Ivan S Vasil'evskii

List of Publications by Year
in descending order

68	458	758635	887659
papers	citations	12 h-index	17 g-index

68	68	68	314
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Nonlinear plasmon-exciton infrared photodetector operating in the two-photon absorption mode. , 2022, , .		0
2	Effect of Different De-Embedding Techniques on Small-Signal Parameters of X-Band Low-Noise Amplifier. , 2021, , .		0
3	Plasmonâ€“exciton interaction strongly increases the efficiency of a quantum dot-based near-infrared photodetector operating in the two-photon absorption mode under normal conditions. Nanoscale, 2021, 13, 19929-19935.	2.8	2
4	New Structure for Photoconductive Antennas Based on {LTG-GaAs/GaAs:Si} Superlattice on GaAs(111)A Substrate. Crystallography Reports, 2019, 64, 205-211.	0.1	7
5	Quantum Hall effect in n-InGaAs/InAlAs metamorphic nanoheterostructures with high InAs content. Journal of Magnetism and Magnetic Materials, 2017, 440, 10-12.	1.0	3
6	Terahertz-radiation generation and detection in low-temperature-grown GaAs epitaxial films on GaAs (100) and (111)A substrates. Semiconductors, 2017, 51, 503-508.	0.2	15
7	Electron properties of surface InGaAs/InAlAs quantum wells with inverted doping on InP substrates. Semiconductors, 2017, 51, 760-765.	0.2	0
8	High accuracy magnetic field sensors with wide operation temperature range. IOP Conference Series: Materials Science and Engineering, 2016, 151, 012029.	0.3	0
9	Eigenstate modelling in arbitrary shaped nanostructres with gradual heterointerfaces. Journal of Physics: Conference Series, 2016, 690, 012016.	0.3	2
10	Pseudomorphic HEMT quantum well AlGaAs/InGaAs/GaAs with AlAs:Î´-Si donor layer. IOP Conference Series: Materials Science and Engineering, 2016, 151, 012037.	0.3	2
11	Tunable configurational anisotropy of concave triangular nanomagnets. Journal of Applied Physics, 2016, 119, 233906.	1.1	8
12	Features of the diagnostics of metamorphic InAlAs/InGaAs/InAlAs nanoheterostructures by high-resolution X-ray diffraction in the Ï‰-scanning mode. Semiconductors, 2016, 50, 559-565.	0.2	9
13	Sn-enriched Ge/GeSn nanostructures grown by MBE on (001) GaAs and Si wafers. Semiconductors, 2015, 49, 1564-1570.	0.2	3
14	Temperature dependence of photoluminescence of GaAs/AlGaAs quantum rings. Journal of Physics: Conference Series, 2015, 643, 012073.	0.3	3
15	Structural and electrophysical properties of In0.52Al0.48As/In0.53Ga0.47As/In0.52Al0.48As/InP HEMT nanoheterostructures with different combinations of InAs and GaAs inserts in quantum well. Crystallography Reports, 2015, 60, 397-405.	0.1	1
16	Thermal Stability of Ge/GeSn Nanostructures Grown by MBE on (001) Si/Ge Virtual Wafers. Physics Procedia, 2015, 72, 411-418.	1.2	9
17	Ge/GeSn heterostructures grown on Si (100) by molecular-beam epitaxy. Semiconductors, 2015, 49, 124-129.	0.2	11
18	Specific features of the photoluminescence of HEMT nanoheterostructures containing a composite InAlAs/InGaAs/InAs/InGaAs/InAlAs quantum well. Semiconductors, 2015, 49, 234-241.	0.2	12

#	Article	IF	Citations
19	Photoluminescence of GaAs/AlGaAs quantum ring arrays. Semiconductors, 2015, 49, 638-643.	0.2	28
20	Photoluminescence properties of modulation-doped In x Al1â€“x As/In y Ga1â€“y As/In x Al1â€“x As structures with strained inas and gaas nanoinserts in the quantum well. Semiconductors, 2015, 49, 1207-1217.	0.2	5
21	Experimental evaluation of stable long term operation of semiconductor magnetic sensors at ITER relevant environment. Nuclear Fusion, 2015, 55, 083006.	1.6	21
22	Electrophysical and structural properties of the composite quantum wells In_{0.52}Al_{0.48}As/In_xGa_{1â^’x}As/In_{0.52}Al_{0.48}A with ultrathin InAs inserts. Journal of Materials Research, 2015, 30, 3020-3025.	1.2	5
23	Features of diffusion processes during drop epitaxy of quantum rings. Bulletin of the Lebedev Physics Institute, 2014, 41, 243-246.	0.1	3
24	Increase of the electron mobility in HEMT heterostructures with composite spacers containing AlAs nanolayers. Semiconductors, 2014, 48, 1619-1625.	0.2	7
25	Application of reactor neutrons to the investigation of the radiation resistance of semiconductor materials of Group IIIâ€“V and sensors. Physics of the Solid State, 2014, 56, 157-160.	0.2	4
26	Effect of (100) GaAs substrate misorientation on electrophysical parameters, structural properties and surface morphology of metamorphic HEMT nanoheterostructures InGaAs/InAlAs. Journal of Crystal Growth, 2014, 392, 11-19.	0.7	12
27	Effect of GaAs (100) substrate misorientation on the electrical parameters and surface morphology of metamorphic In0.7Al0.3As/In0.75Ga0.25As/In0.7Al0.3As HEMT nanoheterostructures. Semiconductors, 2014, 48, 63-68.	0.2	1
28	Technology and electronic properties of PHEMT AlGaAs/In y(z)Ga1 â^’ y(z)As/GaAs compositionally graded quantum wells. Semiconductors, 2014, 48, 1226-1232.	0.2	2
29	Application of photoluminescence spectroscopy to studies of In0.38Al0.62As/In0.38Ga0.62As/GaAs metamorphic nanoheterostructures. Semiconductors, 2014, 48, 883-890.	0.2	4
30	Metamorphic InAlAs/InGaAs/InAlAs/GaAs HEMT heterostructures containing strained superlattices and inverse steps in the metamorphic buffer. Journal of Crystal Growth, 2013, 366, 55-60.	0.7	23
31	Persistent photoconductivity and electron mobility in In0.52Al0.48As/In0.53Ga0.47As/In0.52Al0.48As/InP quantum-well structures. Semiconductors, 2013, 47, 935-942.	0.2	5
32	Study of new designs for the InAlAs metamorphic buffer on GaAs substrates with distributed compensation of elastic deformations. Semiconductors, 2013, 47, 997-1002.	0.2	8
33	Study of the influence of strained superlattices introduced into a metamorphic buffer on the electrophysical properties and the atomic structure of InAlAs/InGaAs MHEMT heterostructures. Semiconductors, 2013, 47, 532-537.	0.2	4
34	Electron mobilities in isomorphic In0.53Ga0.47As quantum wells on InP substrates. Journal of Experimental and Theoretical Physics, 2013, 116, 755-759.	0.2	3
35	Prospects of Using In-Containing Semiconductor Materials in Magnetic Field Sensors for Thermonuclear Reactor Magnetic Diagnostics. IEEE Transactions on Magnetics, 2013, 49, 50-53.	1.2	19
36	Electrical and optical properties of near-surface AlGaAs/InGaAs/AlGaAs quantum wells with different quantum-well depths. Semiconductors, 2013, 47, 1203-1208.	0.2	8

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37	Maximum drift velocity of electrons in selectively doped InAlAs/InGaAs/InAlAs heterostructures with InAs inserts. Semiconductors, 2013, 47, 372-375.	0.2	9
38	Influence of metamorphic buffer design on electrophysical and structural properties of MHEMT nanoheterostructures In_{0.7}Al_{0.3}As/In_{0.7}Ga_{0.3}As/In_{0.7}Al_{0.3}As/GaAs. Proceedings of SPIE, 2013, , .	0.8	0
39	Measurement of the concentration of 2D electrons in Î´-doped InGaAs/GaAs pseudomorphic transistor structures using the photoluminescence spectroscopy. Journal of Communications Technology and Electronics, 2013, 58, 243-249.	0.2	3
40	The built-in electric field in P-HEMT heterostructures with near-surface quantum wells Al_xGa_{1â^'x}As/In_yGa_{1â^'y}As/GaAs. Journal of Physics: Conference Series, 2012, 345, 012015.	0.3	7
41	Effects of phonon confinement on high-electric field electron transport in an InGaAs/InAlAs quantum well with an inserted InAs barrier. Applied Physics A: Materials Science and Processing, 2012, 109, 233-237.	1.1	9
42	Electron effective masses in an InGaAs quantum well with InAs and GaAs inserts. Semiconductor Science and Technology, 2012, 27, 035021.	1.0	24
43	Structural and electrophysical analysis of MHEMT In0.70Al0.30As/In0.75Ga0.25As nanoheterostructures with different strain distributions in metamorphic buffer. Crystallography Reports, 2012, 57, 841-847.	0.1	2
44	Electron mobility and effective mass in composite InGaAs quantum wells with InAs and GaAs nanoinserts. Semiconductors, 2012, 46, 484-490.	0.2	17
45	Structural and electrical properties of quantum wells with nanoscale InAs inserts in In y Al1 â^' y As/In x Ga1 â^' x As heterostructures on InP substrates. Crystallography Reports, 2011, 56, 298-309.	0.1	11
46	Structural and electrical properties of metamorphic nanoheterostructures with a high InAs content (37â€“100%) grown on GaAs and InP substrates. Crystallography Reports, 2011, 56, 875-879.	0.1	2
47	Effect of the built-in electric field on optical and electrical properties of AlGaAs/InGaAs/GaAs P-HEMT nanoheterostructures. Semiconductors, 2011, 45, 657-662.	0.2	19
48	Interrelation of the construction of the metamorphic InAlAs/InGaAs nanoheterostructures with the InAs content in the active layer of 76â€“100% with their surface morphology and electrical properties. Semiconductors, 2011, 45, 1158-1163.	0.2	9
49	Electron mobility and drift velocity in selectively doped InAlAs/InGaAs/InAlAs heterostructures. Semiconductors, 2011, 45, 1169-1172.	0.2	5
50	Scattering and electron mobility in combination-doped HFET-structures AlGaAs/InGaAs/AlGaAs with high electron density. Semiconductors, 2011, 45, 1321-1326.	0.2	6
51	Electron Transport in Modulation-Doped InAlAs/InGaAs/InAlAs Heterostructures in High Electric Fields. Acta Physica Polonica A, 2011, 119, 170-172.	0.2	3
52	The electrical and structural properties of In y Ga1 â^' y As/In x Al1 â^' x As/InP quantum wells with different InAs content. Crystallography Reports, 2010, 55, 6-9.	0.1	0
53	Electron transport in an In0.52Al0.48As/In0.53Ga0.47As/In0.52Al0.48As quantum well with a Î´-Si doped barrier in high electric fields. Semiconductors, 2010, 44, 898-903.	0.2	5
54	Low temperature electron magnetotransport in In_xGa_{1-x}As/In_{0.52}Al_{0.48}As quantum wells with high electron density. Journal of Physics: Conference Series, 2009, 150, 022096.	0.3	0

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55	Drift velocity of electrons in quantum wells in high electric fields. Semiconductors, 2009, 43, 458-462.	0.2	9
56	Electrical and structural properties of PHEMT heterostructures based on AlGaAs/InGaAs/AlGaAs and Î´-doped on two sides. Semiconductors, 2008, 42, 1084-1091.	0.2	25
57	Electron transport and optical properties of shallow GaAs/InGaAs/GaAs quantum wells with a thin central AlAs barrier. Semiconductor Science and Technology, 2007, 22, 222-228.	1.0	12
58	Influence of state hybridization on low-temperature electron transport in shallow quantum wells. Journal of Experimental and Theoretical Physics, 2007, 105, 174-176.	0.2	2
59	Effect of the spacer growth temperature on the electrophysical and structural properties of PHEMTs. Technical Physics, 2007, 52, 440-445.	0.2	1
60	Interband optical transitions in GaAs modulation-doped quantum wells: photoreflectance experiment and self-consistent calculations. Semiconductor Science and Technology, 2006, 21, 462-466.	1.0	4
61	<title>Structural and electrophysical properties of pseudomorphic GaAs/InGaAs/GaAs quantum wells: effect of thin central AlAs barrier</title>. , 2006, , .		1
62	Electrical behavior of modulation-and delta-doped Al x Ga1 â^' x As/In y Ga1 â^' y As/GaAs PHEMT structures. Russian Microelectronics, 2006, 35, 67-73.	0.1	0
63	The effect of spacer-layer growth temperature on mobility in a two-dimensional electron gas in PHEMT structures. Semiconductors, 2006, 40, 1445-1449.	0.2	20
64	n-AlGaAs/GaAs/n-AlGaAs double quantum wells with an AlAs barrier: Relating the cladding doping level to structural and transport properties. Russian Microelectronics, 2005, 34, 78-87.	0.1	0
65	Electron magnetotransport in coupled quantum wells with double-sided doping. Semiconductors, 2004, 38, 1326-1331.	0.2	0
66	Peculiarities of conductivity in structures delta-doped by Si on vicinal (111)A GaAs substrate. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 172-173.	1.3	0
67	Electron transport in coupled quantum wells with double-Sided doping. Semiconductors, 2003, 37, 686-691.	0.2	4
68	Conductance anisotropy of Î´-Si doped GaAs layers grown by molecular beam epitaxy on (111)A GaAs substrates and misoriented in the $$[2ar 1ar 1]$$ direction. Doklady Physics, 2002, 47, 419-421.	0.2	0