Victor Ryzhii

List of Publications by Year
in descending order

180 papers	6,289 citations	66343 42 h-index	79698 73 g-index
183 all docs	183 docs citations	183 times ranked	2921 citing authors

#	Article	IF	Citations
1	Negative dynamic conductivity of graphene with optical pumping. Journal of Applied Physics, 2007, 101, 083114.	2.5	331
2	The theory of quantum-dot infrared phototransistors. Semiconductor Science and Technology, 1996, 11, 759-765.	2.0	303
3	Graphene-based devices in terahertz science and technology. Journal Physics D: Applied Physics, 2012, 45, 303001.	2.8	234
4	Plasma waves in two-dimensional electron-hole system in gated graphene heterostructures. Journal of Applied Physics, 2007, 101, 024509.	2.5	213
5	Ultrafast carrier dynamics and terahertz emission in optically pumped graphene at room temperature. Physical Review B, 2012, 85, .	3.2	169
6	Terahertz surface plasmons in optically pumped graphene structures. Journal of Physics Condensed Matter, 2011, 23, 145302.	1.8	168
7	Voltage and temperature dependencies of conductivity in gated graphene. Physical Review B, 2007, 76, .	3.2	141
8	Toward the creation of terahertz graphene injection laser. Journal of Applied Physics, 2011, 110, .	2.5	141
9	Terahertz lasers based on optically pumped multiple graphene structures with slot-line and dielectric waveguides. Journal of Applied Physics, 2010, 107, .	2.5	134
10	Hydrodynamic model for electron-hole plasma in graphene. Journal of Applied Physics, 2012, 111, .	2.5	132
11	Feasibility of terahertz lasing in optically pumped epitaxial multiple graphene layer structures. Journal of Applied Physics, 2009, 106, .	2.5	125
12	Terahertz Plasma Waves in Gated Graphene Heterostructures. Japanese Journal of Applied Physics, 2006, 45, L923-L925.	1.5	117
13	Injection and Population Inversion in Electrically Induced pâ€"n Junction in Graphene with Split Gates. Japanese Journal of Applied Physics, 2007, 46, L151-L153.	1.5	104
14	Plasmonic terahertz lasing in an array of graphene nanocavities. Physical Review B, 2012, 86, .	3.2	101
15	Active graphene plasmonics for terahertz device applications. Journal Physics D: Applied Physics, 2014, 47, 094006.	2.8	101
16	Emission and Detection of Terahertz Radiation Using Two-Dimensional Electrons in IIIâ€"V Semiconductors and Graphene. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 63-71.	3.1	98
17	Contact and distributed effects in quantum well infrared photodetectors. Applied Physics Letters, 1995, 67, 3147-3149.	3.3	94
18	The gain enhancement effect of surface plasmon polaritons on terahertz stimulated emission in optically pumped monolayer graphene. New Journal of Physics, 2013, 15, 075003.	2.9	94

#	Article	IF	Citations
19	Comparison of dark current, responsivity and detectivity in different intersubband infrared photodetectors. Semiconductor Science and Technology, 2004, 19, 8-16.	2.0	83
20	Photoconductivity of intrinsic graphene. Physical Review B, 2008, 77, .	3.2	81
21	Characteristics of quantum well infrared photodetectors. Journal of Applied Physics, 1997, 81, 6442-6448.	2.5	80
22	Device model for quantum dot infrared photodetectors and their dark-current characteristics. Semiconductor Science and Technology, 2001, 16, 331-338.	2.0	79
23	Unusual capacitance behavior of quantum well infrared photodetectors. Applied Physics Letters, 1997, 70, 1828-1830.	3.3	77
24	Terahertz Laser with Optically Pumped Graphene Layers and Fabriâ€"Perot Resonator. Applied Physics Express, 2009, 2, 092301.	2.4	77
25	Double graphene-layer plasma resonances terahertz detector. Journal Physics D: Applied Physics, 2012, 45, 302001.	2.8	76
26	On the detectivity of quantum-dot infrared photodetectors. Applied Physics Letters, 2001, 78, 3523-3525.	3.3	75
27	Oblique terahertz plasmons in graphene nanoribbon arrays. Physical Review B, 2010, 81, .	3.2	74
28	Terahertz and infrared photodetection using p-i-n multiple-graphene-layer structures. Journal of Applied Physics, 2010, 107, .	2.5	73
29	Terahertz-Wave Generation Using Graphene: Toward New Types of Terahertz Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 8400209-8400209.	2.9	68
30	Photoconductivity nonlinearity at high excitation power in quantum well infrared photodetectors. Applied Physics Letters, 1997, 70, 414-416.	3.3	67
31	Millimeter wave emission from GaN high electron mobility transistor. Applied Physics Letters, 2004, 84, 70-72.	3.3	67
32	Hydrodynamic electron transport and nonlinear waves in graphene. Physical Review B, 2013, 88, .	3.2	66
33	Plasma and transit-time mechanisms of the terahertz radiation detection in high-electron-mobility transistors. Semiconductor Science and Technology, 2003, 18, 460-469.	2.0	65
34	Terahertz light-emitting graphene-channel transistor toward single-mode lasing. Nanophotonics, 2018, 7, 741-752.	6.0	57
35	Terahertz wave generation and detection in double-graphene layered van der Waals heterostructures. 2D Materials, 2016, 3, 045009.	4.4	56
36	Nonequilibrium carriers in intrinsic graphene under interband photoexcitation. Physical Review B, 2008, 78, .	3.2	53

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37	Terahertz and infrared photodetectors based on multiple graphene layer and nanoribbon structures. Opto-electronics Review, 2012, 20, .	2.4	53
38	Plasma Wave Electronics. International Journal of High Speed Electronics and Systems, 2003, 13, 575-600.	0.7	52
39	Graphene based plasma-wave devices for terahertz applications. Applied Physics Letters, 2020, 116, .	3.3	48
40	Injection terahertz laser using the resonant inter-layer radiative transitions in double-graphene-layer structure. Applied Physics Letters, 2013, 103, .	3.3	47
41	Terahertz photomixing using plasma resonances in double-graphene layer structures. Journal of Applied Physics, 2013, 113, .	2.5	47
42	Dynamic effects in double graphene-layer structures with inter-layer resonant-tunnelling negative conductivity. Journal Physics D: Applied Physics, 2013, 46, 315107.	2.8	46
43	Graphene Tunneling Transit-Time Terahertz Oscillator Based on Electrically Induced pâ€“iâ€“n Junction. Applied Physics Express, 0, 2, 034503.	2.4	45
44	Amplification and lasing of terahertz radiation by plasmons in graphene with a planar distributed Bragg resonator. Journal of Optics (United Kingdom), 2013, 15, 114009.	2.2	44
45	Current-voltage characteristics of a graphene-nanoribbon field-effect transistor. Journal of Applied Physics, 2008, 103, .	2.5	42
46	Giant plasmon instability in a dual-grating-gate graphene field-effect transistor. Physical Review B, 2016, 93, .	3.2	42
47	Auger recombination in Dirac materials: A tangle of many-body effects. Physical Review B, 2018, 97, .	3.2	42
48	Observation of Amplified Stimulated Terahertz Emission from Optically Pumped Heteroepitaxial Graphene-on-Silicon Materials. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 655-665.	2.2	41
49	Analysis of integrated quantum-well infrared photodetector and light-emitting diode for implementing pixelless imaging devices. IEEE Journal of Quantum Electronics, 1997, 33, 1527-1531.	1.9	40
50	Transit-time mechanism of plasma instability in high electron mobility transistors. Physica Status Solidi A, 2005, 202, R113-R115.	1.7	39
51	Graphene terahertz uncooled bolometers. Journal Physics D: Applied Physics, 2013, 46, 065102.	2.8	38
52	Plasma Instability and Terahertz Generation in HEMTs Due to Electron Transit-Time Effect. IEICE Transactions on Electronics, 2006, E89-C, 1012-1019.	0.6	38
53	Monte Carlo analysis of ultrafast electron transport in quantum well infrared photodetectors. Applied Physics Letters, 1998, 72, 842-844.	3.3	37
54	Effect of Heating and Cooling of Photogenerated Electronâ€“Hole Plasma in Optically Pumped Graphene on Population Inversion. Japanese Journal of Applied Physics, 2011, 50, 094001.	1.5	37

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55	Effect of Heating and Cooling of Photogenerated Electronâ€“Hole Plasma in Optically Pumped Graphene on Population Inversion. Japanese Journal of Applied Physics, 2011, 50, 094001.	1.5	35
56	Physical model and analysis of quantum dot infrared photodetectors with blocking layer. Journal of Applied Physics, 2001, 89, 5117-5124.	2.5	33
57	Carrier-carrier scattering and negative dynamic conductivity in pumped graphene. Optics Express, 2014, 22, 19873.	3.4	33
58	Electron density modulation effect in a quantumâ€well infrared phototransistor. Journal of Applied Physics, 1995, 78, 1214-1218.	2.5	32
59	Contact and Space-Charge Effects in Quantum Well Infrared Photodetectors. Japanese Journal of Applied Physics, 1999, 38, 5815-5822.	1.5	32
60	Double injection in graphene p-i-n structures. Journal of Applied Physics, 2013, 113, 244505.	2.5	32
61	Voltage-tunable terahertz and infrared photodetectors based on double-graphene-layer structures. Applied Physics Letters, 2014, 104, .	3.3	32
62	Monte Carlo study of electron transport in strained siliconâ€carbon alloy. Journal of Applied Physics, 1994, 76, 1924-1926.	2.5	30
63	Mechanism of self-excitation of terahertz plasma oscillations in periodically double-gated electron channels. Journal of Physics Condensed Matter, 2008, 20, 384207.	1.8	30
64	Graphene materials and devices in terahertz science and technology. MRS Bulletin, 2012, 37, 1235-1243.	3.5	30
65	Negative differential photoconductivity in quantum-dot infrared photodetectors. Applied Physics Letters, 2001, 78, 3346-3348.	3.3	29
66	Carrier heating in intrinsic graphene by a strong dc electric field. Physical Review B, 2009, 79, .	3.2	29
67	Resonant plasmonic terahertz detection in graphene split-gate field-effect transistors with lateral pâ€“n junctions. Journal Physics D: Applied Physics, 2016, 49, 315103.	2.8	27
68	Far-infrared photodetectors based on graphene/black-AsP heterostructures. Optics Express, 2020, 28, 2480.	3.4	27
69	Impact of transit-time and capture effects on high-frequency performance of multiple quantum-well infrared photodetectors. IEEE Transactions on Electron Devices, 1998, 45, 293-298.	3.0	26
70	Periodic electric-field domains in optically excited multiple-quantum-well structures. Physical Review B, 2000, 61, 2742-2748.	3.2	26
71	Electrically induced<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>n</mml:mi><mml:mtext>âˆ’</mml:mtext><mml:mi>i</mml:mi><mml:mtext>âˆ’</mml:mtext>[illegible] in multiple graphene layer structures. Physical Review B, 2010, 82, .	3.2	26
72	Emission of Terahertz Radiation from Two-Dimensional Electron Systems in Semiconductor Nano- and Hetero-Structures. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 629-645.	2.2	26

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73	Tunneling Currentâ€“Voltage Characteristics of Graphene Field-Effect Transistor. Applied Physics Express, 2008, 1, 013001.	2.4	24
74	Negative and positive terahertz and infrared photoconductivity in uncooled graphene. Optical Materials Express, 2019, 9, 585.	3.0	24
75	Plasma mechanisms of resonant terahertz detection in a two-dimensional electron channel with split gates. Journal of Applied Physics, 2008, 103, .	2.5	23
76	Thermionic and tunneling transport mechanisms in graphene fieldâ€effect transistors. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1527-1533.	1.8	22
77	Effect of the Coulomb scattering on graphene conductivity. JETP Letters, 2008, 88, 322-325.	1.4	21
78	Surface-plasmons lasing in double-graphene-layer structures. Journal of Applied Physics, 2014, 115, 044511.	2.5	21
79	Negative terahertz conductivity and amplification of surface plasmons in grapheneâ€“black phosphorus injection laser heterostructures. Physical Review B, 2019, 100, .	3.2	21
80	Phenomenological theory of electric-field domains induced by infrared radiation in multiple quantum well structures. Physical Review B, 2000, 62, 7268-7274.	3.2	20
81	Graphene vertical cascade interband terahertz and infrared photodetectors. 2D Materials, 2015, 2, 025002.	4.4	20
82	Electrical modulation of terahertz radiation using graphene-phosphorene heterostructures. Semiconductor Science and Technology, 2018, 33, 124010.	2.0	19
83	Theoretical Study of Population Inversion in Graphene under Pulse Excitation. Japanese Journal of Applied Physics, 2011, 50, 070116.	1.5	19
84	Population inversion of photoexcited electrons and holes in graphene and its negative terahertz conductivity. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 261-264.	0.8	18
85	Graphene vertical hot-electron terahertz detectors. Journal of Applied Physics, 2014, 116, 114504.	2.5	18
86	Double injection, resonant-tunneling recombination, and current-voltage characteristics in double-graphene-layer structures. Journal of Applied Physics, 2014, 115, .	2.5	18
87	Electron Capture in van der Waals Graphene-Based Heterostructures with WS₂ Barrier Layers. Journal of the Physical Society of Japan, 2015, 84, 094703.	1.6	18
88	Nonlinear response of infrared photodetectors based on van der Waals heterostructures with graphene layers. Optics Express, 2017, 25, 5536.	3.4	18
89	S-Shaped Current-Voltage Characteristics of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msup><mml:mi>n</mml:mi><mml:mo>+</mml:mo></mml:msup></mml:math> - <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>i</mml:mi></mml:math> - <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>n</m	3.8	18
90	High-frequency operation of lateral hot-electron transistors. IEEE Transactions on Electron Devices, 1995, 42, 166-171.	3.0	17

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91	Infrared photodetectors based on graphene van der Waals heterostructures. Infrared Physics and Technology, 2017, 84, 72-81.	2.9	17
92	Lateral terahertz hot-electron bolometer based on an array of Sn nanothreads in GaAs. Journal Physics D: Applied Physics, 2018, 51, 135101.	2.8	17
93	Comment on â€œNegative Landau Damping in Bilayer Grapheneâ€. Physical Review Letters, 2019, 123, 219401.	7.8	17
94	Resonant plasmonic terahertz detection in vertical graphene-base hot-electron transistors. Journal of Applied Physics, 2015, 118, .	2.5	16
95	Negative terahertz conductivity in disordered graphene bilayers with population inversion. Applied Physics Letters, 2015, 106, 113501.	3.3	16
96	High-Frequency Response of Intersubband Infrared Photodetectors with a Multiple Quantum Well Structure. Japanese Journal of Applied Physics, 1997, 36, 2596-2600.	1.5	15
97	Photon mechanism of image smearing in integrated QWIP-LED pixelless devices. IEEE Journal of Quantum Electronics, 1999, 35, 1693-1696.	1.9	15
98	Real-space-transfer mechanism of negative differential conductivity in gated graphene-phosphorene hybrid structures: Phenomenological heating model. Journal of Applied Physics, 2018, 124, 114501.	2.5	15
99	Graphene-based plasmonic metamaterial for terahertz laser transistors. Nanophotonics, 2022, 11, 1677-1696.	6.0	15
100	High-frequency performance of single quantum well infrared photodetectors at high power densities. IEEE Transactions on Electron Devices, 1998, 45, 1797-1803.	3.0	13
101	Plasma effects in lateral Schottky junction tunneling transit-time terahertz oscillator. Journal of Physics: Conference Series, 2006, 38, 228-233.	0.4	13
102	Interband infrared photodetectors based on HgTeâ€“CdHgTe quantum-well heterostructures. Optical Materials Express, 2018, 8, 1349.	3.0	13
103	Coulomb electron drag mechanism of terahertz plasma instability in n+-i-n-n+ graphene FETs with ballistic injection. Applied Physics Letters, 2021, 119, .	3.3	13
104	Characteristics of integrated QWIP-HBT-LED up-converter. IEEE Transactions on Electron Devices, 2003, 50, 2378-2387.	3.0	12
105	Spectroscopic Study on Ultrafast Carrier Dynamics and Terahertz Amplified Stimulated Emission in Optically Pumped Graphene. Journal of Infrared, Millimeter, and Terahertz Waves, 2012, 33, 825-838.	2.2	12
106	Negative dynamic Drude conductivity in pumped graphene. Applied Physics Express, 2014, 7, 115101.	2.4	12
107	Effect of doping on the characteristics of infrared photodetectors based on van der Waals heterostructures with multiple graphene layers. Journal of Applied Physics, 2017, 122, .	2.5	12
108	Negative photoconductivity and hot-carrier bolometric detection of terahertz radiation in graphene-phosphorene hybrid structures. Journal of Applied Physics, 2019, 125, 151608.	2.5	12

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109	Voltage tunable plasma resonances in induced-base hot-electron transistors. Applied Physics Letters, 1997, 70, 2532-2534.	3.3	11
110	Resonant Detection and Frequency Multiplication in Barrier-Injection Heterostructure Transistors. Japanese Journal of Applied Physics, 2000, 39, 4727-4732.	1.5	11
111	PLASMA WAVES IN TWO-DIMENSIONAL ELECTRON SYSTEMS AND THEIR APPLICATIONS. International Journal of High Speed Electronics and Systems, 2007, 17, 521-538.	0.7	11
112	Vertical electron transport in van der Waals heterostructures with graphene layers. Journal of Applied Physics, 2015, 117, 154504.	2.5	11
113	Ultra-compact injection terahertz laser using the resonant inter-layer radiative transitions in multi-graphene-layer structure. Optics Express, 2016, 24, 29603.	3.4	11
114	Nonlinear dynamics of recharging processes in multiple quantum well structures excited by infrared radiation. Physical Review B, 2000, 62, 10292-10296.	3.2	10
115	Tunneling recombination in optically pumped graphene with electron-hole puddles. Applied Physics Letters, 2011, 99, .	3.3	10
116	Effect of self-consistent electric field on characteristics of graphene p-i-n tunneling transit-time diodes. Journal of Applied Physics, 2013, 113, .	2.5	10
117	Modulation characteristics of uncooled graphene photodetectors. Journal of Applied Physics, 2021, 129, .	2.5	10
118	Monte Carlo modeling of transient recharging processes in quantum-well infrared photodetectors. IEEE Transactions on Electron Devices, 2000, 47, 1935-1942.	3.0	9
119	Analysis of photon recycling in light emitting diodes with nonuniform injection. Journal of Applied Physics, 2000, 88, 3613-3617.	2.5	9
120	High-frequency performance of lateral p-n junction photodiodes. IEEE Journal of Quantum Electronics, 2001, 37, 830-836.	1.9	9
121	Negative terahertz dynamic conductivity in electrically induced lateral pâ€"iâ€"n junction in graphene. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 719-721.	2.7	9
122	Comparison of Intersubband Quantum-Well and Interband Graphene-Layer Infrared Photodetectors. IEEE Journal of Quantum Electronics, 2018, 54, 1-8.	1.9	9
123	Optical pumping through a black-As absorbing-cooling layer in graphene-based heterostructure: thermo-diffusion model. Optical Materials Express, 2019, 9, 4061.	3.0	9
124	Nonlocal Hot-Electron Transport and Capture Model for Multiple Quantum Well Structures Excited by Infrared Radiation. Japanese Journal of Applied Physics, 2001, 40, 513-517.	1.5	8
125	Theoretical analysis of injection driven thermal light emitters based on graphene encapsulated by hexagonal boron nitride. Optical Materials Express, 2021, 11, 468.	3.0	8
126	Optical pumping in graphene-based terahertz/far-infrared superluminescent and laser heterostructures with graded-gap black-PxAs1â^'x absorbing-cooling layers. Optical Engineering, 2019, 59, 1.	1.0	8

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127	...f Coulomb Carrier Drag and Terahertz Plasma Instability in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:msup><mml:mi>p</mml:mi><mml:mo>+</mml:mo></mml:msup></mml:math> - <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>p</mml:mi></mml:math> - <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>p</m	3.8	8
128	Terahertz response of metal-semiconductor-metal photodetectors. Journal of Applied Physics, 1998, 84, 6419-6425.	2.5	7
129	Sub-terahertz FET detector with self-assembled Sn-nanothreads. Journal Physics D: Applied Physics, 2020, 53, 075102.	2.8	7
130	Far-infrared and terahertz emitting diodes based on graphene/black-P and graphene/MoS2 heterostructures. Optics Express, 2020, 28, 24136.	3.4	7
131	Procedure for fitting Monte Carlo calculated impact ionization coefficient to experiment. Journal of Applied Physics, 1994, 76, 1672-1675.	2.5	6
132	Combined resonance and resonant detection of modulated terahertz radiation in a micromachined high-electron mobility transistor. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 277-281.	0.8	6
133	Electrical excitation of shock and solitonâ€like waves in highâ€electronâ€mobility transistor structures. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 61-65.	0.8	6
134	Terahertz light amplification by stimulated emission of radiation from optically pumped graphene. Proceedings of SPIE, 2011, , .	0.8	6
135	Ballistic Injection Terahertz Plasma Instability in Graphene n + â€• â€" n â€" n + Fieldâ€Effect Transistors and Lateral Diodes. Physica Status Solidi (A) Applications and Materials Science, 0, , .	1.8	6
136	Terahertz operation of quantum-well intersubband hot-electron phototransistors. IEEE Journal of Quantum Electronics, 1999, 35, 928-935.	1.9	5
137	Device Model of Integrated QWIP-HBT-LED Pixel for Infrared Focal Plane Arrays. , 2002, , .		4
138	Negative Terahertz Conductivity at Vertical Carrier Injection in a Black-Arsenic-Phosphorusâ€"Graphene Heterostructure Integrated With a Light-Emitting Diode. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-9.	2.9	4
139	Terahertz Amplifiers based on Multiple Graphene Layer with Field-Enhancement Effect. Japanese Journal of Applied Physics, 2011, 50, 070118.	1.5	4
140	Subterahertz detection by high electron mobility transistors at large forward gate bias. , 0, , .		3
141	Infrared detection and photon energy up-conversion in graphene layer infrared photodetectors integrated with LEDs based on van der Waals heterostructures: Concept, device model, and characteristics. Infrared Physics and Technology, 2017, 85, 307-314.	2.9	3
142	Device model for pixelless infrared image up-converters based on polycrystalline graphene heterostructures. Journal of Applied Physics, 2018, 123, 014503.	2.5	3
143	Multiple graphene-layer-based heterostructures with van der Waals barrier layers for terahertz superluminescent and laser diodes with lateral/vertical current injection. Semiconductor Science and Technology, 2020, 35, 085023.	2.0	3
144	Coulomb Drag by Injected Ballistic Carriers in Graphene n + â€¯iâ€¯nâ€¯n + Structures: Doping and Temperature Effects. Physica Status Solidi (A) Applications and Materials Science, 0, , 2100535.	1.8	3

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145	Coulomb drag and plasmonic effects in graphene field-effect transistors enable resonant terahertz detection. Applied Physics Letters, 2022, 120, 111102.	3.3	3
146	RESONANT TERAHERTZ DETECTION ANTENNA UTILIZING PLASMA OSCILLATIONS IN LATERAL SCHOTTKY DIODE. International Journal of High Speed Electronics and Systems, 2007, 17, 539-546.	0.7	2
147	Graphene materials and devices for terahertz science and technology. , 2013, , .		2
148	Concepts of infrared and terahertz photodetectors based on vertical graphene van der Waals and HgTe-CdHgTe heterostructures. Opto-electronics Review, 2019, 27, 219-223.	2.4	2
149	Heat capacity of nonequilibrium electron-hole plasma in graphene layers and graphene bilayers. Physical Review B, 2021, 103, .	3.2	2
150	Vertical Hot-electron Terahertz Detectors Based on Black-As1?xPx/graphene/black-As1?yPy Heterostructures. Sensors and Materials, 2019, 31, 2271.	0.5	2
151	Plasma wave electronics devices. , 0, , .		1
152	Modeling of the excitation of terahertz plasma oscillations in a HEMT by ultrashort optical pulses. , 0, , .		1
153	Broadband Terahertz Emission from Dual-Grating Gate HEMT's-Mechanism and Emission Spectral Profile. , 2008, , .		1
154	Graphene active plasmonic metamaterials for new types of terahertz lasers. , 2013, , .		1
155	Graphene Active Plasmonics for New Types of Terahertz Lasers. International Journal of High Speed Electronics and Systems, 2014, 23, 1450016.	0.7	1
156	Plasma resonant terahertz photomixers based on double graphene layer structures. Journal of Physics: Conference Series, 2014, 486, 012032.	0.4	1
157	Graphene Active Plasmonics for New Types of Terahertz Lasers. , 2015, , .		1
158	Characteristics of vertically stacked graphene-layer infrared photodetectors. Solid-State Electronics, 2019, 155, 123-128.	1.4	1
159	Terahertz-wave generation using graphene: Toward new types of terahertz lasers. Proceedings of the IEEE, 2024, , 1-13.	21.3	1
160	PLASMA WAVES IN TWO-DIMENSIONAL ELECTRON SYSTEMS AND THEIR APPLICATIONS. Selected Topics in Electornics and Systems, 2008, , 77-94.	0.2	1
161	Far-infrared photodetection in graphene nanoribbon heterostructures with black-phosphorus base layers. Optical Engineering, 2020, 60, .	1.0	1
162	High-frequency characteristics of a quantum well diode. , 0, , .		0

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163	Computer modeling of static and dynamic behavior of multiple quantum well infrared photodetectors. , 0, , .		0
164	Injection Lasers With a Resonant-Tunneling Controlling Structure. , 1996, , .		0
165	Intersubband infrared phototransistors with a quantum-wire base. , 0, , .		0
166	Optical Tuning Of Plasma Resonances In Hot-electron Transistors. , 0, , .		0
167	Plasma waves excitation in the base of lateral hot electron transistor. , 0, , .		0
168	Tunnelling effects in concentric disk quantum dots: discrete - discrete and discrete - continuum limits. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 1540-1543.	0.8	0
169	Plasma waves in graphene-based heterostructures and their terahertz device applications. , 2007, , .		0
170	Nanomechanical systems with plasmonic resonances as detectors of modulated terahertz radiation. , 2009, , .		0
171	New semiconductor materials and devices for terahertz imaging and sensing. , 2011, , .		0
172	Terahertz Wave Generation Using Graphene and Compound Semiconductor Nano-Heterostructures. Nanostructure Science and Technology, 2015, , 237-261.	0.1	0
173	Plasmonic Enhancement of Terahertz Devices Efficiency. International Journal of High Speed Electronics and Systems, 2016, 25, 1640019.	0.7	0
174	Enhanced Terahertz Emission from Monolayer Graphene with Metal Mesh Structure. Materials Today: Proceedings, 2016, 3, S221-S226.	1.8	0
175	Dynamic Conductivity and Two-Dimensional Plasmons in Lateral CNT Networks. International Journal of High Speed Electronics and Systems, 2017, 26, 1740004.	0.7	0
176	Optical Pumping of Graphene-Based Heterostructures with Black-Arsenic-Phosphorus Absorbing-Cooling Layer for Terahertz Lasing. , 2019, , .		0
177	RESONANT TERAHERTZ DETECTION ANTENNA UTILIZING PLASMA OSCILLATIONS IN LATERAL SCHOTTKY DIODE. Selected Topics in Electornics and Systems, 2008, , 95-102.	0.2	0
178	Plasmonic Enhancement of Terahertz Devices Efficiency. , 2017, , .		0
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