Denis V Marin

List of Publications by Year
in descending order

67 papers	518 citations	759233 12 h-index	752698 20 g-index
67 all docs	67 docs citations	67 times ranked	482 citing authors

#	Article	IF	Citations
1	Applying an improved phonon confinement model to the analysis of Raman spectra of germanium nanocrystals. Journal of Experimental and Theoretical Physics, 2014, 118, 65-71.	0.9	69
2	Effect of Quantum Confinement on Optical Properties of Ge Nanocrystals in GeO[sub 2] Films. Semiconductors, 2005, 39, 1168.	0.5	51
3	Formation of Ge and GeSi nanocrystals in GeO_x/SiO₂multilayers. Journal Physics D: Applied Physics, 2013, 46, 275305.	2.8	28
4	Formation of light-emitting Si nanostructures in SiO₂by pulsed anneals. Nanotechnology, 2008, 19, 355305.	2.6	21
5	Structure and optical properties of silicon nanopowders. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 147, 222-225.	3.5	20
6	High operating temperature SWIR p+â€“n FPA based on MBE-grown HgCdTe/Si(0 1 3). Infrared Physics and Technology, 2016, 76, 72-74.	2.9	20
7	Electrical properties and photoluminescence of SiOx layers with Si nanocrystals in relation to the SiOx composition. Semiconductors, 2006, 40, 1198-1203.	0.5	17
8	Structure and optical properties of SiN x : H films with Si nanoclusters produced by low-frequency plasma-enhanced chemical vapor deposition. Semiconductors, 2009, 43, 1514-1520.	0.5	17
9	The reverse current temperature dependences of SWIR CdHgTe â€œp-on-nâ€•and â€œn-on-pâ€•junctions. Infrared Physics and Technology, 2015, 73, 312-315.	2.9	16
10	Photoluminescence of GeO2 films containing germanium nanocrystals. JETP Letters, 2003, 77, 411-414.	1.4	15
11	Visible photoluminescence from silicon nanopowders produced by silicon evaporation in a high-power electron beam. JETP Letters, 2004, 80, 544-547.	1.4	14
12	The formation of silicon nanocrystals in SiO2 layers by the implantation of Si ions with intermediate heat treatments. Semiconductors, 2005, 39, 552-556.	0.5	12
13	The modification of Si nanocrystallites embedded in a dielectric matrix by high energy ion irradiation. Nanotechnology, 2009, 20, 095205.	2.6	12
14	Nano-size defects in arsenic-implanted HgCdTe films: a HRTEM study. Applied Nanoscience (Switzerland), 2019, 9, 725-730.	3.1	12
15	SiO x layer formation during plasma sputtering of Si and SiO2 targets. Semiconductors, 2008, 42, 731-736.	0.5	11
16	Photoluminescence of Molecular Beam Epitaxy-Grown Mercury Cadmium Telluride: Comparison of HgCdTe/GaAs and HgCdTe/Si Technologies. Journal of Electronic Materials, 2018, 47, 4731-4736.	2.2	10
17	Electrical profiling of arsenic-implanted HgCdTe films performed with discrete mobility spectrum analysis. Semiconductor Science and Technology, 2019, 34, 035009.	2.0	10
18	Light-emitting Si nanostructures formed by swift heavy ions in stoichiometric SiO2 layers. Nuclear Instruments & Methods in Physics Research B, 2012, 282, 68-72.	1.4	9

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19	Anomalous temperature dependence of photoluminescence in GeO x films and GeO x /SiO2 nano-heterostructures. JETP Letters, 2012, 95, 424-428.	1.4	9
20	Light-emitting Si nanostructures formed in silica layers byÂirradiation with swift heavy ions. Applied Physics A: Materials Science and Processing, 2010, 98, 873-877.	2.3	8
21	Photodiodes based on p-on-n junctions formed in MBE-grown n-type MCT absorber layers for the spectral region 8 to 11ÂĨ¼m. Infrared Physics and Technology, 2020, 105, 103182.	2.9	8
22	Modification of germanium nanoclusters in GeO x films during isochronous furnace and pulse laser annealing. Technical Physics Letters, 2010, 36, 439-442.	0.7	7
23	Coulomb blockade of the conductivity of SiOx films due to one-electron charging of a silicon quantum dot in a chain of electronic states. Semiconductors, 2005, 39, 910-916.	0.5	6
24	Ellipsometry of GeO2 films with Ge nanoclusters: Influence of the quantum-size effect on refractive index. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2009, 106, 436-440.	0.6	6
25	High Volume Synthesis of Silicon Nanopowder by Electron Beam Ablation of Silicon Ingot at Atmospheric Pressure. Japanese Journal of Applied Physics, 2008, 47, 7019-7022.	1.5	5
26	Defects in heteroepitaxial CdHgTe/Si layers and their behavior under conditions of implanted p +-n photodiode structure formation. Technical Physics Letters, 2014, 40, 708-711.	0.7	5
27	CdHgTe heterostructures on large-area Si(310) substrates for infrared photodetector arrays of the short-wavelength spectral range. Semiconductors, 2014, 48, 767-771.	0.5	5
28	HgCdTe p⁺â€n structures grown by MBE on Si (013) substrates for high operating temperature SWIR detectors. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 651-655.	0.8	5
29	Methodological and instrumental problems in high-precision in situ ellipsometry diagnostics of the mercury cadmium telluride layer composition in molecular beam epitaxy. Instruments and Experimental Techniques, 2016, 59, 857-864.	0.5	5
30	Defects in mercury-cadmium telluride heteroepitaxial structures grown by molecular-beam epitaxy on silicon substrates. Semiconductors, 2016, 50, 208-211.	0.5	5
31	Electrical properties of the Hg0.7Cd0.3Te films grown by MBE method on Si(0â€¯1â€¯3) substrates. Infrared Physics and Technology, 2018, 94, 11-15.	2.9	5
32	A Megapixel Matrix Photodetector of the Middle Infrared Range. Journal of Communications Technology and Electronics, 2019, 64, 1011-1015.	0.5	5
33	Anisotropic Strain â€“ Anisotropic Heating Engineering for Silicon Nanocrystals in SiO₂. Solid State Phenomena, 2009, 156-158, 523-528.	0.3	4
34	Quasi-direct optical transitions in Ge nanocrystals embedded in GeO2 matrix. JETP Letters, 2009, 89, 76-79.	1.4	4
35	CdHgTe heterostructures for new-generation IR photodetectors operating at elevated temperatures. Semiconductors, 2016, 50, 1626-1629.	0.5	4
36	Ellipsometric Method for Measuring the CdTe Buffer-Layer Temperature in the Molecular-Beam Epitaxy of CdHgTe. Semiconductors, 2019, 53, 132-137.	0.5	4

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37	Structure and photoluminescence study of type-II GaAs quantum wires and dots grown on nano-faceted (311)A surface. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 23, 461-465.	2.7	3
38	Ge Nanoclusters in GeO₂: Synthesis and Optical Properties. Solid State Phenomena, 2005, 108-109, 83-90.	0.3	3
39	Laser Assisted Formation on Nanocrystals in Plasma-Chemical Deposited SiN_x Films. Solid State Phenomena, 2005, 108-109, 53-58.	0.3	3
40	Modification of Silicon Nanocrystals Embedded in an Oxide by High Energy Ion Implantation. Solid State Phenomena, 2008, 131-133, 541-546.	0.3	3
41	Effect of the ion-energy loss rate on defect formation during implantation in silicon nanocrystals. Semiconductors, 2008, 42, 1127-1131.	0.5	3
42	Light-emitting Si nanostructures formed in SiO2 on irradiation with swift heavy ions. Semiconductors, 2010, 44, 525-530.	0.5	3
43	Formation of light-emitting nanostructures in layers of stoichiometric SiO2 irradiated with swift heavy ions. Semiconductors, 2011, 45, 1311-1316.	0.5	3
44	Influence of irradiation with swift heavy ions on multilayer Si/SiO2 heterostructures. Semiconductors, 2013, 47, 358-364.	0.5	3
45	Acceptor states and carrier lifetime in heteroepitaxial HgCdTe-on-Si for mid-infrared photodetectors. Journal of Physics: Conference Series, 2015, 643, 012004.	0.4	3
46	Luminescence in GeO x films containing germanium nanoclusters. Nanotechnologies in Russia, 2016, 11, 325-330.	0.7	3
47	Direct comparison of the results of arsenic ion implantation in nâ€“ and pâ€“type Hg0.8Cd0.2Te. Infrared Physics and Technology, 2020, 109, 103388.	2.9	3
48	Coulomb Blockade in Silicon Nanocrystals Embedded in SiO₂ Matrix. Solid State Phenomena, 2003, 95-96, 629-634.	0.3	2
49	Effect of pressure annealing on formation of lightâ€emitting Si nanocrystals in Si rich SiO₂. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 78-83.	1.8	2
50	The effect of composition on the formation of light-emitting Si nanostructures in SiO x layers on irradiation with swift heavy ions. Semiconductors, 2011, 45, 408-414.	0.5	2
51	Acceptor states in HgCdTe films grown by molecularâ€beam epitaxy on GaAs and Si substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 469-472.	0.8	2
52	The electrical properties of HgCdTe layers grown by MBE on Si and P + / n junction formed on its basis. , 2016, , .		2
53	Effect of annealing on the structural properties of arsenic-implanted mercury cadmium telluride. Opto-electronics Review, 2019, 27, 14-17.	2.4	2
54	Nanocrystalline silicon films formed under the impact of pulsed excimer laser radiation on polyimide substrates. Technical Physics Letters, 2003, 29, 569-571.	0.7	1

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55	Blue Photoluminescence from Quantum Size Silicon Nanopowder. Solid State Phenomena, 2005, 108-109, 65-70.	0.3	1
56	<title>Ge nanoclusters in GeO<formula><inf><roman>2</roman></inf></formula>: formation and optical properties</title>. , 2006, 6260, 298.		1
57	<title>Optical properties of silicon nanopowders formed using power electron beam evaporation</title>. , 2006, , .		1
58	Photoinduced Variation of Capacitance Characteristics of MDS Structures with Three-Layer SiN_x Dielectrics. Solid State Phenomena, 2008, 131-133, 461-466.	0.3	1
59	<title>Falling down capacitance impedance under light illumination of MDS-structures with three-layer SiN<formula><inf><roman>x</roman></inf></formula> dielectrics</title>. Proceedings of SPIE, 2008, , .	0.8	1
60	Phase separation as a basis for the formation of light-emitting silicon nanoclusters in SiO x films irradiated with swift heavy ions. Optoelectronics, Instrumentation and Data Processing, 2014, 50, 292-297.	0.6	1
61	Electrophysical properties of Cd x Hg1â€“x Te (x = 0.3) films grown by molecular beam epitaxy on Si(013) substrates. Physics of the Solid State, 2016, 58, 641-646.	0.6	1
62	Electrical and optical studies of a telluriumâ€related defect in molecularâ€beam epitaxyâ€grown HgCdTe. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 461-464.	0.8	1
63	Laser Crystallization of Thin a-Si Films on Plastic Substrates Using Excimer Laser Treatments. Solid State Phenomena, 2004, 95-96, 29-34.	0.3	0
64	Ge quantum dots in anomalous thick native germanium oxide layers. , 2004, , .		0
65	<title>Electronic transport through silicon nanocrystals embedded in SiO<formula><inf><roman>2</roman></inf></formula> matrix</title>. , 2006, , .		0
66	Modification of photoluminescence and charge in oxide with silicon nanocrystals by high energy ion implantation. , 2006, , .		0
67	The electrical properties of MOS-structures with silicon nanoballs incrusted in SiO<inf>2</inf> layer. , 2009, , .		0