Denis V Marin

List of Publications by Year
in descending order

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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	Photodiodes based on p-on-n junctions formed in MBE-grown n-type MCT absorber layers for the spectral region 8 to 11Âĺ¼m. Infrared Physics and Technology, 2020, 105, 103182.	2.9	8
2	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
3	Nano-size defects in arsenic-implanted HgCdTe films: a HRTEM study. Applied Nanoscience (Switzerland), 2019, 9, 725-730.	3.1	12
4	A Megapixel Matrix Photodetector of the Middle Infrared Range. Journal of Communications Technology and Electronics, 2019, 64, 1011-1015.	0.5	5
5	Effect of annealing on the structural properties of arsenic-implanted mercury cadmium telluride. Opto-electronics Review, 2019, 27, 14-17.	2.4	2
6	Ellipsometric Method for Measuring the CdTe Buffer-Layer Temperature in the Molecular-Beam Epitaxy of CdHgTe. Semiconductors, 2019, 53, 132-137.	0.5	4
7	Electrical profiling of arsenic-implanted HgCdTe films performed with discrete mobility spectrum analysis. Semiconductor Science and Technology, 2019, 34, 035009.	2.0	10
8	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
9	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
10	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
11	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
12	CdHgTe heterostructures for new-generation IR photodetectors operating at elevated temperatures. Semiconductors, 2016, 50, 1626-1629.	0.5	4
13	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
14	Luminescence in GeO x films containing germanium nanoclusters. Nanotechnologies in Russia, 2016, 11, 325-330.	0.7	3
15	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
16	The electrical properties of HgCdTe layers grown by MBE on Si and P + / n junction formed on its basis. , 2016, , .		2
17	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
18	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

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19	Defects in mercury-cadmium telluride heteroepitaxial structures grown by molecular-beam epitaxy on silicon substrates. Semiconductors, 2016, 50, 208-211.	0.5	5
20	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
21	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
22	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
23	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
24	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
25	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
26	Formation of Ge and GeSi nanocrystals in GeO_x/SiO₂multilayers. Journal Physics D: Applied Physics, 2013, 46, 275305.	2.8	28
27	Influence of irradiation with swift heavy ions on multilayer Si/SiO2 heterostructures. Semiconductors, 2013, 47, 358-364.	0.5	3
28	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
29	Anomalous temperature dependence of photoluminescence in GeO x films and GeO x /SiO2 nano-heterostructures. JETP Letters, 2012, 95, 424-428.	1.4	9
30	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
31	Formation of light-emitting nanostructures in layers of stoichiometric SiO2 irradiated with swift heavy ions. Semiconductors, 2011, 45, 1311-1316.	0.5	3
32	Light-emitting Si nanostructures formed in SiO2 on irradiation with swift heavy ions. Semiconductors, 2010, 44, 525-530.	0.5	3
33	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
34	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
35	Anisotropic Strain â€“ Anisotropic Heating Engineering for Silicon Nanocrystals in SiO₂. Solid State Phenomena, 2009, 156-158, 523-528.	0.3	4
36	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

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37	Quasi-direct optical transitions in Ge nanocrystals embedded in GeO2 matrix. JETP Letters, 2009, 89, 76-79.	1.4	4
38	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
39	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
40	The modification of Si nanocrystallites embedded in a dielectric matrix by high energy ion irradiation. Nanotechnology, 2009, 20, 095205.	2.6	12
41	The electrical properties of MOS-structures with silicon nanoballs incrusted in SiO<inf>2</inf> layer. , 2009, , .		0
42	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
43	Modification of Silicon Nanocrystals Embedded in an Oxide by High Energy Ion Implantation. Solid State Phenomena, 2008, 131-133, 541-546.	0.3	3
44	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
45	SiO x layer formation during plasma sputtering of Si and SiO2 targets. Semiconductors, 2008, 42, 731-736.	0.5	11
46	Effect of the ion-energy loss rate on defect formation during implantation in silicon nanocrystals. Semiconductors, 2008, 42, 1127-1131.	0.5	3
47	Formation of light-emitting Si nanostructures in SiO₂by pulsed anneals. Nanotechnology, 2008, 19, 355305.	2.6	21
48	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
49	<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
50	<title>Ge nanoclusters in GeO<formula><inf><roman>2</roman></inf></formula>: formation and optical properties</title>. , 2006, 6260, 298.		1
51	<title>Electronic transport through silicon nanocrystals embedded in SiO<formula><inf><roman>2</roman></inf></formula> matrix</title>. , 2006, , .		0
52	Electrical properties and photoluminescence of SiOx layers with Si nanocrystals in relation to the SiOx composition. Semiconductors, 2006, 40, 1198-1203.	0.5	17
53	<title>Optical properties of silicon nanopowders formed using power electron beam evaporation</title>. , 2006, , .		1
54	Modification of photoluminescence and charge in oxide with silicon nanocrystals by high energy ion implantation. , 2006, , .		0

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55	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
56	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
57	Effect of Quantum Confinement on Optical Properties of Ge Nanocrystals in GeO[sub 2] Films. Semiconductors, 2005, 39, 1168.	0.5	51
58	Ge Nanoclusters in GeO₂: Synthesis and Optical Properties. Solid State Phenomena, 2005, 108-109, 83-90.	0.3	3
59	Laser Assisted Formation on Nanocrystals in Plasma-Chemical Deposited SiN_x Films. Solid State Phenomena, 2005, 108-109, 53-58.	0.3	3
60	Blue Photoluminescence from Quantum Size Silicon Nanopowder. Solid State Phenomena, 2005, 108-109, 65-70.	0.3	1
61	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
62	Visible photoluminescence from silicon nanopowders produced by silicon evaporation in a high-power electron beam. JETP Letters, 2004, 80, 544-547.	1.4	14
63	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
64	Ge quantum dots in anomalous thick native germanium oxide layers. , 2004, , .		0
65	Photoluminescence of GeO2 films containing germanium nanocrystals. JETP Letters, 2003, 77, 411-414.	1.4	15
66	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
67	Coulomb Blockade in Silicon Nanocrystals Embedded in SiO₂ Matrix. Solid State Phenomena, 2003, 95-96, 629-634.	0.3	2