Dmitry A Firsov

List of Publications by Year in descending order

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623699 752679 146 668 14 20 citations g-index h-index papers 147 147 147 374 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Electron heating in GaN/AlGaN quantum well in a longitudinal electric field. Journal of Physics: Conference Series, 2022, 2227, 012011.	0.4	1
2	Effects of an External Magnetic Field on the Interband and Intraband Optical Properties of an Asymmetric Biconvex Lens-Shaped Quantum Dot. Nanomaterials, 2022, 12, 60.	4.1	6
3	The drag of photons by electric current in quantum wells. Journal of Physics Condensed Matter, 2021, 33, 165301.	1.8	1
4	Optical access to folded transverse acoustic phonon doublet in 6H-SiC. Journal of Applied Physics, 2021, 129, 235701.	2.5	2
5	Effect of compensation and near-infrared lasing on donor-related terahertz photoluminescence in GaAs/AlGaAs quantum wells. , 2021, , .		0
6	Implementation of Moshinsky Atom Model for Electron Gas in Quantum Dots. Springer Proceedings in Physics, 2021, , 169-175.	0.2	2
7	Photoconductivity and Infrared-Light Absorption in p-GaAs/AlGaAs Quantum Wells. Semiconductors, 2021, 55, 710.	0.5	0
8	Study of the Spectra of Arched-Cavity Quantum-Cascade Lasers. Optics and Spectroscopy (English) Tj ETQq0 0 (rgBT /Ov	erlock 10 Tf 50
9	Far-infrared spectroscopy of folded transverse acoustic phonons in 4H–SiC. Applied Physics Letters, 2020, 117, 202105.	3.3	2
10	Spectral Characteristics of Half-Ring Quantum-Cascade Lasers. Optics and Spectroscopy (English) Tj ETQq0 0 0 n	gBT /Over	lock 10 Tf 50
11	2D electrons and 2D plasmons in AlGaN/GaN nanostructure under highly non-equilibrium conditions. Journal of Physics: Conference Series, 2020, 1482, 012022.	0.4	0
12	Quantum-Cascade Lasers with a Distributed Bragg Reflector Formed by Ion-Beam Etching. Technical Physics Letters, 2020, 46, 312-315.	0.7	8
13	Near-infrared optical absorption in GaN/AlN quantum wells grown by molecular-beam epitaxy. Journal of Physics: Conference Series, 2020, 1482, 012021.	0.4	1
14	Terahertz luminescence and photoconductivity associated with the impurity electron transitions in GaAs/AlGaAs quantum wells. Journal of Physics: Conference Series, 2020, 1482, 012019.	0.4	O
15	Acceptor-related terahertz and infrared photoconductivity in p-type GaAs/AlGaAs quantum wells. Journal of Physics: Conference Series, 2020, 1482, 012025.	0.4	1
16	Impurity-assisted terahertz photoluminescence in compensated quantum wells. Journal of Applied Physics, 2019, 126, 175702.	2.5	7
17	Acceptor and band states in quantum wells in multiband model. Journal of Physics: Conference Series, 2019, 1236, 012006.	0.4	0
18	Determination of sign during phase correction of sign-variable modulation spectra of intersubband light absorption in GaAs/AlGaAs quantum wells. Journal of Physics: Conference Series, 2019, 1236, 012021.	0.4	0

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19	Two-dimensional plasmons in a GaN/AlGaN heterojunction. Journal of Physics: Conference Series, 2019, 1199, 012014.	0.4	2
20	Selective terahertz emission due to electrically excited 2D plasmons in AlGaN/GaN heterostructure. Journal of Applied Physics, 2019, 126, .	2.5	26
21	Terahertz Emission due to Radiative Decay of Hot 2D Plasmons in AlGaN/GaN Heterojunction., 2019,,.		О
22	Spectral Shift of Quantum-Cascade Laser Emission under the Action of Control Voltage. Technical Physics Letters, 2019, 45, 1136-1139.	0.7	3
23	Interaction of surface plasmon–phonon polaritons with terahertz radiation in heavily doped GaAs epilayers. Journal of Physics Condensed Matter, 2019, 31, 105002.	1.8	7
24	Realization of the Kohnâ∈™s Theorem in Ge/Si Quantum Dots with Hole Gas: Theory and Experiment. Nanomaterials, 2019, 9, 56.	4.1	16
25	Absorption of Far-Infrared Radiation in Ge/Si Quantum Dots. Semiconductors, 2018, 52, 59-63.	0.5	5
26	Non-equilibrium hole capture to excited acceptor states in quantum wells due to optical scattering. Journal of Physics: Conference Series, 2018, 993, 012016.	0.4	1
27	Polarization anisotropy of electroluminescence in indium antimonide. Journal of Physics: Conference Series, 2018, 993, 012001.	0.4	0
28	Experimental study of surface plasmon-phonon polaritons in GaAs-based microstructures. Journal of Physics: Conference Series, 2018, 993, 012012.	0.4	6
29	Growth and optical characterization of 7.5 \hat{l} quantum-cascade laser heterostructures grown by MBE. Journal of Physics: Conference Series, 2018, 1124, 041029.	0.4	4
30	Impurity-assisted terahertz photoluminescence in quantum wells under conditions of interband stimulated emission. Journal of Physics: Conference Series, 2018, 993, 012017.	0.4	0
31	Quantum-Cascade Lasers Generating at the 4.8-μm Wavelength at Room Temperature. Technical Physics Letters, 2018, 44, 814-816.	0.7	2
32	Terahertz Optical Transmission of Charged Ge/Si Quantum Dots. , 2018, , .		0
33	Quantum-cascade lasers in the 7-8 î¼m spectral range with full top metallization. Journal of Physics: Conference Series, 2018, 993, 012031.	0.4	1
34	Lasing in 9.6-μm Quantum Cascade Lasers. Technical Physics, 2018, 63, 1511-1515.	0.7	14
35	On the Fabrication and Study of Lattice-Matched Heterostructures for Quantum Cascade Lasers. Semiconductors, 2018, 52, 950-953.	0.5	6
36	Intraband absorption and interband photoconductivity transients in Ge/Si quantum dots. Journal of Physics: Conference Series, 2017, 816, 012027.	0.4	0

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37	Temperature depopulation of the GeSi/Si quantum dots with non-equilibrium charge carriers. Superlattices and Microstructures, 2017, 107, 228-233.	3.1	3
38	The effect of Auger recombination on the nonequilibrium carrier recombination rate in the InGaAsSb/AlGaAsSb quantum wells. Superlattices and Microstructures, 2017, 109, 743-749.	3.1	4
39	Phase modulation of mid-infrared radiation in double-quantum-well structures under a lateral electric field. Semiconductors, 2017, 51, 363-366.	0.5	6
40	Excitation and decay of surface plasmon polaritons in n-GaN. Journal of Physics: Conference Series, 2017, 864, 012073.	0.4	0
41	Charge carrier kinetics in GeSi/Si quantum dots probed by mid-infrared radiation. Journal of Physics: Conference Series, 2017, 864, 012069.	0.4	1
42	Photoluminescence in InGaAsSb/AlGaAsSb quantum wells: impact of nonradiative recombination. Journal of Physics: Conference Series, 2017, 816, 012017.	0.4	3
43	Optical properties of GaN/AlGaN nanostructures in the terahertz frequency range. Journal of Physics: Conference Series, 2017, 816, 012019.	0.4	2
44	Electric field influence on mid-infrared absorption and interband photoluminescence in tunnel-coupled GaAs/AlGaAs quantum wells. Journal of Physics: Conference Series, 2017, 864, 012070.	0.4	0
45	Multi-particle effects in far-IR optical transmission spectra of Ge/Si quantum dots. Journal of Physics: Conference Series, 2017, 816, 012026.	0.4	2
46	Optical characterization of mid-infrared range quantum-cascade laser structures grown by MBE. Journal of Physics: Conference Series, 2017, 917, 052019.	0.4	3
47	Surface plasmon-phonon polaritons in GaAs. Journal of Physics: Conference Series, 2017, 917, 062038.	0.4	7
48	Luminescence and carrier concentration in Sb-containing narrow bandgap quantum wells under optical excitation. Journal of Physics: Conference Series, 2017, 917, 062027.	0.4	0
49	Terahertz absorption in GaN epitaxial layers under lateral electric field. Journal of Physics: Conference Series, 2016, 741, 012147.	0.4	О
50	Electric-field-induced mid-infrared birefringence of the double quantum wells. Journal of Physics: Conference Series, 2016, 741, 012124.	0.4	0
51	Plasmon phonon modes and optical resonances in <i>n</i> -GaN. Journal of Physics: Conference Series, 2016, 690, 012005.	0.4	6
52	Intersubband light absorption in double GaAs/AlGaAs quantum wells under lateral electric field. Journal of Physics: Conference Series, 2016, 690, 012017.	0.4	2
53	Photo- and electroluminescence in strong electric fields in Sb-containing narrow gap semiconductor materials. Journal of Physics: Conference Series, 2016, 741, 012148.	0.4	0
54	Optical properties of GaAs/AlGaAs double quantum wells in lateral electric field. Journal of Physics: Conference Series, 2016, 741, 012149.	0.4	1

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55	Polarization anisotropy of interband electroluminescence in narrow gap Sb-based semiconductors. , 2016, , .		O
56	Terahertz radiation related to the electron relaxation after interband optical pumping in doped quantum wells. , 2016, , .		1
57	Interaction of surface plasmon polaritons in heavily doped GaN microstructures with terahertz radiation. Journal of Applied Physics, 2016, 119, .	2.5	22
58	Impurity-assisted terahertz luminescence in quantum well nanostructures under interband photoexÑitation. St Petersburg Polytechnical University Journal Physics and Mathematics, 2016, 2, 281-286.	0.3	0
59	Effect of Auger recombination on non-equilibrium charge carrier concentration in InGaAsSb/AlGaAsSb quantum wells. St Petersburg Polytechnical University Journal Physics and Mathematics, 2016, 2, 287-293.	0.3	1
60	Terahertz emission from CdHgTe/HgTe quantum wells with an inverted band structure. Semiconductors, 2016, 50, 915-919.	0.5	2
61	Room-temperature operation of quantum cascade lasers at a wavelength of 5.8 μm. Semiconductors, 2016, 50, 1299-1303.	0.5	22
62	Modulation of intersubband light absorption and interband photoluminescence in double GaAs/AlGaAs quantum wells under strong lateral electric fields. Semiconductors, 2016, 50, 1425-1430.	0.5	11
63	Mid-infrared photoluminescence from structures with InAs/GaSb type II quantum wells. Journal of Physics: Conference Series, 2015, 643, 012078.	0.4	3
64	16th Russian Youth Conference on Physics of Semiconductors and Nanostructures, Opto- and Nanoelectronics. Journal of Physics: Conference Series, 2015, 586, 011001.	0.4	0
65	Mid-infrared light absorption by photo-excited charge carriers in Ge/Si quantum dots. Journal of Physics: Conference Series, 2015, 586, 012001.	0.4	0
66	Effect of transverse electric field and temperature on light absorption in GaAs/AlGaAs tunnel-coupled quantum wells. Semiconductors, 2015, 49, 1425-1429.	0.5	10
67	Dynamics of mid-infrared light absorption related to photoexcited charge carriers in Ge/Si quantum dots. Journal of Physics: Conference Series, 2015, 643, 012077.	0.4	0
68	Terahertz radiation associated with the impurity electron transition in quantum wells upon optical and electrical pumping. Semiconductors, 2015, 49, 28-32.	0.5	19
69	Lasing of multiperiod quantum-cascade lasers in the spectral range of (5.6–5.8)-μm under current pumping. Semiconductors, 2015, 49, 1527-1530.	0.5	17
70	Refraction index modulation induced with transverse electric field in double tunnel-coupled GaAs/AlGaAs quantum wells. Journal of Physics: Conference Series, 2015, 643, 012076.	0.4	0
71	Terahertz reflection and emission associated with nonequilibrium surface plasmon polaritons in <i>n</i> -GaN. Journal of Physics: Conference Series, 2015, 586, 012005.	0.4	2
72	Intersubband absorption modulation in the GaAs/AlGaAs double tunnel-coupled quantum wells. Journal of Physics: Conference Series, 2015, 586, 012012.	0.4	0

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73	Far- and near-infrared photoluminescence from n-GaAs/AlGaAs multiple quantum wells. Journal of Physics: Conference Series, 2014, 541, 012082.	0.4	1
74	Photoinduced absorption and photoconductivity of Ge/Si quantum dots in mid-infrared range under interband excitation. Journal of Physics: Conference Series, 2014, 541, 012087.	0.4	0
75	Intersubband light absorption in tunnel-coupled GaAs/AlGaAs quantum wells for electrooptic studies. Journal of Physics: Conference Series, 2014, 541, 012081.	0.4	4
76	Impurity-related terahertz emission from quantum well nanostructures. Lithuanian Journal of Physics, 2014, 54, 46-49.	0.4	2
77	Photoluminescence dynamics in InGaAsSb/AlGaAsSb quantum well nanostructures. Semiconductors, 2013, 47, 146-151.	0.5	3
78	Lateral photoconductivity in structures with Ge/Si quantum dots. Semiconductors, 2013, 47, 1574-1577.	0.5	13
79	Dependence of the carrier concentration on the current in mid-infrared injection lasers with quantum wells. Semiconductors, 2013, 47, 1513-1516.	0.5	4
80	Mid infrared optical properties of Ge/Si quantum dots with different doping level. , 2013, , .		0
81	Emission of terahertz radiation from GaN/AlGaN heterostructure under electron heating in lateral electric field. , 2013, , .		2
82	Dynamics of charge carrier recombination and capture in laser nanostructures with InGaAsSb/AlGaAsSb quantum wells. , 2013, , .		0
83	Emission of terahertz radiation from selectively doped AlGaN/GaN heterostructures under the heating of two-dimensional electrons by an electric field. Bulletin of the Russian Academy of Sciences: Physics, 2012, 76, 207-210.	0.6	1
84	Photoinduced and equilibrium optical absorption in Ge/Si quantum dots. Semiconductors, 2012, 46, 1529-1533.	0.5	3
85	Influence of Auger recombination on the lifetime of nonequilibrium carriers in InGaAsSb/AlGaAsSb quantum well structures. Bulletin of the Russian Academy of Sciences: Physics, 2012, 76, 211-213.	0.6	1
86	Blackbody-like emission of terahertz radiation from AlGaN/GaN heterostructure under electron heating in lateral electric field. Journal of Applied Physics, 2011, 109, 073108.	2.5	26
87	Polarization dependence of Fano resonances in impurity photoconductivity of quantum wells doped with shallow donors. Physics of the Solid State, 2011, 53, 1253-1262.	0.6	0
88	Dynamics of photoluminescence and recombination processes in Sb-containing laser nanostructures. Semiconductors, 2010, 44, 50-58.	0.5	10
89	Terahertz emission and photoconductivity in n-type GaAs/AlGaAs quantum wells: the role of resonant impurity states. Semiconductors, 2010, 44, 1394-1397.	0.5	14
90	Carrier heating in quantum wells under optical and current injection of electron-hole pairs. Semiconductors, 2010, 44, 1402-1405.	0.5	11

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91	Charge carrier recombination mechanisms in Sb-containing quantum well laser structures. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 69-71.	0.6	0
92	Absorption and modulation of absorption in p-GaAs/AlGaAs quantum well nanostructures. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 82-85.	0.6	0
93	Emission of terahertz radiation from GaN under impact ionization of donors in an electric field. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 86-88.	0.6	3
94	Terahertz electroluminescence of surface plasmons from nanostructured InN layers. Applied Physics Letters, 2010, 96, .	3.3	16
95	Terahertz emission from GaN epilayers at lateral electric field. , 2010, , .		0
96	Impurity breakdown and terahertz luminescence in n-GaN epilayers under external electric field. Journal of Applied Physics, 2009, 106, 123523.	2.5	26
97	Hot charge-carrier electroluminescence from laser nanostructures in the spontaneous and stimulated emission modes and absorption of IR radiation by hot electrons in quantum wells. Bulletin of the Russian Academy of Sciences: Physics, 2009, 73, 73-76.	0.6	0
98	Light absorption related to hole transitions in quantum dots and impurity centers in quantum wells under external excitation. Journal of Physics: Conference Series, 2009, 193, 012059.	0.4	1
99	LIGHT EMISSION, ABSORPTION AND AMPLIFICATION IN InAs/GaAs QUANTUM DOTS AND GaAs/AlGaAs QUANTUM WELLS RESULTING FROM OPTICAL PUMPING. International Journal of Nanoscience, 2007, 06, 241-244.	0.7	1
100	POLARIZED PHOTOLUMINESCENCE OF EXCITONS IN n-, p- AND UNDOPED lnAs / GaAs QUANTUM DOTS. International Journal of Nanoscience, 2007, 06, 319-322.	0.7	0
101	Intraband emission and absorption of terahertz radiation in GaAs/AlGaAs quantum wells., 2007,,.		0
102	Stressed GaAsN/GaAs Heterostructures as a Base of THz Radiation Sources. AIP Conference Proceedings, 2007, , .	0.4	0
103	THz electroluminescence from strained GaAsN layers doped with shallow acceptors., 2007,,.		0
104	Terahertz luminescence in strained GaAsN:Be layers under strong electric fields. Applied Physics Letters, 2007, 90, 161128.	3.3	24
105	Interband light absorption and Pauli blocking in InAs/GaAs quantum dots covered by InGaAs quantum wells. Semiconductor Science and Technology, 2007, 22, 814-818.	2.0	4
106	Intersubband emission and carrier dynamics in GaAs/AlGaAs tunnel-coupled quantum wells after ultrafast optical pumping. AIP Conference Proceedings, 2007, , .	0.4	0
107	Modulation of intersubband absorption in tunnel-coupled quantum wells in electric fields. Semiconductors, 2007, 41, 596-605.	0.5	4
108	Intraband light absorption in InAs/GaAs quantum dots covered with InGaAs quantum wells. Semiconductor Science and Technology, 2006, 21, 1341-1347.	2.0	6

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109	Impurity breakdown and electroluminescence in the terahertz range in p-GaAs and p-GaAsN microstructures. Technical Physics Letters, 2006, 32, 384-387.	0.7	4
110	Carrier transfer in coupled asymmetric GaAs/AlGaAs double quantum wells after ultrafast intersubband excitation. Semiconductor Science and Technology, 2006, 21, 1267-1273.	2.0	9
111	Intersubband Absorption of Light in Heterostructures with Double Tunnel-Coupled GaAsâ^•AlGaAs Quantum Wells. Semiconductors, 2005, 39, 41.	0.5	1
112	Optical Phenomena in InAsâ^•GaAs Heterostructures with Doped Quantum Dots and Artificial Molecules. Semiconductors, 2005, 39, 50.	0.5	2
113	The Engineering and Properties of InAs Quantum Dot Molecules in a GaAs Matrix. Semiconductors, 2005, 39, 124.	0.5	O
114	Dynamics and collective properties of non-equilibrium carriers in highly photoexcited quantum wells. Semiconductor Science and Technology, 2004, 19, S290-S292.	2.0	0
115	The time-resolved spectroscopy of InGaAs/AlGaAs heterostructures with asymmetric funnel-shape quantum wells for near- and mid-IR lasing. Semiconductor Science and Technology, 2004, 19, S273-S275.	2.0	5
116	Intraband absorption and emission of light in quantum wells and quantum dots. Physics of the Solid State, 2004, 46, 118-121.	0.6	6
117	Luminescence of stepped quantum wells in GaAs/GaAlAs and InGaAs/GaAs/GaAlAs structures. Semiconductors, 2004, 38, 565-571.	0.5	3
118	Intersubband absorption of light in selectively doped asymmetric double tunnel-coupled quantum wells. Semiconductors, 2004, 38, 1409-1415.	0.5	3
119	Electron heating by a strong longitudinal electric field in quantum wells. Semiconductors, 2003, 37, 586-593.	0.5	14
120	<title>Light absorption and emission in InAs/GaAs quantum dots and stepped quantum wells</title> ., 2002, 5023, 209.		1
121	Near- and mid-infrared spectroscopy of InGaAs/GaAs quantum dot structures. Nanotechnology, 2001, 12, 447-449.	2.6	1
122	<title>Toward far- and mid-IR intraband lasers based on hot carrier intervalley/real-space transfer in multiple quantum well systems</title> ., 2001, 4318, 192.		12
123	<title>Resonant intersubband transitions of holes in uniaxially stressed p-Ge</title> ., 2001, , .		О
124	<code><title>Screened</code> Coulomb potential approach for the study of resonant impurity states in uniaxially deformed p-Ge <code></title>.,2001,,.</code>		1
125	Quasi-local impurity states in uniaxially compressed p-type Ge. Semiconductors, 2001, 35, 132-134.	0.5	3
126	Generation of millimeter radiation due to electric-field-induced electron-transit-time resonance in indium phosphide. JETP Letters, 2001, 73, 219-222.	1.4	35

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127	Optical phenomena connected with intraband carrier transitions in quantum dots and quantum wells. Nanotechnology, 2001, 12, 462-465.	2.6	3
128	Hot electron optical phenomena in GaAs/AlAs MQW structures in strong lateral electric field. Springer Proceedings in Physics, 2001, , 731-732.	0.2	0
129	Photon hole-current drag in germanium. JETP Letters, 2000, 71, 331-333.	1.4	3
130	Optical absorption and birefringence in GaAs/AlAs MQW structures due to intersubband electron transitions. Nanotechnology, 2000, 11, 218-220.	2.6	1
131	The outlook for the development of radiation sources in the middle-IR range based on the intraband transitions between the energy levels of charge carriers in injection laser heterostructures with quantum dots and wells. Physics-Uspekhi, 1999, 42, 391-396.	2.2	11
132	Hot-electron far-infrared intrasubband absorption and emission in quantum wells. Applied Physics Letters, 1999, 75, 2930-2932.	3.3	7
133	Photoionization of short-range acceptor states in uniaxially deformed semiconductors. Semiconductors, 1999, 33, 640-644.	0.5	0
134	On resonance states in "split―germanium. JETP Letters, 1999, 69, 676-681.	1.4	7
135	Far-IR radiation of hot holes in germanium for mutually perpendicular directions of uniaxial pressure and electric field. JETP Letters, 1999, 70, 265-269.	1.4	9
136	Modulation of optical absorption of GaAs/AlGaAs quantum wells in a transverse electric field. Semiconductors, 1998, 32, 754-756.	0.5	2
137	Light absorption and refraction due to intersubband transitions of hot electrons in coupled GaAs/AlGaAs quantum wells. Semiconductors, 1998, 32, 757-761.	0.5	2
138	Spontaneous long-wavelength interlevel emission in quantum-dot laser structures. Technical Physics Letters, 1998, 24, 590-592.	0.7	2
139	Spontaneous far-IR emission accompanying transitions of charge carriers between levels of quantum dots. JETP Letters, 1998, 67, 275-279.	1.4	31
140	Terahertz emission from square wells in a longitudinal electric field. JETP Letters, 1998, 67, 533-538.	1.4	1
141	Characteristics of a far-infrared germanium hot-hole laser in the Voigt and Faraday field configurations. Semiconductors, 1997, 31, 1273-1279.	0.5	2
142	Amplification of radiation in the far infrared range by hot holes in germanium in crossed electric and magnetic fields. Semiconductors, 1997, 31, 1280-1283.	0.5	0
143	Birefringence and absorption of light during intersubband transitions of hot electrons in quantum wells. JETP Letters, 1997, 65, 549-554.	1.4	7
144	A Two-Dimensional hot electron electro-optic effect in GaAs/(Al,Ga)As multiple quantum wells. Superlattices and Microstructures, 1995, 17, 129-133.	3.1	10

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145	An injectionless FIR laser based on interband transitions of hot holes in germanium. Semiconductor Science and Technology, 1994, 9, 641-644.	2.0	4
146	Narrowband tunable sub-millimetre hot hole injectionless semiconductor laser and its use for cyclotron resonance investigation. Optical and Quantum Electronics, 1993, 25, 705-721.	3.3	5