Sergey A Dvoretskiy

List of Publications by Year
in descending order

214	3,289	147801	197818
papers	citations	31 h-index	49 g-index

216	216	216	1325
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Observation of three-dimensional massless Kane fermions in a zinc-blende crystal. Nature Physics, 2014, 10, 233-238.	16.7	190
2	Growth of HgTe Quantum Wells for IR to THz Detectors. Journal of Electronic Materials, 2010, 39, 918-923.	2.2	137
3	Transport in disordered two-dimensional topological insulators. Physical Review B, 2011, 84, .	3.2	116
4	Two-dimensional electron-hole system in a HgTe-based quantum well. JETP Letters, 2008, 87, 502-505.	1.4	83
5	Cyclotron-resonance-assisted photocurrents in surface states of a three-dimensional topological insulator based on a strained high-mobility HgTe film. Physical Review B, 2015, 92, .	3.2	74
6	Transport Properties of a 3D Topological Insulator based on a Strained High-Mobility HgTe Film. Physical Review Letters, 2014, 112, 196801.	7.8	73
7	Temperature-driven massless Kane fermions in HgCdTe crystals. Nature Communications, 2016, 7, 12576.	12.8	73
8	Giant photocurrents in a Dirac fermion system at cyclotron resonance. Physical Review B, 2013, 87, .	3.2	65
9	Temperature dependence of the resistance of a two-dimensional topological insulator in a HgTe quantum well. Physical Review B, 2014, 89, .	3.2	63
10	Persistence of a Two-Dimensional Topological Insulator State in Wide HgTe Quantum Wells. Physical Review Letters, 2015, 114, 126802.	7.8	63
11	Photogalvanic probing of helical edge channels in two-dimensional HgTe topological insulators. Physical Review B, 2017, 95, .	3.2	61
12	Cyclotron resonance photoconductivity of a two-dimensional electron gas in HgTe quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1885-1887.	2.7	60
13	Molecular-beam epitaxy of mercury-cadmium-telluride solid solutions on alternative substrates. Semiconductors, 2001, 35, 1045-1053.	0.5	58
14	Stimulated emission from HgCdTe quantum well heterostructures at wavelengths up to 19.5â€‰Î¼m. Applied Physics Letters, 2017, 111, .	3.3	58
15	Two-dimensional electron-hole system in HgTe-based quantum wells with surface orientation (112). Physical Review B, 2011, 83, .	3.2	50
16	HgCdTe-based heterostructures for terahertz photonics. APL Materials, 2017, 5, .	5.1	49
17	Probing spin helical surface states in topological HgTe nanowires. Physical Review B, 2018, 97, .	3.2	48
18	Cyclotron resonance in HgTe/CdTe-based heterostructures in high magnetic fields. Nanoscale Research Letters, 2012, 7, 534.	5.7	47

#	Article	IF	Citations
19	Nonlocal resistance and its fluctuations in microstructures of band-inverted HgTe/(Hg,Cd)Te quantum wells. Physical Review B, 2013, 88, .	3.2	45
20	Probing Quantum Capacitance in a 3D Topological Insulator. Physical Review Letters, 2016, 116, 166802.	7.8	43
21	Temperature-Induced Topological Phase Transition in HgTe Quantum Wells. Physical Review Letters, 2018, 120, 086401.	7.8	43
22	Linear magnetoresistance in HgTe quantum wells. Physical Review B, 2013, 87, .	3.2	41
23	Fast detector of the ellipticity of infrared and terahertz radiation based on HgTe quantum well structures. Journal of Applied Physics, 2009, 105, 013106.	2.5	40
24	Spin-orbit splitting of valence and conduction bands in HgTe quantum wells near the Dirac point. Physical Review B, 2016, 93, .	3.2	38
25	Temperature-driven single-valley Dirac fermions in HgTe quantum wells. Physical Review B, 2017, 96, .	3.2	38
26	Scattering processes in a two-dimensional semimetal. JETP Letters, 2009, 89, 290-293.	1.4	36
27	Cyclotron resonance of Dirac ferions in HgTe quantum wells. JETP Letters, 2012, 94, 816-819.	1.4	35
28	Two-dimensional semimetal in a wide HgTe quantum well: Magnetotransport and energy spectrum. Physical Review B, 2013, 88, .	3.2	35
29	Efficient long wavelength interband photoluminescence from HgCdTe epitaxial films at wavelengths up to 26â€‰Î¼m. Applied Physics Letters, 2014, 104, .	3.3	35
30	HgCdTe heterostructures on Si (310) substrates for midinfrared focal plane arrays. Semiconductors, 2011, 45, 385-391.	0.5	34
31	Long wavelength stimulated emission up to 9.5â€‰Î¼m from HgCdTe quantum well heterostructures. Applied Physics Letters, 2016, 108, .	3.3	34
32	Weak localization of Dirac fermions in HgTe quantum wells. JETP Letters, 2013, 96, 730-734.	1.4	31
33	Valence band energy spectrum of HgTe quantum wells with an inverted band structure. Physical Review B, 2017, 96, .	3.2	30
34	Spectra and kinetics of THz photoconductivity in narrow-gap Hg_{1â€“x}Cd_xTe (x< 0.2) epitaxial films. Semiconductor Science and Technology, 2013, 28, 125007.	2.0	29
35	Shot noise of the edge transport in the inverted band HgTe quantum wells. JETP Letters, 2015, 101, 708-713.	1.4	29
36	Time resolved photoluminescence spectroscopy of narrow gap Hg1â^'xCdxTe/CdyHg1â^'yTe quantum well heterostructures. Applied Physics Letters, 2014, 105, 022102.	3.3	28

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37	Terahertz spectroscopy of quantum-well narrow-bandgap HgTe/CdTe-based heterostructures. JETP Letters, 2010, 92, 756-761.	1.4	27
38	Terahertz photoconductivity of double acceptors in narrow gap HgCdTe epitaxial films grown by molecular beam epitaxy on GaAs(013) and Si(013) substrates. Semiconductor Science and Technology, 2017, 32, 095007.	2.0	27
39	Anticrossing of Landau levels in HgTe/CdHgTe (013) quantum wells with an inverted band structure. JETP Letters, 2015, 100, 790-794.	1.4	26
40	Stimulated emission in the 28â€“35 Î¼m wavelength range from Peltier cooled HgTe/CdHgTe quantum well heterostructures. Optics Express, 2018, 26, 12755.	3.4	26
41	Non-equilibrium electron transport induced by terahertz radiation in the topological and trivial phases of Hg_{1â^'}_xCd_xTe. Beilstein Journal of Nanotechnology, 2018, 9, 1035-1039.	2.8	25
42	Topological Protection Brought to Light by the Time-Reversal Symmetry Breaking. Physical Review Letters, 2019, 123, 056801.	7.8	25
43	Weak antilocalization in HgTe quantum wells near a topological transition. JETP Letters, 2010, 91, 347-350.	1.4	24
44	Cyclotron resonance in a two-dimensional semimetal based on a HgTe quantum well. JETP Letters, 2011, 93, 170-173.	1.4	24
45	Spin splitting in HgTe/CdHgTe (013) quantum well heterostructures. JETP Letters, 2010, 92, 63-66.	1.4	23
46	Ballistic geometric resistance resonances in a single surface of a topological insulator. Nature Communications, 2017, 8, 2023.	12.8	23
47	Suppressed Auger scattering and tunable light emission of Landau-quantized massless Kane electrons. Nature Photonics, 2019, 13, 783-787.	31.4	23
48	Transition from insulating to metallic phase induced by in-plane magnetic field in HgTe quantum wells. Physical Review B, 2013, 88, .	3.2	22
49	Radiative recombination in narrow gap HgTe/CdHgTe quantum well heterostructures for laser applications. Journal of Physics Condensed Matter, 2018, 30, 495301.	1.8	22
50	Effect of low-temperature annealing on electrical properties of n-HgCdTe. Semiconductors, 2004, 38, 1172-1175.	0.5	21
51	Photoluminescence of Hg1 â^' x Cd x Te based heterostructures grown by molecular-beam epitaxy. Semiconductors, 2011, 45, 872-879.	0.5	21
52	Symmetry breaking and circular photogalvanic effect in epitaxial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cd</mml:mi><mml:mi>x</mml:mi></mml:msub></mml:m films. Physical Review Materials, 2020, 4, .	2.4	21
53	Specific features of the spectra and relaxation kinetics of long-wavelength photoconductivity in narrow-gap HgCdTe epitaxial films and heterostructures with quantum wells. Semiconductors, 2013, 47, 1438-1441.	0.5	18
54	Evidence on the macroscopic length scale spin coherence for the edge currents in a narrow HgTe quantum well. JETP Letters, 2015, 101, 814-819.	1.4	18

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55	Topological insulators based on HgTe. Physics-Uspekhi, 2020, 63, 629-647.	2.2	18
56	Hole transport and valence-band dispersion law in a HgTe quantum well with a normal energy spectrum. Physical Review B, 2014, 89, .	3.2	17
57	Determining the Compositional Profile of HgTe/CdxHg1Ââ€“ÂxTe Quantum Wells by Single-Wavelength Ellipsometry. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2019, 127, 340-346.	0.6	17
58	Coherent Emission in the Vicinity of 10 THz due to Auger-Suppressed Recombination of Dirac Fermions in HgCdTe Quantum Wells. ACS Photonics, 2021, 8, 3526-3535.	6.6	17
59	Metal-insulator transition in a HgTe quantum well under hydrostatic pressure. JETP Letters, 2014, 98, 843-847.	1.4	16
60	Quantum hall effect in a system of gapless Dirac fermions in HgTe quantum wells. JETP Letters, 2015, 100, 724-730.	1.4	16
61	Magnetotransport in double quantum well with inverted energy spectrum: HgTe/CdHgTe. Physical Review B, 2016, 93, .	3.2	16
62	Terahertz Photoconductivity in Hg1âˆ’x Cd x Te near the transition from the direct to inverted spectrum. JETP Letters, 2017, 106, 162-166.	1.4	16
63	Magneto-transport in inverted HgTe quantum wells. Npj Quantum Materials, 2019, 4, .	5.2	16
64	Unconventional Hall effect near charge neutrality point in a two-dimensional electron-hole system. Physical Review B, 2012, 86, .	3.2	15
65	Terahertz detection of magnetic field-driven topological phase transition in HgTe-based transistors. Applied Physics Letters, 2015, 107, .	3.3	13
66	Landau level spectroscopy of valence bands in HgTe quantum wells: effects of symmetry lowering. Journal of Physics Condensed Matter, 2019, 31, 145501.	1.8	13
67	Two-dimensional topological insulator state in double HgTe quantum well. Physical Review B, 2020, 101, .	3.2	13
68	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>4</mml:mn><mml:mi>Ï€</mml:mi></mml:mrow></mml: -periodic supercurrent tuned by an axial magnetic flux in topological insulator nanowires. Physical Review Research, 2022, 4, .	3.6	13
69	Cyclotron resonance in HgTe/CdTe(013) narrowband heterostructures in quantized magnetic fields. JETP Letters, 2012, 95, 406-410.	1.4	12
70	The effect of electron-hole scattering on transport properties of a 2D semimetal in the HgTe quantum well. Journal of Experimental and Theoretical Physics, 2013, 117, 933-943.	0.9	12
71	Capacitance spectroscopy of a system of gapless Dirac fermions in a HgTe quantum well. JETP Letters, 2016, 104, 859-863.	1.4	12
72	Robust helical edge transport at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î½</mml:mi><mml:mo>=</mml:mo><mml:mn>0</mml:mn></mml:m quantum Hall state. Physical Review B, 2017, 96, .	3.2	12

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73	Apparent PT-symmetric terahertz photoconductivity in the topological phase of Hg1â^'xCdxTe-based structures. Scientific Reports, 2020, 10, 2377.	3.3	12
74	Quantum Hall effect and Landau levels in the three-dimensional topological insulator HgTe. Physical Review Research, 2020, 2, .	3.6	12
75	Quantum Hall liquid-insulator and plateau-to-plateau transitions in a high mobility 2D electron gas in an HgTe quantum well. JETP Letters, 2007, 84, 565-569.	1.4	11
76	Effects of spin polarization in the HgTe quantum well. Physical Review B, 2012, 85, .	3.2	11
77	Temperature scaling in the quantum-Hall-effect regime in a HgTe quantum well with an inverted energy spectrum. Semiconductors, 2015, 49, 1545-1549.	0.5	11
78	HgTe/CdHgTe double quantum well with a spectrum of bilayer graphene and peculiarities of its magnetotransport. JETP Letters, 2016, 104, 403-410.	1.4	11
79	Topological surface states in thick partially relaxed HgTe films. Physical Review B, 2019, 99, .	3.2	11
80	Auger recombination in narrow gap HgCdTe/CdHgTe quantum well heterostructures. Journal of Applied Physics, 2021, 129, .	2.5	11
81	Magnetic-field dependences of the conductivity and hall factor in MBE-grown CdXHg1â^'X Te layers. Semiconductors, 2004, 38, 1168-1171.	0.5	10
82	Properties of MIS structures based on graded-gap HgCdTe grown by molecular beam epitaxy. Semiconductors, 2008, 42, 1298-1303.	0.5	10
83	Determination of charge-carrier diffusion length in the photosensing layer of HgCdTe n-on-p photovoltaic infrared focal plane array detectors. Applied Physics Letters, 2014, 104, 092112.	3.3	10
84	Acceptor states in heteroepitaxial CdHgTe films grown by molecular-beam epitaxy. Semiconductors, 2015, 49, 367-372.	0.5	10
85	Features of Photoluminescence of Double Acceptors in HgTe/CdHgTe Heterostructures with Quantum Wells in a Terahertz Range. JETP Letters, 2019, 109, 657-662.	1.4	10
86	Magneto-intersubband oscillations in two-dimensional systems with an energy spectrum split due to spin-orbit interaction. Physical Review B, 2020, 101, .	3.2	10
87	Dependence of the electrical parameters of MBE-grown Cd x Hg1 â^' x Te films on the level of doping with indium. Semiconductors, 2008, 42, 648-650.	0.5	9
88	Analysis of charge-carrier diffusion in the photosensing films of HgCdTe infrared focal plane array photodetectors. Journal of Applied Physics, 2015, 118, .	2.5	9
89	Magnetospectroscopy of double HgTe/CdHgTe quantum wells. Semiconductors, 2016, 50, 1532-1538.	0.5	9
90	Bipolar Persistent Photoconductivity in HgTe/CdHgTe (013) Double Quantum-Well Heterostructures. Semiconductors, 2018, 52, 1586-1589.	0.5	9

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91	Unconventional reentrant quantum Hall effect in a HgTe/CdHgTe double quantum well. Physical Review B, 2020, 102, .	3.2	9
92	Non-local terahertz photoconductivity in the topological phase of Hg1â^'xCdxTe. Scientific Reports, 2021, 11, 1587.	3.3	9
93	Optical properties of molecular beam epitaxyâ€grown HgCdTe structures with potential wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1621-1623.	0.8	8
94	On the band spectrum in p-type HgTe/CdHgTe heterostructures and its transformation under temperature variation. Semiconductors, 2017, 51, 1531-1536.	0.5	8
95	Terahertz Magnetospectroscopy of Cyclotron Resonances from Topological Surface States in Thick Films of Cd x Hg 1â^' x Te. Physica Status Solidi (B): Basic Research, 2021, 258, 2000023.	1.5	8
96	Growing HgTe/Cd0.735Hg0.265Te quantum wells by molecular beam epitaxy. Optoelectronics, Instrumentation and Data Processing, 2007, 43, 375-381.	0.6	7
97	Growing of HgCdTe heterostructures with in situ ellipsometric control. Optoelectronics, Instrumentation and Data Processing, 2011, 47, 426-435.	0.6	7
98	Photoluminescence of HgCdTe nanostructures grown by molecular beam epitaxy on GaAs. Opto-electronics Review, 2013, 21, .	2.4	7
99	Terahertz electron transport in a two-dimensional topological insulator in a HgTe quantum well. JETP Letters, 2014, 99, 290-294.	1.4	7
100	Surface states in a HgTe quantum well and scattering by surface roughness. JETP Letters, 2015, 101, 330-333.	1.4	7
101	Long-wavelength stimulated emission and carrier lifetimes in HgCdTe-based waveguide structures with quantum wells. Semiconductors, 2016, 50, 1651-1656.	0.5	7
102	Features of Magneto-Intersubband Oscillations in HgTe Quantum Wells. JETP Letters, 2019, 110, 301-305.	1.4	7
103	Mid-IR stimulated emission in Hg(Cd)Te/CdHgTe quantum well structures up to 200 K due to suppressed Auger recombination. Laser Physics, 2021, 31, 015801.	1.2	7
104	Toward Peltier-cooled mid-infrared HgCdTe lasers: Analyzing the temperature quenching of stimulated emission at â^¼6â€‰l¼m wavelength from HgCdTe quantum wells. Journal of Applied Physics, 2021, 130, .	2.5	7
105	Exchange enhancement of the electron g-factor in a two-dimensional semimetal in HgTe quantum wells. Semiconductors, 2015, 49, 1627-1633.	0.5	6
106	Investigation of possibility of VLWIR lasing in HgCdTe based heterostructures. Journal of Physics: Conference Series, 2015, 647, 012008.	0.4	6
107	Weak antilocalization in a three-dimensional topological insulator based on a high-mobility HgTe film. JETP Letters, 2016, 104, 302-308.	1.4	6
108	Mercury vacancies as divalent acceptors in Hg y Te1 â€“ y /Cd x Hg1 â€“ x Te structures with quantum wells. Semiconductors, 2016, 50, 1662-1668.	0.5	6

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109	Investigation of HgCdTe waveguide structures with quantum wells for long-wavelength stimulated emission. Semiconductors, 2017, 51, 1557-1561.	0.5	6
110	Terahertz Photoluminescence of Double Acceptors in Bulky Epitaxial HgCdTe Layers and HgTe/CdHgTe Structures with Quantum Wells. Journal of Experimental and Theoretical Physics, 2018, 127, 1125-1129.	0.9	6
111	Terahertz Cyclotron Photoconductivity in a Highly Unbalanced Two-Dimensional Electronâ€“Hole System. JETP Letters, 2018, 108, 247-252.	1.4	6
112	Effect of Features of the Band Spectrum on the Characteristics of Stimulated Emission in Narrow-Gap Heterostructures with HgCdTe Quantum Wells. Semiconductors, 2018, 52, 1375-1379.	0.5	6
113	Photodetectors with 384 Ã— 288 Matrix Elements for the Infrared Range of 8â€“10 Microns. Journal of Communications Technology and Electronics, 2019, 64, 1024-1029.	0.5	6
114	Second-Harmonic Generation of Subterahertz Gyrotron Radiation by Frequency Doubling in InP:Fe and Its Application for Magnetospectroscopy of Semiconductor Structures. Semiconductors, 2019, 53, 1217-1221.	0.5	6
115	High-frequency impact ionization and nonlinearity of photocurrent induced by intense terahertz radiation in HgTe-based quantum well structures. Physical Review B, 2019, 99, .	3.2	6
116	Optical Studies and Transmission Electron Microscopy of HgCdTe Quantum Well Heterostructures for Very Long Wavelength Lasers. Nanomaterials, 2021, 11, 1855.	4.1	6
117	Effect of the arsenic cracking zone temperature on the efficiency of arsenic incorporation in CdHgTe films in molecular-beam epitaxy. Semiconductors, 2008, 42, 651-654.	0.5	5
118	Arsenic incorporation in MBEâ€grown HgCdTe studied with the use of ion milling. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1618-1620.	0.8	5
119	Quantum Hall effect in a quasi-three-dimensional HgTe film. JETP Letters, 2011, 93, 526-529.	1.4	5
120	Electrical and optical properties of CdHgTe films grown by molecular-beam epitaxy on silicon substrates. Semiconductors, 2012, 46, 1341-1345.	0.5	5
121	High-temperature photoluminescence of CdHgTe solid solutions grown by molecular-beam epitaxy. Technical Physics, 2013, 58, 1536-1539.	0.7	5
122	Photoluminescence of CdHgTe solid solutions subjected to low-energy ion treatment. Semiconductors, 2014, 48, 195-198.	0.5	5
123	Investigation of magnetoabsorption at different temperatures in HgTe/CdHgTe quantum-well heterostructures in pulsed magnetic fields. Semiconductors, 2015, 49, 1611-1615.	0.5	5
124	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
125	Defects in mercury-cadmium telluride heteroepitaxial structures grown by molecular-beam epitaxy on silicon substrates. Semiconductors, 2016, 50, 208-211.	0.5	5
126	A Megapixel Matrix Photodetector of the Middle Infrared Range. Journal of Communications Technology and Electronics, 2019, 64, 1011-1015.	0.5	5

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127	Experimental Observation of Temperature-Driven Topological Phase Transition in HgTe/CdHgTe Quantum Wells. Condensed Matter, 2019, 4, 27.	1.8	5
128	Probing States of a Double Acceptor in CdHgTe Heterostructures via Optical Gating. JETP Letters, 2020, 111, 575-581.	1.4	5
129	Possibilities of Characterizing the Crystal Parameters of CdxHg1Ââ€“ÂxTe Structures on GaAs Substrates by the Method of Generation of the Probe-Radiation Second Harmonic in Reflection Geometry. Physics of the Solid State, 2020, 62, 252-259.	0.6	5
130	Mid-infrared stimulated emission in HgCdTe/CdHgTe quantum well heterostructures at room temperature. Optical Engineering, 2020, 60, .	1.0	5
131	Molecular Beam Epitaxy of CdHgTe: Current State and Horizons. Optoelectronics, Instrumentation and Data Processing, 2020, 56, 456-469.	0.6	5
132	Preparation of Atomically Clean and Structurally Ordered Surfaces of Epitaxial CdTe Films for Subsequent Epitaxy. Semiconductors, 2021, 55, S62-S66.	0.5	5
133	Spontaneous formation of the periodic composition-modulated nanostructure in CdxHg1â^'x Te films. Semiconductors, 2003, 37, 1331-1335.	0.5	4
134	Three-dimensional topological insulator based on a strained HgTe film. Low Temperature Physics, 2015, 41, 82-89.	0.6	4
135	CdHgTe heterostructures for new-generation IR photodetectors operating at elevated temperatures. Semiconductors, 2016, 50, 1626-1629.	0.5	4
136	Zeeman splitting of the conduction band of HgTe quantum wells with a semimetallic spectrum. JETP Letters, 2016, 104, 241-247.	1.4	4
137	Polarization-Sensitive Fourier-Transform Spectroscopy of HgTe/CdHgTe Quantum Wells in the Far Infrared Range in a Magnetic Field. JETP Letters, 2018, 108, 329-334.	1.4	4
138	Magnetoconductivity and Terahertz Response of a HgCdTe Epitaxial Layer. Sensors, 2018, 18, 4341.	3.8	4
139	Magnetooptics of HgTe/CdTe Quantum Wells with Giant Rashba Splitting in Magnetic Fields up to 34 T. Semiconductors, 2018, 52, 1386-1391.	0.5	4
140	Electron Effective Mass and g Factor in Wide HgTe Quantum Wells. Semiconductors, 2018, 52, 12-18.	0.5	4
141	Residual-Photoconductivity Spectra in HgTe/CdHgTe Quantum-Well Heterostructures. Semiconductors, 2019, 53, 1363-1366.	0.5	4
142	Study of the Auger Recombination Energy Threshold in a Series of Waveguide Heterostructures with HgTe/Cd0.7Hg0.3Te QWs Near 14 Î¼m. Semiconductors, 2019, 53, 1154-1157.	0.5	4
143	TEM studies of structural defects in HgTe/HgCdTe quantum wells. Applied Nanoscience (Switzerland), 2020, 10, 2867-2871.	3.1	4
144	Urbach tail and nonuniformity probe of HgCdTe thin films and quantum well heterostructures grown by molecular beam epitaxy. Optical Engineering, 2020, 60, .	1.0	4

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145	Mobility of minority charge carriers in p-HgCdTe films. Semiconductors, 2004, 38, 514-519.	0.5	3
146	Ellipsometric in situ control of quantum nanostructures with gradient layers. Technical Physics, 2009, 54, 1602-1606.	0.7	3
147	Two-dimensional semimetal in wide HgTe quantum wells: Charge-carrier energy spectrum and magnetotransport. Semiconductors, 2013, 47, 1562-1566.	0.5	3
148	Conductance of a lateral pâ€”n junction in two-dimensional HgTe structures with an inverted spectrum: The role of edge states. JETP Letters, 2015, 101, 469-473.	1.4	3
149	Activation transport under quantum Hall regime in HgTe-based heterostructure. Low Temperature Physics, 2017, 43, 485-490.	0.6	3
150	On the Thermal Activation of Conductivity Electrons in a p-Type HgTe/CdHgTe Double Quantum Well with HgTe Layers of Critical Width. Semiconductors, 2019, 53, 919-922.	0.5	3
151	Spin splitting of surface states in HgTe quantum wells. Low Temperature Physics, 2019, 45, 159-164.	0.6	3
152	Anisotropy of the in-plane g -factor of electrons in HgTe quantum wells. Physical Review B, 2020, 101, .	3.2	3
153	Many-particle effects in optical transitions from zero-mode Landau levels in HgTe quantum wells. Physical Review B, 2020, 102, .	3.2	3
154	Magnetic Susceptibility Measurements in HgTe Quantum Wells in a Perpendicular Magnetic Field. JETP Letters, 2020, 111, 633-638.	1.4	3
155	Density of states measurements for the heavy subband of holes in HgTe quantum wells. Physical Review B, 2020, 101, .	3.2	3
156	HgCdTe-Based 640 Ã— 512 Matrix Midwave Infrared Photodetector. Journal of Communications Technology and Electronics, 2020, 65, 316-320.	0.5	3
157	Impact Ionization Induced by Terahertz Radiation in HgTe Quantum Wells of Critical Thickness. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 1155-1169.	2.2	3
158	Multiple crossings of Landau levels of two-dimensional fermions in double HgTe quantum wells. Physical Review B, 2021, 103, .	3.2	3
159	Photothermal Ionization Spectroscopy of Mercury Vacancies in HgCdTe Epitaxial Films. JETP Letters, 2021, 113, 402-408.	1.4	3
160	Express Characterization of Crystalline Perfection of CdxHg1â^'xTe Structures by Reflection Second Harmonic Generation of Probing Radiation. Optoelectronics, Instrumentation and Data Processing, 2019, 55, 447-454.	0.6	3
161	Localization of helical edge states in the absence of external magnetic field. Physical Review B, 2021, 104, .	3.2	3
162	Engineering topological phases in triple HgTe/CdTe quantum wells. Scientific Reports, 2022, 12, 2617.	3.3	3

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163	Electrical properties of n-HgCdTe heteroepitaxial layers modified by ion etching. Semiconductors, 2008, 42, 1413-1415.	0.5	2
164	Increasing the mechanical strength of hybrid photodetectors based on mercury-cadmium-telluride heteroepitaxial layers. Optoelectronics, Instrumentation and Data Processing, 2013, 49, 94-100.	0.6	2
165	Dual-wavelength stimulated emission from a double-layer Cd x Hg1 â˜' x Te structure at wavelengths of 2 and 3 Î¼m. JETP Letters, 2013, 97, 358-361.	1.4	2
166	HgCdTe structures for dual-band photodetectors operating in the 3â€“5 and 8â€“12 Âµm spectral ranges. Optoelectronics, Instrumentation and Data Processing, 2013, 49, 476-484.	0.6	2
167	Energy spectrum and transport in narrow HgTe quantum wells. Semiconductors, 2015, 49, 39-43.	0.5	2
168	Observation of topological phase transition by terahertz photoconductivity in HgTeâ€based transistors. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 534-537.	0.8	2
169	The noise model of CTIA-based pixel of SWIR HgCdTe focal plane arrays. , 2016, , .		2
170	Polarization Pyrometry of Layered Semiconductor Structures under Conditions of Low-Temperature Technological Processes. Optoelectronics, Instrumentation and Data Processing, 2017, 53, 630-638.	0.6	2
171	Advanced Design of Scanning Infrared Focal Plane Arrays. Optoelectronics, Instrumentation and Data Processing, 2018, 54, 569-575.	0.6	2
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