC nanocrystals by carbothermal reduction of spherical nanoparticles of amorphous silicon dioxide. Physics of the Solid State, 2009, 51, 1723-1729.	0.2	10
29	Synthesis of Monodisperse Silica Nanoparticles via Heterogeneous Tetraethoxysilane Hydrolysis Using L-Arginine as a Catalyst. Inorganic Materials, 2018, 54, 156-162.	0.2	10
30	Opalâ€“ZnO Nanocomposites: Structure and Emission Properties. Semiconductors, 2005, 39, 1328.	0.2	9
31	Growth of nickel sulfate hexahydrate (Î±-NiSO4 Â· 6H2O) single crystals under steady-state conditions of temperature difference. Crystallography Reports, 2015, 60, 963-969.	0.1	9
32	Hydrodynamics and oscillation of temperature in single crystal growth from high-temperature solutions with use of ACRT. Journal of Crystal Growth, 1992, 119, 297-302.	0.7	8
33	Luminescence of CdSe/ZnS quantum dots infiltrated into an opal matrix. Semiconductors, 2009, 43, 197-201.	0.2	8
34	Microporous and mesoporous carbon nanostructures with the inverse opal lattice. Physics of the Solid State, 2013, 55, 1105-1110.	0.2	8
35	Opal-based terahertz optical elements fabricated by self-assembly of porous SiO₂ nanoparticles. Optics Express, 2021, 29, 13764.	1.7	8
36	Mono- and multilayered opalline superlattices: application to nanotechnology of 2D ordered array of nanoobjects and 3D metalattices. Applied Surface Science, 2004, 234, 93-101.	3.1	7

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37	Spontaneous and stimulated red luminescence of Lu2O3: Eu nanocrystals. Physics of the Solid State, 2011, 53, 1263-1268.	0.2	7
38	Luminescence from ZnO quantum dots deposited with synthetic opal. Semiconductors, 2003, 37, 314-316.	0.2	6
39	Change of the luminescence decay time for Lu2O3: Eu nanocrystals embedded in synthetic opal. Physics of the Solid State, 2010, 52, 2510-2517.	0.2	6
40	Ultraviolet luminescence of ZnO infiltrated into an opal matrix. Semiconductors, 2004, 38, 849-854.	0.2	5
41	Dispersion of light in opal photonic crystal. Physics of the Solid State, 2007, 49, 1700-1703.	0.2	5
42	Photoluminescence properties of core-shell SiO2/Lu2O3: Eu monodisperse heteronanoparticles. Physics of the Solid State, 2010, 52, 2385-2391.	0.2	5
43	Optical properties of a carbon-zirconia quantum-dot photonic crystal. Inorganic Materials, 2010, 46, 505-509.	0.2	5
44	SiC/C nanocomposites with inverse opal structure. Nanotechnology, 2010, 21, 475604.	1.3	5
45	Growth of faces of K2CoxNi1 â€“ x(SO4)2 Â· 6H2O mixed crystals. Crystallography Reports, 2017, 62, 976-982.	0.1	5
46	Interferometric study of the growth kinetics of K2Co(SO4)2 Â· 6H2O and K2Ni(SO4)2 Â· 6H2O crystals. Crystallography Reports, 2017, 62, 983-992.	0.1	5
47	Synthesis of a periodic SiC/C nanostructure. Physics of the Solid State, 2011, 53, 1121-1125.	0.2	4
48	Developing of Standard Reference Materials of the Electrokinetic (Zeta) Potential of Nanoparticles. Nanotechnologies in Russia, 2018, 13, 90-95.	0.7	4
49	Study of the Fracture Toughness of K2NixCo(1Ââ€"Âx)(SO4)2 Â· 6H2O Crystals in Dependence of the Growth Direction and Rate. Crystallography Reports, 2019, 64, 926-931.	0.1	4
50	Photoluminescence of ZnO infiltrated into a three-dimensional photonic crystal. Semiconductors, 2009, 43, 1017-1022.	0.2	3
51	Three-dimensional periodic lattice of ZrO2 nanocrystals in transparent silica matrix. Physics of the Solid State, 2010, 52, 794-799.	0.2	3
52	Local spectroscopy of band gaps in ferroelectric photonic crystals. Inorganic Materials, 2012, 48, 285-288.	0.2	3
53	Luminescence induced in diamond by He+ ion implantation into SiC/C composites with an inverse opal structure. Physics of the Solid State, 2012, 54, 586-592.	0.2	3
54	Synthesis and Modification of Carbon Inverse Opal Nanostructres Based on Anthracene and Their Electrochemical Characteristics. Nanotechnologies in Russia, 2017, 12, 635-642.	0.7	3

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55	Study of the Radial Heterogeneity and Mosaic Microheterogeneity in KCNSH Mixed Crystals. Crystallography Reports, 2019, 64, 828-833.	0.1	3
56	Growth of mixed K2NixCo(1â^'x)(SO4)2 Â· 6H2O crystals for large supercooling without spontaneous crystallization in solution. Materials Research Express, 2020, 7, 016202.	0.8	3
57	Novel promising terahertz optical material based on nanoporous SiO2. , 2020, , .		3
58	Formation of two-dimensional ordered magnetic nanolattices in opal structures. JETP Letters, 2004, 80, 500-502.	0.4	2
59	Opal-ZnO nanocomposites: structure and emission properties. , 2005, , .		2
60	Photonic stop bands in opal films and crystalline liquids. , 2006, , .		2
61	The growth of KNSH/KCSH bicrystals from aqueous solutions at a constant temperature difference. Journal of Crystal Growth, 2018, 503, 45-50.	0.7	2
62	Effect of Heat Treatment on Water Vapor Adsorption by Opal Structures and Their Effective Refractive Index. Inorganic Materials, 2019, 55, 143-148.	0.2	2
63	Optical properties of thin films of closely packed SiO2 spheres. Physics of the Solid State, 2002, 44, 1071-1076.	0.2	1
64	Growth and morphology of ruby crystals with unusual chromium concentration. Journal of Crystal Growth, 2005, 280, 551-556.	0.7	1
65	Stimulated emission at the second order stop-zone edge of the two-dimensional opalâ€"zinc oxide photonic crystal. Photonics and Nanostructures - Fundamentals and Applications, 2007, 5, 96-100.	1.0	1
66	Reflectivity spectra of NaNO2-infiltrated synthetic opal. Inorganic Materials, 2009, 45, 894-899.	0.2	1
67	Influence of high-temperature treatment on the structure and emission properties of opal doped with erbium. Physics of the Solid State, 2009, 51, 1154-1159.	0.2	1
68	Synthesis and features of the structure and luminescence of monodisperse SiO2/(Lu1 â^' x Eu x)2O3 (x =) Tj ETQq0 0 0 rgBT /Overlock 1	0.2	1
69	Inverse opal based on a polymer filler and transformation of its optical characteristics. Physics of the Solid State, 2014, 56, 746-750.	0.2	1
70	C-IOP/NiO/Ni₇S₆composite with the inverse opal lattice as an electrode for supercapacitors. Proceedings of SPIE, 2015, , .	0.8	1
71	Phase transformations in opals under thermal and thermobaric actions. Journal of Surface Investigation, 2017, 11, 634-638.	0.1	1
72	A novel way of synthesising C₈ cubic carbon nanocrystals. CrystEngComm, 2018, 20, 6133-6135.	1.3	1

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73	Terahertz axicon fabricated by direct sedimentation of SiO2 colloidal nanoparticles in a mold. , 2021, , .		1
74	Synthesis of polymer - based inverted opal and transformation of its optical properties. Advances in Nano Research, 2014, 2, 69-76.	0.9	1
75	Investigation of the Electrochemical Properties of Lithiumâ€“Sulfur Cells with Sulfur Electrodes Based on Carbon Inverted Opals. IFMBE Proceedings, 2020, , 193-197.	0.2	1
76	Physical simulation of hydrodynamics and growth of single crystals from high temperature solutions under conditions of free convection. III. Non-stationary mode of convection. Materials Research Bulletin, 1991, 26, 277-284.	2.7	0
77	Physical simulation of the hydrodynamics during the growth of oxide single crystals from high-temperature solutions in the presence of a steady-state free convection flow. Materials Research Bulletin, 1991, 26, 1135-1141.	2.7	0
78	Boundary conditions of the transition from steady-state to unsteady-state regimes of free convection in high-temperature solutions of oxides. Single crystal growth in a steady-state regime. Materials Research Bulletin, 1991, 26, 1309-1314.	2.7	0
79	UV luminescence of ZnO infiltrated in opal matrix. , 2004, , .		0
80	1.5 Î¼m photoluminescence of Er³⁺in opal based photonic crystals. Proceedings of SPIE, 2008, , .	0.8	0
81	Angle- and time-resolved luminescence of CdSe/ZnS nanocrystals in 3D photonic crystals. , 2009, , .		0
82	Annealing effect on reflectivity spectra of opal photonic crystals. Inorganic Materials, 2009, 45, 645-650.	0.2	0
83	Carbon and carbon-silicon carbide nanocomposites with inverse opal structure. Russian Journal of General Chemistry, 2013, 83, 2167-2172.	0.3	0
84	C8 microcrystals synthesized by anthracene carbonization. AIP Conference Proceedings, 2019, , .	0.3	0
85	Magnetization Distribution in Particles with Configuration Anisotropy, Prepared via Microsphere Lithography. Technical Physics, 2019, 64, 1652-1656.	0.2	0