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	Photoluminescence of GaAs/AlGaAs quantum ring arrays. Semiconductors, 2015, 49, 638-643.	0.2	28
2	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
3	Electron effective masses in an InGaAs quantum well with InAs and GaAs inserts. Semiconductor Science and Technology, 2012, 27, 035021.	1.0	24
4	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
5	Experimental evaluation of stable long term operation of semiconductor magnetic sensors at ITER relevant environment. Nuclear Fusion, 2015, 55, 083006.	1.6	21
6	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
7	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
8	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
9	Electron mobility and effective mass in composite InGaAs quantum wells with InAs and GaAs nanoinserts. Semiconductors, 2012, 46, 484-490.	0.2	17
10	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
11	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
12	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
13	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
14	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
15	Ge/GeSn heterostructures grown on Si (100) by molecular-beam epitaxy. Semiconductors, 2015, 49, 124-129.	0.2	11
16	Drift velocity of electrons in quantum wells in high electric fields. Semiconductors, 2009, 43, 458-462.	0.2	9
17	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
18	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

#	Article	IF	Citations
19	Maximum drift velocity of electrons in selectively doped InAlAs/InGaAs/InAlAs heterostructures with InAs inserts. Semiconductors, 2013, 47, 372-375.	0.2	9
20	Thermal Stability of Ge/GeSn Nanostructures Grown by MBE on (001) Si/Ge Virtual Wafers. Physics Procedia, 2015, 72, 411-418.	1.2	9
21	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
22	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
23	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
24	Tunable configurational anisotropy of concave triangular nanomagnets. Journal of Applied Physics, 2016, 119, 233906.	1.1	8
25	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
26	Increase of the electron mobility in HEMT heterostructures with composite spacers containing AlAs nanolayers. Semiconductors, 2014, 48, 1619-1625.	0.2	7
27	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
28	Scattering and electron mobility in combination-doped HFET-structures AlGaAs/InGaAs/AlGaAs with high electron density. Semiconductors, 2011, 45, 1321-1326.	0.2	6
29	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
30	Electron mobility and drift velocity in selectively doped InAlAs/InGaAs/InAlAs heterostructures. Semiconductors, 2011, 45, 1169-1172.	0.2	5
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	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
33	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}As with ultrathin InAs inserts. Journal of Materials Research, 2015, 30, 3020-3025.	1.1	5
34	Electron transport in coupled quantum wells with double-Sided doping. Semiconductors, 2003, 37, 686-691.	0.2	4
35	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
36	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

#	Article	IF	Citations
37	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
38	Application of photoluminescence spectroscopy to studies of In0.38Al0.62As/In0.38Ga0.62As/GaAs metamorphic nanoheterostructures. Semiconductors, 2014, 48, 883-890.	0.2	4
39	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
40	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
41	Features of diffusion processes during drop epitaxy of quantum rings. Bulletin of the Lebedev Physics Institute, 2014, 41, 243-246.	0.1	3
42	Sn-enriched Ge/GeSn nanostructures grown by MBE on (001) GaAs and Si wafers. Semiconductors, 2015, 49, 1564-1570.	0.2	3
43	Temperature dependence of photoluminescence of GaAs/AlGaAs quantum rings. Journal of Physics: Conference Series, 2015, 643, 012073.	0.3	3
44	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
45	Electron Transport in Modulation-Doped InAlAs/InGaAs/InAlAs Heterostructures in High Electric Fields. Acta Physica Polonica A, 2011, 119, 170-172.	0.2	3
46	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
47	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
48	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
49	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
50	Eigenstate modelling in arbitrary shaped nanostructres with gradual heterointerfaces. Journal of Physics: Conference Series, 2016, 690, 012016.	0.3	2
51	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
52	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
53	‹title›Structural and electrophysical properties of pseudomorphic GaAs/InGaAs/GaAs quantum wells: effect of thin central AlAs barrier‹/title›. , 2006, , .		1
54	Effect of the spacer growth temperature on the electrophysical and structural properties of PHEMTs. Technical Physics, 2007, 52, 440-445.	0.2	1

#	Article	IF	Citations
55	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
56	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
57	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
58	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
59	Electron magnetotransport in coupled quantum wells with double-sided doping. Semiconductors, 2004, 38, 1326-1331.	0.2	0
60	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
61	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
62	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
63	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
64	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
65	High accuracy magnetic field sensors with wide operation temperature range. IOP Conference Series: Materials Science and Engineering, 2016, 151, 012029.	0.3	0
66	Electron properties of surface InGaAs/InAlAs quantum wells with inverted doping on InP substrates. Semiconductors, 2017, 51, 760-765.	0.2	0
67	Effect of Different De-Embedding Techniques on Small-Signal Parameters of X-Band Low-Noise Amplifier. , 2021, , .		0
68	Nonlinear plasmon-exciton infrared photodetector operating in the two-photon absorption mode. , 2022, , .		0