

Sergey A Dvoretzkiy

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

203
papers

2,409
citations

28
h-index

40
g-index

216
ext. papers

2,984
ext. citations

2.2
avg, IF

4.72
L-index

#	Paper	IF	Citations
203	Engineering topological phases in triple HgTe/CdTe quantum wells.. <i>Scientific Reports</i> , 2022 , 12, 2617	4.9	0
202	Edge and Bulk Transport in a Two-Dimensional Topological Insulator Based on a CdHgTe Quantum Well. <i>JETP Letters</i> , 2022 , 115, 202-207	1.2	0
201	Generation of Terahertz Radiation in InP:Fe Crystals Due to Second-Order Lattice Nonlinearity. <i>Semiconductors</i> , 2021 , 55, 785	0.7	
200	Toward Peltier-cooled mid-infrared HgCdTe lasers: Analyzing the temperature quenching of stimulated emission at ~6 μ m wavelength from HgCdTe quantum wells. <i>Journal of Applied Physics</i> , 2021 , 130, 214302	2.5	1
199	Mid-IR stimulated emission in Hg(Cd)Te/CdHgTe quantum well structures up to 200 K due to suppressed Auger recombination. <i>Laser Physics</i> , 2021 , 31, 015801	1.2	2
198	Photothermal Ionization Spectroscopy of Mercury Vacancies in HgCdTe Epitaxial Films. <i>JETP Letters</i> , 2021 , 113, 402-408	1.2	0
197	Auger recombination in narrow gap HgCdTe/CdHgTe quantum well heterostructures. <i>Journal of Applied Physics</i> , 2021 , 129, 133106	2.5	4
196	Distinction between electron states formed at topological insulator interfaces with the trivial phase and vacuum. <i>Scientific Reports</i> , 2021 , 11, 11638	4.9	
195	Terahertz Magnetospectroscopy of Cyclotron Resonances from Topological Surface States in Thick Films of Cd _x Hg _{1-x} Te. <i>Physica Status Solidi (B): Basic Research</i> , 2021 , 258, 2000023	1.3	5
194	Multiple crossings of Landau levels of two-dimensional fermions in double HgTe quantum wells. <i>Physical Review B</i> , 2021 , 103,	3.3	1
193	Express Characterization of the HgCdTe/CdHgTe Quantum Well Waveguide Heterostructures with the Quasi-Relativistic Carrier Dispersion Law by Room-Temperature Photoluminescence Spectroscopy. <i>Technical Physics Letters</i> , 2021 , 47, 154-157	0.7	1
192	THz polarization-dependent response of antenna-coupled HgCdTe photoconductors under an external constant electric field. <i>Semiconductor Science and Technology</i> , 2021 , 36, 105009	1.8	0
191	Non-local terahertz photoconductivity in the topological phase of HgCdTe. <i>Scientific Reports</i> , 2021 , 11, 1587	4.9	3
190	Characterization of Crystal Perfection in the Layers of (013)HgCdTe/CdTe/ZnTe/GaAs Heterostructures via the Second Harmonic Generation Method. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2021 , 57, 458-467	0.6	
189	Effect of Internal Optical Losses on the Generation of Mid-IR Stimulated Emission in Waveguide Heterostructures with HgCdTe/CdHgTe Quantum Wells. <i>Semiconductors</i> , 2021 , 55, 899-902	0.7	
188	Preparation of Atomically Clean and Structurally Ordered Surfaces of Epitaxial CdTe Films for Subsequent Epitaxy. <i>Semiconductors</i> , 2021 , 55, S62-S66	0.7	0
187	Magneto-intersubband oscillations in two-dimensional systems with an energy spectrum split due to spin-orbit interaction. <i>Physical Review B</i> , 2020 , 101,	3.3	2

186	Two-dimensional topological insulator state in double HgTe quantum well. <i>Physical Review B</i> , 2020 , 101,	3.3	5
185	Density of states measurements for the heavy subband of holes in HgTe quantum wells. <i>Physical Review B</i> , 2020 , 101,	3.3	1
184	Apparent PT-symmetric terahertz photoconductivity in the topological phase of HgCdTe-based structures. <i>Scientific Reports</i> , 2020 , 10, 2377	4.9	7
183	Possibilities of Characterizing the Crystal Parameters of CdxHg1-xTe Structures on GaAs Substrates by the Method of Generation of the Probe-Radiation Second Harmonic in Reflection Geometry. <i>Physics of the Solid State</i> , 2020 , 62, 252-259	0.8	3
182	HgCdTe-Based 640 \times 12 Matrix Midwave Infrared Photodetector. <i>Journal of Communications Technology and Electronics</i> , 2020 , 65, 316-320	0.5	1
181	Symmetry breaking and circular photogalvanic effect in epitaxial CdxHg1-xTe films. <i>Physical Review Materials</i> , 2020 , 4,	3.2	10
180	Quantum Hall effect and Landau levels in the three-dimensional topological insulator HgTe. <i>Physical Review Research</i> , 2020 , 2,	3.9	7
179	Investigation of Stimulated Emission from HgTe/CdHgTe Quantum-Well Heterostructures in the 3 μ m Atmospheric Transparency Window. <i>Semiconductors</i> , 2020 , 54, 1365-1370	0.7	
178	Mid-infrared stimulated emission in HgCdTe/CdHgTe quantum well heterostructures at room temperature. <i>Optical Engineering</i> , 2020 , 60,	1.1	2
177	Effects of the Electron-Electron Interaction in the Magneto-Absorption Spectra of HgTe/CdHgTe Quantum Wells with an Inverted Band Structure. <i>JETP Letters</i> , 2020 , 112, 508-512	1.2	0
176	Molecular Beam Epitaxy of CdHgTe: Current State and Horizons. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2020 , 56, 456-469	0.6	2
175	Topological insulators based on HgTe. <i>Physics-Uspexhi</i> , 2020 , 63, 629-647	2.8	5
174	Investigation of the Photosensitivity of Narrow-Gap and Gapless HgCdTe Solid Solutions in the Terahertz and Sub-Terahertz Range. <i>Semiconductors</i> , 2020 , 54, 1096-1102	0.7	0
173	Anisotropy of the in-plane g-factor of electrons in HgTe quantum wells. <i>Physical Review B</i> , 2020 , 101,	3.3	1
172	Unconventional reentrant quantum Hall effect in a HgTe/CdHgTe double quantum well. <i>Physical Review B</i> , 2020 , 102,	3.3	2
171	Effective Mass and g-Factor of Two-Dimensional HgTe δ -Band Electrons: Shubnikov-de Haas Oscillations. <i>Semiconductors</i> , 2020 , 54, 982-990	0.7	0
170	Many-particle effects in optical transitions from zero-mode Landau levels in HgTe quantum wells. <i>Physical Review B</i> , 2020 , 102,	3.3	2
169	Probing States of a Double Acceptor in CdHgTe Heterostructures via Optical Gating. <i>JETP Letters</i> , 2020 , 111, 575-581	1.2	2

168	Transport Features in the Topological Phase Hg _{0.87} Cd _{0.13} Te under Terahertz Photoexcitation. <i>Semiconductors</i> , 2020 , 54, 1064-1068	0.7	
167	Continuous-Wave Stimulated Emission in the 10 ¹⁴ -THz Range under Optical Excitation in HgCdTe/CdHgTe-QW Structures with Quasirelativistic Dispersion. <i>Semiconductors</i> , 2020 , 54, 1371-1375	0.7	1
166	Magnetic Susceptibility Measurements in HgTe Quantum Wells in a Perpendicular Magnetic Field. <i>JETP Letters</i> , 2020 , 111, 633-638	1.2	2
165	TEM studies of structural defects in HgTe/HgCdTe quantum wells. <i>Applied Nanoscience (Switzerland)</i> , 2020 , 10, 2867-2871	3.3	2
164	Impact Ionization Induced by Terahertz Radiation in HgTe Quantum Wells of Critical Thickness. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2020 , 41, 1155-1169	2.2	1
163	Second-Harmonic Generation of Subterahertz Gyrotron Radiation by Frequency Doubling in InP:Fe and Its Application for Magnetospectroscopy of Semiconductor Structures. <i>Semiconductors</i> , 2019 , 53, 1217-1221	0.7	4
162	Evolution of the Impurity Photoconductivity in CdHgTe Epitaxial Films with Temperature. <i>Semiconductors</i> , 2019 , 53, 1266-1271	0.7	1
161	Study of the Auger Recombination Energy Threshold in a Series of Waveguide Heterostructures with HgTe/Cd _{0.7} Hg _{0.3} Te QWs Near 14 THz. <i>Semiconductors</i> , 2019 , 53, 1154-1157	0.7	4
160	Determining the Compositional Profile of HgTe/CdxHg _{1-x} Te Quantum Wells by Single-Wavelength Ellipsometry. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2019 , 127, 340-346	0.7	8
159	A Megapixel Matrix Photodetector of the Middle Infrared Range. <i>Journal of Communications Technology and Electronics</i> , 2019 , 64, 1011-1015	0.5	2
158	Spin splitting of surface states in HgTe quantum wells. <i>Low Temperature Physics</i> , 2019 , 45, 159-164	0.7	3
157	Topological surface states in thick partially relaxed HgTe films. <i>Physical Review B</i> , 2019 , 99,	3.3	8
156	Magnetoabsorption in HgCdTe/CdHgTe Quantum Wells in Tilted Magnetic Fields. <i>JETP Letters</i> , 2019 , 109, 191-197	1.2	1
155	High-frequency impact ionization and nonlinearity of photocurrent induced by intense terahertz radiation in HgTe-based quantum well structures. <i>Physical Review B</i> , 2019 , 99,	3.3	2
154	Experimental Observation of Temperature-Driven Topological Phase Transition in HgTe/CdHgTe Quantum Wells. <i>Condensed Matter</i> , 2019 , 4, 27	1.8	2
153	Features of Photoluminescence of Double Acceptors in HgTe/CdHgTe Heterostructures with Quantum Wells in a Terahertz Range. <i>JETP Letters</i> , 2019 , 109, 657-662	1.2	6
152	Suppressed Auger scattering and tunable light emission of Landau-quantized massless Kane electrons. <i>Nature Photonics</i> , 2019 , 13, 783-787	33.9	8
151	Topological Protection Brought to Light by the Time-Reversal Symmetry Breaking. <i>Physical Review Letters</i> , 2019 , 123, 056801	7.4	11

150	An Optical Study of Disordering in Cadmium Mercury Telluride Solid Solutions. <i>Technical Physics Letters</i> , 2019 , 45, 553-556	0.7	0
149	Magneto-transport in inverted HgTe quantum wells. <i>Npj Quantum Materials</i> , 2019 , 4,	5	9
148	On the Thermal Activation of Conductivity Electrons in a p-Type HgTe/CdHgTe Double Quantum Well with HgTe Layers of Critical Width. <i>Semiconductors</i> , 2019 , 53, 919-922	0.7	3
147	Residual-Photoconductivity Spectra in HgTe/CdHgTe Quantum-Well Heterostructures. <i>Semiconductors</i> , 2019 , 53, 1363-1366	0.7	2
146	Photodetectors with 384 × 88 Matrix Elements for the Infrared Range of 8–10 Microns. <i>Journal of Communications Technology and Electronics</i> , 2019 , 64, 1024-1029	0.5	3
145	Express Characterization of Crystalline Perfection of Cd _x Hg _{1-x} Te Structures by Reflection Second Harmonic Generation of Probing Radiation. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2019 , 55, 447-454	0.6	2
144	Features of Magneto-Intersubband Oscillations in HgTe Quantum Wells. <i>JETP Letters</i> , 2019 , 110, 301-305.	1.2	5
143	Shubnikov-de Haas Oscillations in a Three-Dimensional Topological Insulator Based on a Strained HgTe Film in an Inclined Magnetic Field. <i>JETP Letters</i> , 2019 , 109, 799-805	1.2	2
142	Landau level spectroscopy of valence bands in HgTe quantum wells: effects of symmetry lowering. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 145501	1.8	10
141	Temperature-Induced Topological Phase Transition in HgTe Quantum Wells. <i>Physical Review Letters</i> , 2018 , 120, 086401	7.4	28
140	Probing spin helical surface states in topological HgTe nanowires. <i>Physical Review B</i> , 2018 , 97,	3.3	32
139	Stimulated emission in the 2.8-3.5 μm wavelength range from Peltier cooled HgTe/CdHgTe quantum well heterostructures. <i>Optics Express</i> , 2018 , 26, 12755-12760	3.3	18
138	Electron Effective Mass and g Factor in Wide HgTe Quantum Wells. <i>Semiconductors</i> , 2018 , 52, 12-18	0.7	2
137	Magneto-optical Studies and Stimulated Emission in Narrow Gap HgTe/CdHgTe Structures in the Very Long Wavelength Infrared Range. <i>Semiconductors</i> , 2018 , 52, 436-441	0.7	
136	Transmission Spectra of HgTe-Based Quantum Wells and Films in the Far-Infrared Range. <i>Physics of the Solid State</i> , 2018 , 60, 778-782	0.8	1
135	Terahertz Photoluminescence of Double Acceptors in Bulky Epitaxial HgCdTe Layers and HgTe/CdHgTe Structures with Quantum Wells. <i>Journal of Experimental and Theoretical Physics</i> , 2018 , 127, 1125-1129	1	4
134	Advanced Design of Scanning Infrared Focal Plane Arrays. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2018 , 54, 569-575	0.6	0
133	Terahertz Cyclotron Photoconductivity in a Highly Unbalanced Two-Dimensional Electron Hole System. <i>JETP Letters</i> , 2018 , 108, 247-252	1.2	5

132	Bipolar Persistent Photoconductivity in HgTe/CdHgTe (013) Double Quantum-Well Heterostructures. <i>Semiconductors</i> , 2018 , 52, 1586-1589	0.7	5
131	Polarization-Sensitive Fourier-Transform Spectroscopy of HgTe/CdHgTe Quantum Wells in the Far Infrared Range in a Magnetic Field. <i>JETP Letters</i> , 2018 , 108, 329-334	1.2	2
130	HgCdTe based quantum well heterostructures for long-wavelength lasers operating in 5 - 15 THz range. <i>Journal of Physics: Conference Series</i> , 2018 , 1092, 012126	0.3	
129	Magnetoconductivity and Terahertz Response of a HgCdTe Epitaxial Layer. <i>Sensors</i> , 2018 , 18,	3.8	3
128	Two-dimensional semimetal in HgTe quantum well under hydrostatic pressure. <i>Physical Review B</i> , 2018 , 98,	3.3	1
127	Magneto-optics of HgTe/CdTe Quantum Wells with Giant Rashba Splitting in Magnetic Fields up to 34 T. <i>Semiconductors</i> , 2018 , 52, 1386-1391	0.7	0
126	Radiative recombination in narrow gap HgTe/CdHgTe quantum well heterostructures for laser applications. <i>Journal of Physics Condensed Matter</i> , 2018 , 30, 495301	1.8	10
125	Effect of Features of the Band Spectrum on the Characteristics of Stimulated Emission in Narrow-Gap Heterostructures with HgCdTe Quantum Wells. <i>Semiconductors</i> , 2018 , 52, 1375-1379	0.7	4
124	Non-equilibrium electron transport induced by terahertz radiation in the topological and trivial phases of Hg Cd Te. <i>Beilstein Journal of Nanotechnology</i> , 2018 , 9, 1035-1039	3	10
123	Electrical Properties of the V-Defects of Epitaxial HgCdTe. <i>Journal of Electronic Materials</i> , 2017 , 46, 4435-4438	1.4	3
122	Activation transport under quantum Hall regime in HgTe-based heterostructure. <i>Low Temperature Physics</i> , 2017 , 43, 485-490	0.7	3
121	HgCdTe-based heterostructures for terahertz photonics. <i>APL Materials</i> , 2017 , 5, 035503	5.7	33
120	Polarization Pyrometry of Layered Semiconductor Structures under Conditions of Low-Temperature Technological Processes. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2017 , 53, 630-638	0.6	2
119	Robust helical edge transport at $\nu=0$ quantum Hall state. <i>Physical Review B</i> , 2017 , 96,	3.3	6
118	Valence band energy spectrum of HgTe quantum wells with an inverted band structure. <i>Physical Review B</i> , 2017 , 96,	3.3	22
117	Photogalvanic probing of helical edge channels in two-dimensional HgTe topological insulators. <i>Physical Review B</i> , 2017 , 95,	3.3	39
116	Ballistic geometric resistance resonances in a single surface of a topological insulator. <i>Nature Communications</i> , 2017 , 8, 2023	17.4	18
115	Activation conductivity in HgTe/CdHgTe quantum wells at integer Landau level filling factors: Role of the random potential. <i>Semiconductors</i> , 2017 , 51, 1562-1570	0.7	

114	On the band spectrum in p-type HgTe/CdHgTe heterostructures and its transformation under temperature variation. <i>Semiconductors</i> , 2017 , 51, 1531-1536	0.7	5
113	Terahertz Photoconductivity in Hg _{1-x} Cd _x Te near the transition from the direct to inverted spectrum. <i>JETP Letters</i> , 2017 , 106, 162-166	1.2	10
112	Stimulated emission from HgCdTe quantum well heterostructures at wavelengths up to 19.5 μ m. <i>Applied Physics Letters</i> , 2017 , 111, 192101	3.4	44
111	Temperature-driven single-valley Dirac fermions in HgTe quantum wells. <i>Physical Review B</i> , 2017 , 96,	3.3	23
110	Terahertz photoconductivity of double acceptors in narrow gap HgCdTe epitaxial films grown by molecular beam epitaxy on GaAs(013) and Si(013) substrates. <i>Semiconductor Science and Technology</i> , 2017 , 32, 095007	1.8	17
109	Investigation of HgCdTe waveguide structures with quantum wells for long-wavelength stimulated emission. <i>Semiconductors</i> , 2017 , 51, 1557-1561	0.7	6
108	Investigation of the surface-potential distribution of epitaxial CdHgTe films. <i>Journal of Surface Investigation</i> , 2016 , 10, 1096-1100	0.5	1
107	The noise model of CTIA-based pixel of SWIR HgCdTe focal plane arrays 2016 ,		2
106	Magnetotransport in double quantum well with inverted energy spectrum: HgTe/CdHgTe. <i>Physical Review B</i> , 2016 , 93,	3.3	13
105	Spin-orbit splitting of valence and conduction bands in HgTe quantum wells near the Dirac point. <i>Physical Review B</i> , 2016 , 93,	3.3	28
104	Probing Quantum Capacitance in a 3D Topological Insulator. <i>Physical Review Letters</i> , 2016 , 116, 166802	7.4	34
103	Methodological and instrumental problems in high-precision in situ ellipsometry diagnostics of the mercury cadmium telluride layer composition in molecular beam epitaxy. <i>Instruments and Experimental Techniques</i> , 2016 , 59, 857-864	0.5	4
102	Magneto spectroscopy of double HgTe/CdHgTe quantum wells. <i>Semiconductors</i> , 2016 , 50, 1532-1538	0.7	8
101	Temperature-driven massless Kane fermions in HgCdTe crystals. <i>Nature Communications</i> , 2016 , 7, 12576	17.4	47
100	Zeeman splitting of the conduction band of HgTe quantum wells with a semimetallic spectrum. <i>JETP Letters</i> , 2016 , 104, 241-247	1.2	4
99	Cell of the silicon integrated reading circuit with built-in analog-digital converter. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2016 , 52, 381-387	0.6	
98	Defects in mercury-cadmium telluride heteroepitaxial structures grown by molecular-beam epitaxy on silicon substrates. <i>Semiconductors</i> , 2016 , 50, 208-211	0.7	2
97	Observation of topological phase transition by terahertz photoconductivity in HgTe-based transistors. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2016 , 13, 534-537		2

96	CdHgTe heterostructures for new-generation IR photodetectors operating at elevated temperatures. <i>Semiconductors</i> , 2016 , 50, 1626-1629	0.7	4
95	Capacitance spectroscopy of a system of gapless Dirac fermions in a HgTe quantum well. <i>JETP Letters</i> , 2016 , 104, 859-863	1.2	8
94	Long-wavelength stimulated emission and carrier lifetimes in HgCdTe-based waveguide structures with quantum wells. <i>Semiconductors</i> , 2016 , 50, 1651-1656	0.7	7
93	Long wavelength stimulated emission up to 9.5 μm from HgCdTe quantum well heterostructures. <i>Applied Physics Letters</i> , 2016 , 108, 092104	3.4	25
92	Weak antilocalization in a three-dimensional topological insulator based on a high-mobility HgTe film. <i>JETP Letters</i> , 2016 , 104, 302-308	1.2	3
91	Mercury vacancies as divalent acceptors in Hg _y Te _{1-y} /Cd _x Hg _{1-x} Te structures with quantum wells. <i>Semiconductors</i> , 2016 , 50, 1662-1668	0.7	5
90	HgTe/CdHgTe double quantum well with a spectrum of bilayer graphene and peculiarities of its magnetotransport. <i>JETP Letters</i> , 2016 , 104, 403-410	1.2	9
89	Quantum hall effect in a system of gapless Dirac fermions in HgTe quantum wells. <i>JETP Letters</i> , 2015 , 100, 724-730	1.2	12
88	Three-dimensional topological insulator based on a strained HgTe film. <i>Low Temperature Physics</i> , 2015 , 41, 82-89	0.7	3
87	Surface states in a HgTe quantum well and scattering by surface roughness. <i>JETP Letters</i> , 2015 , 101, 330-333	1.2	5
86	Anticrossing of Landau levels in HgTe/CdHgTe (013) quantum wells with an inverted band structure. <i>JETP Letters</i> , 2015 , 100, 790-794	1.2	23
85	Energy spectrum and transport in narrow HgTe quantum wells. <i>Semiconductors</i> , 2015 , 49, 39-43	0.7	2
84	Acceptor states in heteroepitaxial CdHgTe films grown by molecular-beam epitaxy. <i>Semiconductors</i> , 2015 , 49, 367-372	0.7	9
83	Persistence of a two-dimensional topological insulator state in wide HgTe quantum wells. <i>Physical Review Letters</i> , 2015 , 114, 126802	7.4	48
82	Conductance of a lateral p-n junction in two-dimensional HgTe structures with an inverted spectrum: The role of edge states. <i>JETP Letters</i> , 2015 , 101, 469-473	1.2	1
81	Exchange enhancement of the electron g-factor in a two-dimensional semimetal in HgTe quantum wells. <i>Semiconductors</i> , 2015 , 49, 1627-1633	0.7	5
80	Shot noise of the edge transport in the inverted band HgTe quantum wells. <i>JETP Letters</i> , 2015 , 101, 708-713	1.2	20
79	Evidence on the macroscopic length scale spin coherence for the edge currents in a narrow HgTe quantum well. <i>JETP Letters</i> , 2015 , 101, 814-819	1.2	14

78	Cyclotron-resonance-assisted photocurrents in surface states of a three-dimensional topological insulator based on a strained high-mobility HgTe film. <i>Physical Review B</i> , 2015 , 92,	3.3	61
77	Analysis of charge-carrier diffusion in the photosensing films of HgCdTe infrared focal plane array photodetectors. <i>Journal of Applied Physics</i> , 2015 , 118, 124508	2.5	6
76	Terahertz detection of magnetic field-driven topological phase transition in HgTe-based transistors. <i>Applied Physics Letters</i> , 2015 , 107, 152101	3.4	10
75	Investigation of possibility of VLWIR lasing in HgCdTe based heterostructures. <i>Journal of Physics: Conference Series</i> , 2015 , 647, 012008	0.3	3
74	Temperature scaling in the quantum-Hall-effect regime in a HgTe quantum well with an inverted energy spectrum. <i>Semiconductors</i> , 2015 , 49, 1545-1549	0.7	9
73	Investigation of magnetoabsorption at different temperatures in HgTe/CdHgTe quantum-well heterostructures in pulsed magnetic fields. <i>Semiconductors</i> , 2015 , 49, 1611-1615	0.7	5
72	Metal-insulator transition in a HgTe quantum well under hydrostatic pressure. <i>JETP Letters</i> , 2014 , 98, 843-847	1.2	14
71	Photoluminescence of CdHgTe solid solutions subjected to low-energy ion treatment. <i>Semiconductors</i> , 2014 , 48, 195-198	0.7	4
70	Observation of three-dimensional massless Kane fermions in a zinc-blende crystal. <i>Nature Physics</i> , 2014 , 10, 233-238	16.2	143
69	Efficient long wavelength interband photoluminescence from HgCdTe epitaxial films at wavelengths up to 26 μm . <i>Applied Physics Letters</i> , 2014 , 104, 072102	3.4	28
68	Time resolved photoluminescence spectroscopy of narrow gap $\text{Hg}_{1-x}\text{Cd}_x\text{Te}/\text{Cd}_y\text{Hg}_{1-y}\text{Te}$ quantum well heterostructures. <i>Applied Physics Letters</i> , 2014 , 105, 022102	3.4	23
67	Hole transport and valence-band dispersion law in a HgTe quantum well with a normal energy spectrum. <i>Physical Review B</i> , 2014 , 89,	3.3	14
66	Transport properties of a 3D topological insulator based on a strained high-mobility HgTe film. <i>Physical Review Letters</i> , 2014 , 112, 196801	7.4	56
65	Temperature dependence of the resistance of a two-dimensional topological insulator in a HgTe quantum well. <i>Physical Review B</i> , 2014 , 89,	3.3	53
64	Terahertz electron transport in a two-dimensional topological insulator in a HgTe quantum well. <i>JETP Letters</i> , 2014 , 99, 290-294	1.2	7
63	Determination of charge-carrier diffusion length in the photosensing layer of HgCdTe n-on-p photovoltaic infrared focal plane array detectors. <i>Applied Physics Letters</i> , 2014 , 104, 092112	3.4	6
62	Giant photocurrents in a Dirac fermion system at cyclotron resonance. <i>Physical Review B</i> , 2013 , 87,	3.3	55
61	Increasing the mechanical strength of hybrid photodetectors based on mercury-cadmium-telluride heteroepitaxial layers. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2013 , 49, 94-100	0.6	1

60	Dual-wavelength stimulated emission from a double-layer Cd x Hg1-x Te structure at wavelengths of 2 and 3 μ m. <i>JETP Letters</i> , 2013 , 97, 358-361	1.2	1
59	Weak localization of Dirac fermions in HgTe quantum wells. <i>JETP Letters</i> , 2013 , 96, 730-734	1.2	22
58	High-temperature photoluminescence of CdHgTe solid solutions grown by molecular-beam epitaxy. <i>Technical Physics</i> , 2013 , 58, 1536-1539	0.5	4
57	Photoluminescence of HgCdTe nanostructures grown by molecular beam epitaxy on GaAs. <i>Opto-electronics Review</i> , 2013 , 21,	2.4	6
56	Specific features of the spectra and relaxation kinetics of long-wavelength photoconductivity in narrow-gap HgCdTe epitaxial films and heterostructures with quantum wells. <i>Semiconductors</i> , 2013 , 47, 1438-1441	0.7	15
55	The effect of electron-hole scattering on transport properties of a 2D semimetal in the HgTe quantum well. <i>Journal of Experimental and Theoretical Physics</i> , 2013 , 117, 933-943	1	9
54	Two-dimensional semimetal in wide HgTe quantum wells: Charge-carrier energy spectrum and magnetotransport. <i>Semiconductors</i> , 2013 , 47, 1562-1566	0.7	3
53	HgCdTe structures for dual-band photodetectors operating in the 3-8 and 8-12 μ m spectral ranges. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2013 , 49, 476-484	0.6	1
52	Two-dimensional semimetal in a wide HgTe quantum well: Magnetotransport and energy spectrum. <i>Physical Review B</i> , 2013 , 88,	3.3	33
51	Nonlocal resistance and its fluctuations in microstructures of band-inverted HgTe/(Hg,Cd)Te quantum wells. <i>Physical Review B</i> , 2013 , 88,	3.3	40
50	Transition from insulating to metallic phase induced by in-plane magnetic field in HgTe quantum wells. <i>Physical Review B</i> , 2013 , 88,	3.3	18
49	Linear magnetoresistance in HgTe quantum wells. <i>Physical Review B</i> , 2013 , 87,	3.3	32
48	Spectra and kinetics of THz photoconductivity in narrow-gap Hg _{1-x} Cd _x Te (x). <i>Semiconductor Science and Technology</i> , 2013 , 28, 125007	1.8	21
47	The suppression of magnetic level coincidences in tilted magnetic fields in the HgTe quantum well as a consequence of electronic phase transitions under quantum hall effect conditions. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2012 , 76, 204-206	0.4	1
46	Cyclotron resonance in HgTe/CdTe(013) narrowband heterostructures in quantized magnetic fields. <i>JETP Letters</i> , 2012 , 95, 406-410	1.2	11
45	Two-dimensional semimetal-insulator transition in HgTe-based quantum wells induced by a longitudinal magnetic field. <i>JETP Letters</i> , 2012 , 96, 251-254	1.2	1
44	Cyclotron resonance in HgTe/CdTe-based heterostructures in high magnetic fields. <i>Nanoscale Research Letters</i> , 2012 , 7, 534	5	39
43	Electrical and optical properties of CdHgTe films grown by molecular-beam epitaxy on silicon substrates. <i>Semiconductors</i> , 2012 , 46, 1341-1345	0.7	4

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41	Cyclotron resonance of Dirac fermions in HgTe quantum wells. <i>JETP Letters</i> , 2012 , 94, 816-819	1.2	28
40	Unconventional Hall effect near charge neutrality point in a two-dimensional electron-hole system. <i>Physical Review B</i> , 2012 , 86,	3.3	13
39	Transport in disordered two-dimensional topological insulators. <i>Physical Review B</i> , 2011 , 84,	3.3	96
38	Two-dimensional electron-hole system in HgTe-based quantum wells with surface orientation (112). <i>Physical Review B</i> , 2011 , 83,	3.3	42
37	Cyclotron resonance in a two-dimensional semimetal based on a HgTe quantum well. <i>JETP Letters</i> , 2011 , 93, 170-173	1.2	22
36	Quantum Hall effect in a quasi-three-dimensional HgTe film. <i>JETP Letters</i> , 2011 , 93, 526-529	1.2	5
35	Infrared focal plane assemblies based on HgCdTe/Si(310) heterostructure. <i>Technical Physics Letters</i> , 2011 , 37, 148-150	0.7	1
34	Electron probe microanalysis of HgCdTe heteroepitaxial structures with CdTe buffer layers. <i>Journal of Surface Investigation</i> , 2011 , 5, 934-940	0.5	1
33	HgCdTe heterostructures on Si (310) substrates for midinfrared focal plane arrays. <i>Semiconductors</i> , 2011 , 45, 385-391	0.7	30
32	Photoluminescence of Hg _{1-x} Cd _x Te based heterostructures grown by molecular-beam epitaxy. <i>Semiconductors</i> , 2011 , 45, 872-879	0.7	19
31	Growing of HgCdTe heterostructures with in situ ellipsometric control. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2011 , 47, 426-435	0.6	6
30	Weak antilocalization in HgTe quantum wells near a topological transition. <i>JETP Letters</i> , 2010 , 91, 347-350	1.2	22
29	Spin splitting in HgTe/CdHgTe (013) quantum well heterostructures. <i>JETP Letters</i> , 2010 , 92, 63-66	1.2	20
28	Terahertz spectroscopy of quantum-well narrow-bandgap HgTe/CdTe-based heterostructures. <i>JETP Letters</i> , 2010 , 92, 756-761	1.2	24
27	Growth of HgTe Quantum Wells for IR to THz Detectors. <i>Journal of Electronic Materials</i> , 2010 , 39, 918-923	3.9	100
26	Arsenic incorporation in MBE-grown HgCdTe studied with the use of ion milling. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010 , 7, 1618-1620		4
25	Optical properties of molecular beam epitaxy-grown HgCdTe structures with potential wells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2010 , 7, 1621-1623		6

24	All electrical detection of the stokes parameters of IR/THz radiation 2009 ,		1
23	Scattering processes in a two-dimensional semimetal. <i>JETP Letters</i> , 2009 , 89, 290-293	1.2	32
22	HgCdTe heterostructures on Si(310) substrates for infrared photodetectors. <i>Optoelectronics, Instrumentation and Data Processing</i> , 2009 , 45, 301-307	0.6	
21	Determining the normal and lateral dark current components in n-p photodiodes based on p-Cd x Hg1-x Te heteroepitaxial structures with x = 0.22. <i>Technical Physics Letters</i> , 2009 , 35, 552-555	0.7	
20	Ellipsometric in situ control of quantum nanostructures with gradient layers. <i>Technical Physics</i> , 2009 , 54, 1602-1606	0.5	3
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18	Two-dimensional electron-hole system in a HgTe-based quantum well. <i>JETP Letters</i> , 2008 , 87, 502-505	1.2	73
17	Cyclotron resonance photoconductivity of a two-dimensional electron gas in HgTe quantum wells. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008 , 40, 1885-1887	3	53
16	Ion-beam-induced modification of the electrical properties of vacancy-doped mercury cadmium telluride. <i>Technical Physics Letters</i> , 2008 , 34, 981-984	0.7	1
15	Dependence of the electrical parameters of MBE-grown Cd x Hg1-x Te films on the level of doping with indium. <i>Semiconductors</i> , 2008 , 42, 648-650	0.7	8
14	Effect of the arsenic cracking zone temperature on the efficiency of arsenic incorporation in CdHgTe films in molecular-beam epitaxy. <i>Semiconductors</i> , 2008 , 42, 651-654	0.7	4
13	Properties of MIS structures based on graded-gap HgCdTe grown by molecular beam epitaxy. <i>Semiconductors</i> , 2008 , 42, 1298-1303	0.7	9
12	Electrical properties of n-HgCdTe heteroepitaxial layers modified by ion etching. <i>Semiconductors</i> , 2008 , 42, 1413-1415	0.7	2
11	Quantum Hall liquid-insulator and plateau-to-plateau transitions in a high mobility 2D electron gas in an HgTe quantum well. <i>JETP Letters</i> , 2007 , 84, 565-569	1.2	10
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5	Magnetic-field dependences of the conductivity and hall factor in MBE-grown Cd _x Hg _{1-x} Te layers. <i>Semiconductors</i> , 2004 , 38, 1168-1171	0.7	10
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1	Molecular-beam epitaxy of mercury-cadmium-telluride solid solutions on alternative substrates. <i>Semiconductors</i> , 2001 , 35, 1045-1053	0.7	47