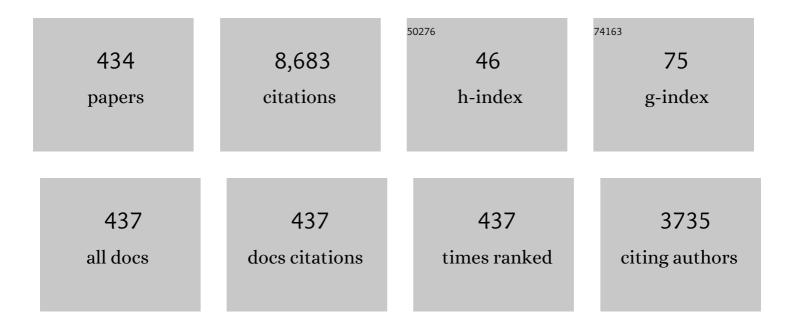
## Taichi Otsuji

List of Publications by Year in descending order

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Тлісні Отяції

#	Article	IF	CITATIONS
1	Terahertz-wave generation using graphene: Toward new types of terahertz lasers. Proceedings of the IEEE, 2024, , 1-13.	21.3	1
2	Enhanced terahertz detection of multigate graphene nanostructures. Nanophotonics, 2022, 11, 519-529.	6.0	17
3	Graphene-based plasmonic metamaterial for terahertz laser transistors. Nanophotonics, 2022, 11, 1677-1696.	6.0	15
4	Graphene-based plasma-wave devices for terahertz applications. , 2022, , .		0
5	Boosting photoconductive large-area THz emitter via optical light confinement behind a highly refractive sapphire-fiber lens. Optics Letters, 2022, 47, 1899.	3.3	9
6	Coulomb drag and plasmonic effects in graphene field-effect transistors enable resonant terahertz detection. Applied Physics Letters, 2022, 120, 111102.	3.3	3
7	Optical up-conversion-based cross-correlation for characterization of sub-nanosecond terahertz-wave pulses. Optics Express, 2022, 30, 11217.	3.4	7
8	Plasma-Wave Devices. Springer Series in Optical Sciences, 2022, , 291-296.	0.7	0
9	Bias voltage dependency of plasmonic instability and terahertz radiation in a dual-grating-gate high-electron-mobility transistor. , 2021, , .		Ο
10	Terahertz emission in an InGaAs-based dual-grating-gate high-electron-mobility transistor plasmonic photomixer. Applied Physics Express, 2021, 14, 051001.	2.4	3
11	Unitraveling-Carrier-Photodiode-Integrated High-Electron-Mobility Transistor for Photonic Double-Mixing. Journal of Lightwave Technology, 2021, 39, 3341-3349.	4.6	8
12	Optical-to-Wireless Carrier Frequency Down-Conversion by UTC-PD-Integrated HEMT: Dependence of Conversion Gain on UTC-PD Mesa Size. , 2021, , .		1
13	Modulation characteristics of uncooled graphene photodetectors. Journal of Applied Physics, 2021, 129, .	2.5	10
14	Fast terahertz detection by asymmetric dual-grating-gate graphene FET. , 2021, , .		1
15	Heat capacity of nonequilibrium electron-hole plasma in graphene layers and graphene bilayers. Physical Review B, 2021, 103, .	3.2	2
16	1-THz plasmonic double-mixing in a dual-grating-gate high-electron- mobility transistor. , 2021, , . S-Shaped Current-Voltage Characteristics of Kmml:math		0
17	xmins:mml="http://www.w3.org/1998/Math/Wath/Wath/Wath/Wath/Wath/Wath/Wath/W	3.8	18
18	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

#	Article	IF	CITATIONS
19	Giant Enhancement of Photovoltage from InGaAs-Channel Dual-Grating-Gate HEMT THz Detector due to Nonlinear Rectification Effect at InGaAs/InAlAs Heterobarrier. , 2021, , .		Ο
20	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
21	THz Emission in a Dual-Grating-Gate HEMT Promoted by the Plasmonic Boom Instability. , 2021, , .		Ο
22	Terahertz Detection by an Asymmetric Dual-Grating-Gate Graphene FET. , 2021, , .		1
23	3D Rectification Effect on Plasmonic THz Detection by InP-Based Dual-Grating-Gate High-Electron-Mobility Transistor. , 2021, , .		2
24	Modal Analysis of Plasmon-Polaritons in Plasmonic THz Detector Integrated with Two-Dimensional Nano-Antennas. , 2021, , .		0
25	Paving the Way for Tunable Graphene Plasmonic THz Amplifiers. Frontiers in Physics, 2021, 9, .	2.1	10
26	Plasmonic Field-Effect Transistors (TeraFETs) for 6G Communications. Sensors, 2021, 21, 7907.	3.8	20
27	Current Driven Plasma Instability in Graphene-FETs with Coulomb Electron Drag. , 2021, , . Effect of Coulomb Carrier Drag and Terahertz Plasma Instability in <mml:math< td=""><td></td><td>0</td></mml:math<>		0
28	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 <br="" display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML">overflow="scroll"&gt;<mml:mi>p</mml:mi></mml:math> - <mml:math overflow="scroll"&gt;<mml:mi>p</mml:mi>/wml:math&gt; - <mml:math< td=""><td>3.8</td><td>8</td></mml:math<></mml:math 	3.8	8
29	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" sverflow="scroll"> mmlmi>is/m Sub-terahertz FET detector with self-assembled Sn-nanothreads. Journal Physics D: Applied Physics, 2020, 53, 075102.	2.8	7
30	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
31	Asymmetric dual-grating gates graphene FET for detection of terahertz radiations. APL Photonics, 2020, 5, 066102.	5.7	36
32	A graphene-based magnetoplasmonic metasurface for actively tunable transmission and polarization rotation at terahertz frequencies. Applied Physics Letters, 2020, 116, 221107.	3.3	15
33	Electrical transport properties of gate tunable graphene lateral tunnel diodes. Japanese Journal of Applied Physics, 2020, 59, SIID03.	1.5	3
34	Graphene based plasma-wave devices for terahertz applications. Applied Physics Letters, 2020, 116, .	3.3	48
35	Room-Temperature Amplification of Terahertz Radiation by Grating-Gate Graphene Structures. Physical Review X, 2020, 10, .	8.9	43
36	Far-infrared photodetectors based on graphene/black-AsP heterostructures. Optics Express, 2020, 28, 2480.	3.4	27

#	Article	IF	CITATIONS
37	Far-infrared and terahertz emitting diodes based on graphene/black-P and graphene/MoS2 heterostructures. Optics Express, 2020, 28, 24136.	3.4	7
38	Frequency-agile injection-seeded terahertz-wave parametric generation: publisher's note. Optics Letters, 2020, 45, 627.	3.3	1
39	Frequency-agile injection-seeded terahertz-wave parametric generation. Optics Letters, 2020, 45, 77.	3.3	6
40	Nanoscale probing of thermally excited evanescent fields in an electrically biased graphene by near-field optical microscopy. Applied Physics Express, 2020, 13, 096501.	2.4	9
41	Far-infrared photodetection in graphene nanoribbon heterostructures with black-phosphorus base layers. Optical Engineering, 2020, 60, .	1.0	1
42	Gate-Readout of Photovoltage from a Grating-Gate Plasmonic THz Detector. , 2020, , .		6
43	Investigation of Terahertz properties in Graphene ribbons. , 2020, , .		3
44	Terahertz Emission in an Asymmetric Dual-Grating-Gate High-Electron Mobility Transistor Plasmonic Photomixer under dc Current Flow. , 2020, , .		0
45	Room Temperature Amplification of Terahertz Radiation by Grating-Gate Monolayer Graphene-Channel Transistor Structures. , 2020, , .		1
46	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
47	Optical-to-THz Frequency Down-Conversion Utilizing Two-Dimensional Plasmons. , 2019, , .		1
48	Negative terahertz conductivity and amplification of surface plasmons in graphene–black phosphorus injection laser heterostructures. Physical Review B, 2019, 100, .	3.2	21
49	Characteristics of vertically stacked graphene-layer infrared photodetectors. Solid-State Electronics, 2019, 155, 123-128.	1.4	1
50	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
51	Optical Pumping of Graphene-Based Heterostructures with Black-Arsenic-Phosphorus Absorbing-Cooling Layer for Terahertz Lasing. , 2019, , .		Ο
52	Asymmetric Dual Grating Gate Graphene-based THz detectors. , 2019, , .		0
53	Terahertz Emission from an Asymmetric Dual-Grating-Gate InGaAs High-Electron-Mobility Transistor Stimulated by Plasmonic Boom Instability. , 2019, , .		1
54	Negative Terahertz Conductivity at Vertical Carrier Injection in a Black-Arsenic-Phosphorus–Graphene Heterostructure Integrated With a Light-Emitting Diode. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-9.	2.9	4

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55	Terahertz plasmon-emitting graphene-channel transistor. Opto-electronics Review, 2019, 27, 345-347.	2.4	6
56	Terahertz photoconductive emitter with dielectric-embedded high-aspect-ratio plasmonic grating for operation with low-power optical pumps. AIP Advances, 2019, 9, .	1.3	43
57	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
58	Metallic and dielectric metasurfaces in photoconductive terahertz devices: a review. Optical Engineering, 2019, 59, 1.	1.0	61
59	Graphene-based van der Waals heterostructures towards a new type of terahertz quantum-cascade lasers. , 2019, , .		1
60	Negative and positive terahertz and infrared photoconductivity in uncooled graphene. Optical Materials Express, 2019, 9, 585.	3.0	24
61	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
62	UTC-PD-Integrated HEMT for Optical-to-Millimeter-Wave Carrier Frequency Down-Conversion. , 2019, , .		2
63	Graphene-based 2D-heterostructures for terahertz lasers and amplifiers. , 2019, , .		1
64	Plasmonic terahertz emitters with high-aspect ratio metal gratings. , 2019, , .		0
65	Terahertz light amplification of stimulated emission of radiation in current-injection graphene channel transistor. , 2019, , .		0
66	Vertical Hot-electron Terahertz Detectors Based on Black-As1?xPx/graphene/black-As1?yPy Heterostructures. Sensors and Materials, 2019, 31, 2271.	0.5	2
67	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
68	Comparison of Intersubband Quantum-Well and Interband Graphene-Layer Infrared Photodetectors. IEEE Journal of Quantum Electronics, 2018, 54, 1-8.	1.9	9
69	Device model for pixelless infrared image up-converters based on polycrystalline graphene heterostructures. Journal of Applied Physics, 2018, 123, 014503.	2.5	3
70	Terahertz light-emitting graphene-channel transistor toward single-mode lasing. Nanophotonics, 2018, 7, 741-752.	6.0	57
71	Manifestation of plasmonic response in the detection of sub-terahertz radiation by graphene-based devices. Nanotechnology, 2018, 29, 245204.	2.6	18
72	Plasmonic terahertz antennas with high-aspect ratio metal gratings. EPJ Web of Conferences, 2018, 195, 02009.	0.3	2

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73	Coupling of 2D Plasmons in Grating-Gate Plasmonic THz Detector to THz Wave with Lateral Polarization. , 2018, , .		3
74	Sn-nanothreads in GaAs matrix and their sub- and terahertz applications. Journal of Physics: Conference Series, 2018, 1092, 012166.	0.4	5
75	Electrical modulation of terahertz radiation using graphene-phosphorene heterostructures. Semiconductor Science and Technology, 2018, 33, 124010.	2.0	19
76	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
77	Interband infrared photodetectors based on HgTe–CdHgTe quantum-well heterostructures. Optical Materials Express, 2018, 8, 1349.	3.0	13
78	Infrared photodetectors based on graphene van der Waals heterostructures. Infrared Physics and Technology, 2017, 84, 72-81.	2.9	17
79	Dynamic Conductivity and Two-Dimensional Plasmons in Lateral CNT Networks. International Journal of High Speed Electronics and Systems, 2017, 26, 1740004.	0.7	0
80	Current-injection terahertz lasing in a distributed-feedback dual-gate graphene-channel transistor. Proceedings of SPIE, 2017, , .	0.8	0
81	Plasmonic amplification of terahertz radiation in a periodic graphene structure with the carrier injection. Applied Physics Letters, 2017, 111, .	3.3	27
82	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
83	Neutral beam process in AlGaN/GaN HEMTs: Impact on current collapse. Solid-State Electronics, 2017, 137, 1-5.	1.4	9
84	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
85	Neutral beam etching for device isolation in AlGaN/GaN HEMTs. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600617.	1.8	5
86	Detection and up-conversion of infrared radiation using van der Waals heterostructures with graphene layers. , 2017, , .		0
87	Lens-integrated asymmetric-dual-grating-gate high-electron-mobility-transistor for plasmonic terahertz detection. , 2017, , .		2
88	High-speed pulse response of asymmetric-dual-grating-gate high-electron-mobility-transistor for plasmonic THz detection. , 2017, , .		1
89	Solution-based formation of high-quality gate dielectrics on epitaxial graphene by microwave-assisted annealing. Japanese Journal of Applied Physics, 2017, 56, 06GF09.	1.5	2
90	Nonlinear response of infrared photodetectors based on van der Waals heterostructures with graphene layers. Optics Express, 2017, 25, 5536.	3.4	18

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91	Broadband Terahertz-Light Emission by Current-Injection Distributed-Feedback Dual-Gate Graphene-Channel Field-Effect Transistor. , 2017, , .		1
92	Physics of Terahertz-Wave Generation Using Plasmon Resonance and its Application to the Light-Source Devices. The Review of Laser Engineering, 2017, 45, 746.	0.0	0
93	Millimeter-wave/terahertz detection and photonic double-mixing by transistors. , 2017, , .		4
94	Terahertz Optoelectronics in Graphene. Hyomen Kagaku, 2016, 37, 553-559.	0.0	0
95	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
96	5.2-THz single-mode lasing in current-injection distributed-feedback dual-gate graphene-channel field-effect transistor. , 2016, , .		0
97	Design and Fabrication of Terahertz Detectors Based on 180-nm CMOS Process Technology. International Journal of High Speed Electronics and Systems, 2016, 25, 1640014.	0.7	1
98	Plasmonic Enhancement of Terahertz Devices Efficiency. International Journal of High Speed Electronics and Systems, 2016, 25, 1640019.	0.7	0
99	Achievement of balanced high frequency and high breakdown by InGaAs-based high-electron-mobility transistors with slant field plates. Applied Physics Express, 2016, 9, 114101.	2.4	2
100	Resonant plasmonic terahertz detection in graphene split-gate field-effect transistors with lateral p–n junctions. Journal Physics D: Applied Physics, 2016, 49, 315103.	2.8	27
101	Solution-processed Al <sub>2</sub> O <sub>3</sub> gate dielectrics for graphene field-effect transistors. Japanese Journal of Applied Physics, 2016, 55, 091502.	1.5	6
102	Two-dimensional plasmons in lateral carbon nanotube network structures and their effect on the terahertz radiation detection. Journal of Applied Physics, 2016, 120, 044501.	2.5	18
103	Nanostructured asymmetric dual-grating-gate plasmonic THz detectors: Enhancement of external coupling efficiency by array configuration and silicon-lens integration. , 2016, , .		1
104	High-performance self-aligned graphene transistors fabricated using contamination- and defect-free process. Japanese Journal of Applied Physics, 2016, 55, 06GF11.	1.5	1
105	Array configuration and silicon-lens integration of asymmetric dual-grating-gate plasmonic THz detectors. , 2016, , .		4
106	Enhanced Terahertz Emission from Monolayer Graphene with Metal Mesh Structure. Materials Today: Proceedings, 2016, 3, S221-S226.	1.8	0
107	Graphene-based van der Waals heterostructures for emission and detection of terahertz radiation. Proceedings of SPIE, 2016, , .	0.8	2
108	Cooperative promotion of plasma instabilities for emission of terahertz radiation in an asymmetric dual-grating-gate graphene-channel FET. , 2016, , .		2

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109	Plasmons in tunnel-coupled graphene layers: Backward waves with quantum cascade gain. Physical Review B, 2016, 94, .	3.2	32
110	A Fitting Model for Asymmetric <inline-formula> <tex-math notation="LaTeX">\$I\$ </tex-math> </inline-formula> – <inline-formula> <tex-math notation="LaTeX">\$V\$ </tex-math> </inline-formula> Characteristics of Graphene FETs for Extraction of Intrinsic Mobilities. IEEE Transactions on Electron Devices, 2016, 63, 3300-3306.	3.0	11
111	Giant plasmon instability in a dual-grating-gate graphene field-effect transistor. Physical Review B, 2016, 93, .	3.2	42
112	Models for plasmonic THz detectors based on graphene split-gate FETs with lateral p-n junctions. , 2016, , .		0
113	Terahertz wave generation and detection in double-graphene layered van der Waals heterostructures. 2D Materials, 2016, 3, 045009.	4.4	56
114	A new process approach for slant field plates in GaN-based high-electron-mobility transistors. Japanese Journal of Applied Physics, 2016, 55, 01AD02.	1.5	11
115	Photonic Frequency Double-Mixing Conversion Over the 120-GHz Band Using InP- and Graphene-Based Transistors. Journal of Lightwave Technology, 2016, 34, 2011-2019.	4.6	14
116	Sub-THz photonic frequency conversion using optoelectronic transistors for future fully coherent access network systems. , 2016, , .		0
117	Current-Injection Terahertz Lasing in Distributed-Feedback Dual-Gate Graphene-Channel Field-Effect Transistor. , 2016, , .		0
118	Sub-THz photonic frequency conversion using graphene and InP-based transistors for future fully coherent access network. , 2015, , .		0
119	Resonant plasmonic terahertz detection in vertical graphene-base hot-electron transistors. Journal of Applied Physics, 2015, 118, .	2.5	16
120	Negative terahertz conductivity in remotely doped graphene bilayer heterostructures. Journal of Applied Physics, 2015, 118, .	2.5	4
121	Effects of carrier-carrier scattering on population inversion in graphene under pulse photoexcitation. Journal of Physics: Conference Series, 2015, 584, 012018.	0.4	6
122	Graphene active plasmonics for terahertz device applications. , 2015, , .		0
123	Photonic frequency conversion using graphene FETs for future fully coherent access network. , 2015, , .		0
124	Vertical hot-electron graphene-base transistors as resonant plasmonic terahertz detectors. , 2015, , .		0
125	Superradiant amplification of terahertz radiation by plasmons in inverted graphene with a planar distributed Bragg resonator. Semiconductors, 2015, 49, 1468-1472.	0.5	2
126	Broadband characteristics of ultrahigh responsivity of asymmetric dual-grating-gate plasmonic terahertz detectors. , 2015, , .		1

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127	Emission and detection of terahertz radiation in double-graphene-layer van der waals heterostructures. , 2015, , .		Ο
128	Graphene Active Plasmonics for New Types of Terahertz Lasers. , 2015, , .		1
129	Active guiding of Dirac plasmons in graphene. Applied Physics Letters, 2015, 106, 061105.	3.3	22
130	Controlled oxygen-doped diamond-like carbon film synthesized by photoemission-assisted plasma. Diamond and Related Materials, 2015, 53, 11-17.	3.9	10
131	Graphene vertical cascade interband terahertz and infrared photodetectors. 2D Materials, 2015, 2, 025002.	4.4	20
132	Vertical electron transport in van der Waals heterostructures with graphene layers. Journal of Applied Physics, 2015, 117, 154504.	2.5	11
133	Room-temperature zero-bias plasmonic THz detection by asymmetric dual-grating-gate HEMT. Proceedings of SPIE, 2015, , .	0.8	Ο
134	Recent advances in the research toward graphene-based terahertz lasers. , 2015, , .		4
135	Helicity sensitive terahertz radiation detection by dual-grating-gate high electron mobility transistors. Journal of Applied Physics, 2015, 118, .	2.5	23
136	InGaAs channel HEMTs for photonic frequency double mixing conversion over the sub-THz band. , 2015, , $\cdot$		1
137	Terahertz Wave Generation Using Graphene and Compound Semiconductor Nano-Heterostructures. Nanostructure Science and Technology, 2015, , 237-261.	0.1	Ο
138	Electron Capture in van der Waals Graphene-Based Heterostructures with WS <sub>2</sub> Barrier Layers. Journal of the Physical Society of Japan, 2015, 84, 094703.	1.6	18
139	Negative terahertz conductivity in disordered graphene bilayers with population inversion. Applied Physics Letters, 2015, 106, 113501.	3.3	16
140	Terahertz Emission in Double-Graphene-Layer Structure. , 2015, , .		0
141	Graphene-channel FETs for photonic frequency double-mixing conversion over the sub-THz band. Solid-State Electronics, 2015, 103, 216-221.	1.4	62
142	Graphene Terahertz Devices. , 2015, , 105-122.		0
143	Application of Graphene to Ultrahigh-Frequency Optoelectronic Devices. Journal of the Vacuum Society of Japan, 2014, 57, 444-450.	0.3	0
144	Amplification of terahertz radiation by plasmonic graphene metasurfaces. , 2014, , .		0

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145	Graphene Active Plasmonics for New Types of Terahertz Lasers. International Journal of High Speed Electronics and Systems, 2014, 23, 1450016.	0.7	1
146	Graphene nanoelectromechanical resonators for the detection of modulated terahertz radiation. Journal Physics D: Applied Physics, 2014, 47, 505105.	2.8	7
147	S3-P4: Impact of drain conductance in InGaaS-HEMTs operated in a class-F amplifier. , 2014, , .		1
148	S7-N2: Terahertz lasing and detection in double-graphene-layer structures. , 2014, , .		0
149	Carrier-carrier scattering and negative dynamic conductivity in pumped graphene. Optics Express, 2014, 22, 19873.	3.4	33
150	Terahertz Plasmonics: Good Results and Great Expectations. IEEE Microwave Magazine, 2014, 15, 43-50.	0.8	96
151	Graphene vertical hot-electron terahertz detectors. Journal of Applied Physics, 2014, 116, 114504.	2.5	18
152	Double injection, resonant-tunneling recombination, and current-voltage characteristics in double-graphene-layer structures. Journal of Applied Physics, 2014, 115, .	2.5	18
153	Negative dynamic Drude conductivity in pumped graphene. Applied Physics Express, 2014, 7, 115101.	2.4	12
154	Gain Enhancement Effect of Surface Plasmon Polaritons on Terahertz Stimulated Emission in Optically Pumped Monolayer Graphene. , 2014, , .		6
155	Double graphene-layer structures for adaptive devices. , 2014, , .		0
156	Giant terahertz gain by excitation of surface plasmon polarities in optically pumped graphene. , 2014, , .		0
157	Graphene plasmonic heterostructures for new types of terahertz lasers. , 2014, , .		0
158	All-graphene field-effect transistor based on lateral tunnelling. Journal Physics D: Applied Physics, 2014, 47, 094002.	2.8	3
159	Voltage-tunable terahertz and infrared photodetectors based on double-graphene-layer structures. Applied Physics Letters, 2014, 104, .	3.3	32
160	Surface-plasmons lasing in double-graphene-layer structures. Journal of Applied Physics, 2014, 115, 044511.	2.5	21
161	Relationship between the structure and electrical characteristics of diamond-like carbon films. Journal of Applied Physics, 2014, 116, .	2.5	23
162	Impact of T-gate stem height on parasitic gate delay time in InGaAs-HEMTs. Solid-State Electronics, 2014, 102, 93-97.	1.4	51

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163	Ultrahigh sensitive sub-terahertz detection by InP-based asymmetric dual-grating-gate high-electron-mobility transistors and their broadband characteristics. Applied Physics Letters, 2014, 104, .	3.3	158
164	Current collapse suppression in AlGaN/GaN HEMTs by means of slant field plates fabricated by multi-layer SiCN. Solid-State Electronics, 2014, 101, 63-69.	1.4	13
165	Active graphene plasmonics for terahertz device applications. Journal Physics D: Applied Physics, 2014, 47, 094006.	2.8	101
166	Transient stimulated emission from multi-split-gated graphene structure. Journal Physics D: Applied Physics, 2014, 47, 055103.	2.8	1
167	Terahertz emission and detection in double-graphene-layer structures. , 2014, , .		1
168	Challenges to create graphene terahertz lasers. Journal of Physics: Conference Series, 2014, 486, 012007.	0.4	1
169	Current-driven detection of terahertz radiation using a dual-grating-gate plasmonic detector. Applied Physics Letters, 2014, 104, .	3.3	43
170	Graphene plasmonic heterostructures for terahertz device applications. , 2014, , .		0
171	Improved breakdown voltage and RF characteristics in AlGaN/GaN high-electron-mobility transistors achieved by slant field plates. Applied Physics Express, 2014, 7, 096501.	2.4	7
172	Damping mechanism of terahertz plasmons in graphene on heavily doped substrate. Journal of Applied Physics, 2014, 115, 104501.	2.5	10
173	Terahertz and infrared surface plasmon-polaritons in double-graphene layer structures. Journal of Physics: Conference Series, 2014, 486, 012023.	0.4	0
174	Plasma resonant terahertz photomixers based on double graphene layer structures. Journal of Physics: Conference Series, 2014, 486, 012032.	0.4	1
175	Recent Results on Broadband Nanotransistor Based THz Detectors. NATO Science for Peace and Security Series B: Physics and Biophysics, 2014, , 189-209.	0.3	5
176	Terahertz Plasma Field Effect Transistors. Springer Series in Optical Sciences, 2014, , 77-100.	0.7	4
177	Threshold of terahertz population inversion and negative dynamic conductivity in graphene under pulse photoexcitation. Journal of Applied Physics, 2013, 113, .	2.5	45
178	Site-Selective Epitaxy of Graphene on Si Wafers. Proceedings of the IEEE, 2013, 101, 1557-1566.	21.3	13
179	InP- and GaAs-Based Plasmonic High-Electron-Mobility Transistors for Room-Temperature Ultrahigh-Sensitive Terahertz Sensing and Imaging. IEEE Sensors Journal, 2013, 13, 89-99.	4.7	69
180	Double injection in graphene p-i-n structures. Journal of Applied Physics, 2013, 113, 244505.	2.5	32

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181	Hydrodynamic electron transport and nonlinear waves in graphene. Physical Review B, 2013, 88, .	3.2	66
182	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
183	Injection terahertz laser using the resonant inter-layer radiative transitions in double-graphene-layer structure. Applied Physics Letters, 2013, 103, .	3.3	47
184	Graphene active plasmonics and their applications to terahertz lasers and sensors. Proceedings of SPIE, 2013, , .	0.8	2
185	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
186	Graphene-channel FETs for photonic frequency double-mixing conversion over the sub-THz band. , 2013, , .		2
187	Observation of terahertz resonant absorption in graphene micro-ribbon arrays. , 2013, , .		0
188	Amplification of terahertz radiation by plasmons in graphene with a planar Bragg grating. , 2013, , .		0
189	Simulation of terahertz plasmons in graphene with grating-gate structures. , 2013, , .		0
190	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
191	Voltage-controlled surface plasmon-polaritons in double graphene layer structures. Journal of Applied Physics, 2013, 113, .	2.5	60
192	Terahertz emission and detection using two dimensional plasmons in semiconductor nano-heterostructures for sensing applications. , 2013, , .		0
193	Emission and Detection of Terahertz Radiation Using Two-Dimensional Electrons in Ill–V Semiconductors and Graphene. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 63-71.	3.1	98
194	Graphene terahertz uncooled bolometers. Journal Physics D: Applied Physics, 2013, 46, 065102.	2.8	38
195	Concept of infrared photodetector based on graphene–graphene nanoribbon structure. Infrared Physics and Technology, 2013, 59, 137-141.	2.9	7
196	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
197	Numerical simulation of terahertz plasmons in gated graphene structures. , 2013, , .		2
198	AlGaN/GaN MISâ€gate HEMTs with SiCN gate stacks. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 790-793.	0.8	1

#	Article	IF	CITATIONS
199	Terahertz photomixing using plasma resonances in double-graphene layer structures. Journal of Applied Physics, 2013, 113, .	2.5	47
200	High-Performance Graphene Field-Effect Transistors With Extremely Small Access Length Using Self-Aligned Source and Drain Technique. Proceedings of the IEEE, 2013, 101, 1603-1608.	21.3	15
201	InGaAs HEMTs with T-gate electrodes formed by multi-layer SiCN molds. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 773-776.	0.8	4
202	Graphene active plasmonic metamaterials for new types of terahertz lasers. , 2013, , .		1
203	Double-graphene-layer terahertz laser: concept, characteristics, and comparison. Optics Express, 2013, 21, 31567.	3.4	34
204	Asymmetric dual-grating gate InGaAs/InAlAs/InP HEMTs for ultrafast and ultrahigh sensitive terahertz detection. , 2013, , .		0
205	Emission and detection of terahertz radiation using two dimensional plasmons in semiconductor nano-heterostructures for nondestructive evaluations. Proceedings of SPIE, 2013, , .	0.8	2
206	Plasmonic terahertz monochromatic coherent emission from an asymmetric chirped dual-grating-gate InP-HEMT with a photonic vertical cavity. , 2013, , .		2
207	Plasmonic Terahertz Monochromatic Coherent Emission from an Asymmetric Chirped Dual-Grating-Gate InP-HEMT with a Photonic Vertical Cavity. , 2013, , .		3
208	Terahertz graphene lasers: Injection versus optical pumping. , 2013, , .		2
209	Formation of Diamond-Like Carbon Films by Photoemission-Assisted Plasma-Enhanced Chemical Vapor Deposition. Japanese Journal of Applied Physics, 2013, 52, 110123.	1.5	10
210	Emission and detection of terahertz radiation using two-dimensional plasmons in semiconductor nanoheterostructures for nondestructive evaluations. Optical Engineering, 2013, 53, 031206.	1.0	29
211	Graphene materials and devices for terahertz science and technology. , 2013, , .		2
212	Impact of T-gate stem height on parasitic gate delay time in InGaAs-HEMTs. , 2013, , .		1
213	Amplification of terahertz radiation by stimulated emission of plasmons in graphene. , 2013, , .		1
214	Graphene surface emitting terahertz laser: Diffusion pumping concept. Applied Physics Letters, 2013, 103, 251102.	3.3	40
215	Terahertz monochromatic coherent emission from an asymmetric chirped dual-grating-gate InP-HEMT with a photonic vertical cavity. , 2013, , .		0
216	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

#	Article	IF	CITATIONS
217	Contribution of the gate leakage current to terahertz detection by asymmetric dual-grating gate HEMT structures. , 2013, , .		0
218	Graphene active plasmonics for superradiant terahertz lasing. , 2013, , .		0
219	Graphene Terahertz Lasers: Injection versus Optical Pumping. Materials Research Society Symposia Proceedings, 2013, 1505, 1.	0.1	0
220	Frequency Dispersion and Damping Mechanisms of Terahertz Plasmons in Graphene Transistor Structures. , 2013, , .		0
221	Asymmetric dual-grating gate InGaAs/InAlAs/InP HEMTs for ultrafast and ultrahigh sensitive terahertz detection. , 2012, , .		3
222	Interplay of intra- and interband absorption in a disordered graphene. Physical Review B, 2012, 86, .	3.2	20
223	Terahertz-wave generation using graphene. Materials Research Society Symposia Proceedings, 2012, 1437, 36.	0.1	Ο
224	Ultrahigh Sensitive Plasmonic Terahertz Detection Using Asymmetric Dual-Grating Gate HEMT Structures. , 2012, , .		0
225	Terahertz light amplification by stimulated emission of radiation in optically pumped graphene. Materials Research Society Symposia Proceedings, 2012, 1451, 169-177.	0.1	Ο
226	Synthesis of diamond-like carbon films on Si substrates by photoemission-assisted plasma-enhanced chemical vapor deposition. Thin Solid Films, 2012, 523, 25-28.	1.8	10
227	Effect of plasma resonances on dynamic characteristics of double graphene-layer optical modulator. Journal of Applied Physics, 2012, 112, .	2.5	50
228	Plasmonic terahertz lasing in an array of graphene nanocavities. Physical Review B, 2012, 86, .	3.2	101
229	Carbonaceous field effect transistor with graphene and diamondlike carbon. Diamond and Related Materials, 2012, 22, 118-123.	3.9	21
230	Terahertz radiation detection by double grating-gate transistors in high magnetic fields. , 2012, , .		0
231	Double graphene-layer plasma resonances terahertz detector. Journal Physics D: Applied Physics, 2012, 45, 302001.	2.8	76
232	Terahertz wave generation using graphene — Toward the creation of terahertz graphene injection lasers. , 2012, , .		0
233	Asymmetric dual-grating gate InGaAs/InAlAs/InP HEMTs for ultrafast and ultrahigh sensitive terahertz detection. , 2012, , .		3
234	Nonresonant Detection of Terahertz Radiation in High-Electron-Mobility Transistor Structure Using InAlAs/InGaAs/InP Material Systems at Room Temperature. Journal of Nanoscience and Nanotechnology, 2012, 12, 6737-6740.	0.9	16

#	Article	IF	CITATIONS
235	Terahertz detection and emission by field-effect transistors. , 2012, , .		2
236	Graphene-based devices in terahertz science and technology. Journal Physics D: Applied Physics, 2012, 45, 303001.	2.8	234
237	Resonant properties of the planar plasmonic crystal on a membrane substrate. Bulletin of the Russian Academy of Sciences: Physics, 2012, 76, 229-232.	0.6	1
238	Gain enhancement in graphene terahertz amplifiers with resonant structures. Journal of Applied Physics, 2012, 112, .	2.5	33
239	Ultrahigh sensitive plasmonic terahertz detectors based on an asymmetric dual-grating gate HEMT structure. Proceedings of SPIE, 2012, , .	0.8	1
240	Ultrahigh sensitive plasmonic terahertz detector based on an asymmetric dual-grating gate HEMT structure. Solid-State Electronics, 2012, 78, 109-114.	1.4	71
241	Population inversion and terahertz lasing in graphene. Proceedings of SPIE, 2012, , .	0.8	Ο
242	Graphene materials and devices in terahertz science and technology. MRS Bulletin, 2012, 37, 1235-1243.	3.5	30
243	InGaAs HEMTs with T-gate electrodes fabricated using HMDS SiN mold. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 354-356.	0.8	3
244	Terahertz and infrared photodetectors based on multiple graphene layer and nanoribbon structures. Opto-electronics Review, 2012, 20, .	2.4	53
245	Hydrodynamic model for electron-hole plasma in graphene. Journal of Applied Physics, 2012, 111, .	2.5	132
246	Ultrafast carrier dynamics and terahertz emission in optically pumped graphene at room temperature. Physical Review B, 2012, 85, .	3.2	169
247	Graphene-based electro-optical modulator: Concept and analysis. , 2012, , .		1
248	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
249	Toward the Creation of Graphene Terahertz Lasers. The Review of Laser Engineering, 2012, 40, 491.	0.0	Ο
250	THz Double-Grating Gate Transistor Detectors in High Magnetic Fields. Acta Physica Polonica A, 2012, 122, 1080-1082.	0.5	0
251	Control of epitaxy of graphene by crystallographic orientation of a Si substrate toward device applications. Journal of Materials Chemistry, 2011, 21, 17242.	6.7	37
252	Effect of Heating and Cooling of Photogenerated Electron–Hole Plasma in Optically Pumped Graphene on Population Inversion. Japanese Journal of Applied Physics, 2011, 50, 094001.	1.5	35

#	Article	IF	CITATIONS
253	Analytical device model for graphene bilayer field-effect transistors using weak nonlocality approximation. Journal of Applied Physics, 2011, 109, 064508.	2.5	11
254	Plasmonic terahertz detection by a double-grating-gate field-effect transistor structure with an asymmetric unit cell. Applied Physics Letters, 2011, 99, .	3.3	143
255	Toward the creation of terahertz graphene injection laser. Journal of Applied Physics, 2011, 110, .	2.5	141
256	Terahertz surface plasmons in optically pumped graphene structures. Journal of Physics Condensed Matter, 2011, 23, 145302.	1.8	168
257	Terahertz imaging with InP high-electron-mobility transistors. Proceedings of SPIE, 2011, , .	0.8	3
258	Performance Prediction of Complementary Field-Effect Transistor Circuits Using Graphene with Band Gap Induced by Site-Potential Asymmetry. Japanese Journal of Applied Physics, 2011, 50, 115101.	1.5	0
259	Polymer Material as a Gate Dielectric for Graphene Field-Effect-Transistor Applications. Japanese Journal of Applied Physics, 2011, 50, 070107.	1.5	1
260	Investigation of Graphene Field Effect Transistors with Al <sub>2</sub> O <sub>3</sub> Gate Dielectrics Formed by Metal Oxidation. Japanese Journal of Applied Physics, 2011, 50, 070111.	1.5	5
261	Room Temperature Logic Inverter on Epitaxial Graphene-on-Silicon Device. Japanese Journal of Applied Physics, 2011, 50, 070113.	1.5	31
262	Terahertz Amplifiers based on Multiple Graphene Layer with Field-Enhancement Effect. Japanese Journal of Applied Physics, 2011, 50, 070118.	1.5	6
263	Theoretical Study of Population Inversion in Graphene under Pulse Excitation. Japanese Journal of Applied Physics, 2011, 50, 070116.	1.5	20
264	Effect of "Mexican Hat―on Graphene Bilayer Field-Effect Transistor Characteristics. Japanese Journal of Applied Physics, 2011, 50, 070112.	1.5	2
265	New semiconductor materials and devices for terahertz imaging and sensing. , 2011, , .		0
266	Field Effect Transistors for Terahertz Detection and Emission. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 618-628.	2.2	40
267	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
268	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
269	Impact of Tâ€gate electrode on gate capacitance in In <sub>0.7</sub> Ga <sub>0.3</sub> As HEMTs. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 300-302.	0.8	8
270	Device loading effect on nonresonant detection of terahertz radiation in dual grating gate plasmonâ€resonant structure using InGaP/InGaAs/GaAs material systems. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 346-348.	0.8	20

#	Article	IF	CITATIONS
271	Terahertz and infrared detectors based on graphene structures. Infrared Physics and Technology, 2011, 54, 302-305.	2.9	32
272	Tunneling recombination in optically pumped graphene with electron-hole puddles. Applied Physics Letters, 2011, 99, .	3.3	10
273	Terahertz light amplification by stimulated emission of radiation from optically pumped graphene. Proceedings of SPIE, 2011, , .	0.8	6
274	Graphene/SiC/Si FETs with SiCN Gate Stack. ECS Transactions, 2011, 41, 249-254.	0.5	9
275	Characteristics of p–i–n Terahertz and Infrared Photodiodes Based on Multiple Graphene Layer Structures. Japanese Journal of Applied Physics, 2011, 50, 070117.	1.5	9
276	Strained silicon modulation field-effect transistor as a new sensor of terahertz radiation. Semiconductor Science and Technology, 2011, 26, 105006.	2.0	16
277	Effect of "Mexican Hat―on Graphene Bilayer Field-Effect Transistor Characteristics. Japanese Journal of Applied Physics, 2011, 50, 070112.	1.5	1
278	Theoretical Study of Population Inversion in Graphene under Pulse Excitation. Japanese Journal of Applied Physics, 2011, 50, 070116.	1.5	19
279	Characteristics of p–i–n Terahertz and Infrared Photodiodes Based on Multiple Graphene Layer Structures. Japanese Journal of Applied Physics, 2011, 50, 070117.	1.5	10
280	Terahertz Amplifiers based on Multiple Graphene Layer with Field-Enhancement Effect. Japanese Journal of Applied Physics, 2011, 50, 070118.	1.5	4
281	Effect of Heating and Cooling of Photogenerated Electron–Hole Plasma in Optically Pumped Graphene on Population Inversion. Japanese Journal of Applied Physics, 2011, 50, 094001.	1.5	37
282	Investigation of 2D plasma resonances in HEMTs by using electro-optical sampling technique. Lithuanian Journal of Physics, 2011, 51, 324-329.	0.4	0
283	Coherent and Tunable Terahertz Emission from Nano-metric Field Effect Transistor at Room Temperature. , 2011, , .		Ο
284	Performance Prediction of Complementary Field-Effect Transistor Circuits Using Graphene with Band Gap Induced by Site-Potential Asymmetry. Japanese Journal of Applied Physics, 2011, 50, 115101.	1.5	1
285	Plasmon-resonant microchip emitters and detectors for terahertz sensing and spectroscopic applications. Proceedings of SPIE, 2010, , .	0.8	5
286	Room Temperature Intense Terahertz Emission from a Dual Grating Gate Plasmon-Resonant Emitter Using InAlAs/InGaAs/InP Material Systems. IEICE Transactions on Electronics, 2010, E93-C, 1286-1289.	0.6	16
287	Oblique terahertz plasmons in graphene nanoribbon arrays. Physical Review B, 2010, 81, .	3.2	74
288	Epitaxial graphene field-effect transistors on silicon substrates. Solid-State Electronics, 2010, 54, 1010-1014.	1.4	12

#	Article	IF	CITATIONS
289	Epitaxial graphene top-gate FETs on silicon substrates. Solid-State Electronics, 2010, 54, 1071-1075.	1.4	18
290	Emission of terahertz radiation from two-dimensional electron systems in semiconductor nano-heterostructures. Comptes Rendus Physique, 2010, 11, 421-432.	0.9	12
291	Electrically induced <mml:math <br="" xmlns:mml="http://www.w3.org/1998/Math/MathML">display="inline"&gt;<mml:mrow><mml:mi>n</mml:mi><mml:mtext>â^`</mml:mtext><mml:mi>iin multiple graphene layer structures. Physical Review B, 2010, 82, .</mml:mi></mml:mrow></mml:math>	ex <b>t.</b> 2â^' <td>nn<b>2le</b>mtext&gt;&lt;1</td>	nn <b>2le</b> mtext><1
292	Room temperature terahertz detection in high-electron-mobility transistor structure using InAlAs/InGaAs/InP material systems. , 2010, , .		11
293	Extraction of Drain Current and Effective Mobility in Epitaxial Graphene Channel Field-Effect Transistors on SiC Layer Grown on Silicon Substrates. Japanese Journal of Applied Physics, 2010, 49, 04DF17.	1.5	20
294	Observation of Amplified Stimulated Terahertz Emission in Optically Pumped Epitaxial Graphene Heterostructures. , 2010, , .		1
295	An Intensity Modulator for Terahertz Electromagnetic Waves Utilizing Two-Dimensional Plasmon Resonance in a Dual-Grating-Gate High-Electron-Mobility Transistor. Japanese Journal of Applied Physics, 2010, 49, 054301.	1.5	11
296	AlGaN/GaN high electron mobility transistors as a voltage-tunable room temperature terahertz sources. Journal of Applied Physics, 2010, 107, .	2.5	133
297	Ambipolar Behavior in Epitaxial Graphene-Based Field-Effect Transistors on Si Substrate. Japanese Journal of Applied Physics, 2010, 49, 06GG01.	1.5	13
298	Room temperature coherent and voltage tunable terahertz emission from nanometer-sized field effect transistors. Applied Physics Letters, 2010, 97, .	3.3	31
299	Room temperature detection of sub-terahertz radiation in double-grating-gate transistors. Optics Express, 2010, 18, 6024.	3.4	51
300	Terahertz and infrared photodetection using p-i-n multiple-graphene-layer structures. Journal of Applied Physics, 2010, 107, .	2.5	73
301	Terahertz lasers based on optically pumped multiple graphene structures with slot-line and dielectric waveguides. Journal of Applied Physics, 2010, 107, .	2.5	134
302	Enhanced responsivity in a novel AlGaN / GaN plasmon-resonant terahertz detector using gate-dipole antenna with parasitic elements. , 2010, , .		29
303	Terahertz photomixing in strained silicon MODFET. , 2010, , .		0
304	Emission of terahertz radiation from two-dimensional electron systems in semiconductor nano-heterostructures. , 2010, , .		1
305	Observation of carrier relaxation and recombination dynamics in optically pumped epitaxial graphene heterostructures using terahertz emission spectroscopy. , 2009, , .		1
306	AlGaN/GaN Plasmon-Resonant Terahertz Detectors with On-Chip Patch Antennas. , 2009, , .		2

#	Article	IF	CITATIONS
307	Analysis of Gate Delay Scaling in In0.7Ga0.3As-Channel High Electron Mobility Transistors. Japanese Journal of Applied Physics, 2009, 48, 04C086.	1.5	6
308	Analysis of Fringing Effect on Resonant Plasma Frequency in Plasma Wave Devices. Japanese Journal of Applied Physics, 2009, 48, 04C096.	1.5	14
309	EMISSION AND INTENSITY MODULATION OF TERAHERTZ ELECTROMAGNETIC RADIATION UTILIZING 2-DIMENSIONAL PLASMONS IN DUAL-GRATING-GATE HEMT'S. International Journal of High Speed Electronics and Systems, 2009, 19, 33-53.	0.7	5
310	Field Effect Transistors for Terahertz Detection: Physics and First Imaging Applications. Journal of Infrared, Millimeter, and Terahertz Waves, 2009, 30, 1319.	2.2	199
311	Terahertz plasmon-resonant microship emitters and their possible sensing and spectroscopic applications. , 2009, , .		2
312	Terahertz Laser with Optically Pumped Graphene Layers and Fabri–Perot Resonator. Applied Physics Express, 2009, 2, 092301.	2.4	77
313	Application of plasmon-resonant microchip emitters to broadband terahertz spectroscopic measurement. Journal of the Optical Society of America B: Optical Physics, 2009, 26, A52.	2.1	21
314	Bandgap Engineering of Bilayer Graphene for Field-Effect Transistor Channels. Japanese Journal of Applied Physics, 2009, 48, 091605.	1.5	20
315	Theoretical Evaluation of Channel Structure in Graphene Field-Effect Transistors. Japanese Journal of Applied Physics, 2009, 48, 041202.	1.5	13
316	Performance Prediction of Graphene-Channel Field-Effect Transistors. Japanese Journal of Applied Physics, 2009, 48, 011604.	1.5	9
317	Feasibility of terahertz lasing in optically pumped epitaxial multiple graphene layer structures. Journal of Applied Physics, 2009, 106, .	2.5	125
318	Epitaxial graphene field effect transistors on silicon substrates. , 2009, , .		1
319	Graphene Nanoribbon Phototransistor: Proposal and Analysis. Japanese Journal of Applied Physics, 2009, 48, 04C144.	1.5	34
320	Device model for graphene bilayer field-effect transistor. Journal of Applied Physics, 2009, 105, 104510.	2.5	40
321	Spectral narrowing of terahertz emission from super-grating dual-gate plasmon-resonant high-electron mobility transistors. Journal of Physics: Conference Series, 2009, 193, 012068.	0.4	18
322	Terahertz detection in a double-grating-gate heterotransistor. Journal of Physics: Conference Series, 2009, 193, 012074.	0.4	2
323	3D-integration of a log spiral antenna onto a dual grating-gate plasmon-resonant terahertz emitter for high-directivity radiation. Journal of Physics: Conference Series, 2009, 193, 012070.	0.4	0
324	Enhancement of terahertz radiation by CW infrared laser excitation in a doubly interdigitated grating gates transistors. Journal of Physics: Conference Series, 2009, 193, 012071.	0.4	0

#	Article	IF	CITATIONS
325	Spectral Narrowing Effect of a Novel Super-Grating Dual-Gate Structure for Plasmon-Resonant Terahertz Emitter. IEICE Transactions on Electronics, 2009, E92-C, 696-701.	0.6	11
326	Plasmon-resonant Microchip Emitters and Their Applications to Terahertz Spectroscopy. Progress in Electromagnetics Research Symposium: [proceedings] Progress in Electromagnetics Research Symposium, 2009, 5, 341-345.	0.4	0
327	Bolometric detection of terahertz radiation from new grating gates device. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 282-285.	0.8	4
328	Plasma oscillations in nanotransistors for room temperature detection and emission of terahertz radiation. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 244-248.	0.8	13
329	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
330	Room temperature terahertz emission from grating coupled two-dimensional plasmons. Applied Physics Letters, 2008, 92, .	3.3	55
331	Current-voltage characteristics of a graphene-nanoribbon field-effect transistor. Journal of Applied Physics, 2008, 103, .	2.5	42
332	Plasma mechanisms of resonant terahertz detection in a two-dimensional electron channel with split gates. Journal of Applied Physics, 2008, 103, .	2.5	23
333	Analysis of resonant detection of terahertz radiation in high-electron mobility transistor with a nanostring/carbon nanotube as the mechanically floating gate. Journal of Applied Physics, 2008, 104, .	2.5	15
334	Emission of terahertz radiation from dual grating gate plasmon-resonant emitters fabricated with InGaP/InGaAs/GaAs material systems. Journal of Physics Condensed Matter, 2008, 20, 384206.	1.8	53
335	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
336	Tunneling Current–Voltage Characteristics of Graphene Field-Effect Transistor. Applied Physics Express, 2008, 1, 013001.	2.4	24
337	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
338	Broadband Terahertz Emission from Dual-Grating Gate HEMT's-Mechanism and Emission Spectral Profile. , 2008, , .		1
339	High-frequency properties of a graphene nanoribbon field-effect transistor. Journal of Applied Physics, 2008, 104, 114505.	2.5	15
340	Room temperature generation of terahertz radiation from dual grating gate HEMTâ $\in$ Ms. , 2008, , .		0
341	Frequency performance of plasmawave devices for THZ applications and the role of fringing effects. , 2008, , .		0
342	Plasmonic metamaterials and their applications in novel terahertz devices. , 2008, , .		0

20

#	Article	IF	CITATIONS
343	Room temperature terahertz emission from two-dimensional plasmons in doubly interdigitated grating gate heterostructure transistors. , 2008, , .		0
344	Self Oscillation of the Plasma Waves in a Dual Grating Gates HEMT Device. Indium Phosphide and Related Materials Conference (IPRM), IEEE International Conference on, 2007, , .	0.0	0
345	Threshold Behavior of Photoinduced Plasmon-Resonant Self-Oscillation in a New Interdigitated Grating Gates Device. Japanese Journal of Applied Physics, 2007, 46, 2409-2412.	1.5	12
346	HEMT-BASED NANOMETER DEVICES TOWARD TERAHERTZ ERA. International Journal of High Speed Electronics and Systems, 2007, 17, 509-520.	0.7	0
347	Development of Solitons in Composite Right- and Left-Handed Transmission Lines Periodically Loaded with Varactors with Symmetrical Capacitance–Voltage Characteristics. Japanese Journal of Applied Physics, 2007, 46, 3123-3125.	1.5	5
348	Generation of terahertz radiation from a new InGaP/InGaAs/GaAs Double Grating Gate HEMT Device. , 2007, , .		0
349	Development of solitons in composite right- and left-handed transmission lines periodically loaded with Schottky varactors. Journal of Applied Physics, 2007, 102, 024501.	2.5	23
350	TERAHERTZ POLARIZATION CONTROLLER BASED ON ELECTRONIC DISPERSION CONTROL OF 2D PLASMONS. International Journal of High Speed Electronics and Systems, 2007, 17, 547-555.	0.7	1
351	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
352	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
353	Room temperature terahertz emission from plasmon-resonant high-electron mobility transistors stimulated by optical signals. Proceedings of SPIE, 2007, , .	0.8	0
354	Novel Plasmon-Resonant Terahertz-Wave Emitter Using a Double-Decked HEMT Structure. Device Research Conference, IEEE Annual, 2007, , .	0.0	3
355	Room temperature generation of terahertz radiation from a grating-bicoupled plasmon-resonant emitter: Size effect. Applied Physics Letters, 2007, 90, 061105.	3.3	31
356	Plasma waves in two-dimensional electron-hole system in gated graphene heterostructures. Journal of Applied Physics, 2007, 101, 024509.	2.5	213
357	Negative dynamic conductivity of graphene with optical pumping. Journal of Applied Physics, 2007, 101, 083114.	2.5	331
358	Emission of terahertz radiation from InGaP/InGaAs/GaAs grating-bicoupled plasmon-resonant emitter. Solid-State Electronics, 2007, 51, 1319-1327.	1.4	18
359	Terahertz Emission from InGaP/InGaAs/GaAs Double Grating Gate HEMT Device. , 2007, , .		0
360	Possibility of Terahertz Injection-Locked Oscillation in an InGaP/InGaAs/GaAs Two-Dimensional Plasmon-Resonant Photomixer. IEICE Transactions on Electronics, 2007, E90-C, 949-954.	0.6	1

#	Article	IF	CITATIONS
361	A grating-bicoupled plasma-wave photomixer with resonant-cavity enhanced structure. Optics Express, 2006, 14, 4815.	3.4	83
362	Plasma effects in lateral Schottky junction tunneling transit-time terahertz oscillator. Journal of Physics: Conference Series, 2006, 38, 228-233.	0.4	13
363	Resonant Terahertz Photomixing in Integrated High-Electron-Mobility Transistor and Quantum-Well Infrared Photodetector Device. Japanese Journal of Applied Physics, 2006, 45, 3648-3651.	1.5	5
364	Pulse Compression by Quasi-Steady Propagation along Switch Lines. Japanese Journal of Applied Physics, 2006, 45, 5692-5695.	1.5	6
365	Generation of electrical short pulse using Schottky line periodically loaded with electronic switches. Journal of Applied Physics, 2006, 100, 024511.	2.5	7
366	Grating-bicoupled plasmon-resonant terahertz emitter fabricated with GaAs-based heterostructure material systems. Applied Physics Letters, 2006, 89, 263502.	3.3	53
367	IC Technologies for Future Lightwave Communication Systems. Series in Optics and Optoelectronics, 2006, , 185-215.	0.0	0
368	Modulation Effects of Photocarriers on the Terahertz Plasma-Wave Resonance in High-Electron-Mobility Transistors under Interband Photoexcitation. Japanese Journal of Applied Physics, 2005, 44, 3842-3847.	1.5	29
369	Terahertz Photomixing in Heterostructure Device Based on Integration of High-Electron Mobility Transistor and Quantum-Well Infrared Photodetector. , 2005, , .		0
370	Terahertz plasma wave resonance of two-dimensional electrons in InGaPâ^•InGaAsâ^•GaAs high-electron-mobility transistors. Applied Physics Letters, 2004, 85, 2119-2121.	3.3	150
371	PRESENT AND FUTURE OF HIGH-SPEED COMPOUND SEMICONDUCTOR IC's. International Journal of High Speed Electronics and Systems, 2003, 13, 1-25.	0.7	5
372	PRESENT AND FUTURE OF HIGH-SPEED COMPOUND SEMICONDUCTOR IC's. Selected Topics in Electornics and Systems, 2003, , 1-25.	0.2	1
373	An 80-Gb/s optoelectronic delayed flip-flop IC using resonant tunneling diodes and uni-traveling-carrier photodiode. IEEE Journal of Solid-State Circuits, 2001, 36, 281-289.	5.4	40
374	Fully electrical 40-Gb/s TDM system prototype based on InP HEMT digital IC technologies. Journal of Lightwave Technology, 2000, 18, 34-43.	4.6	32
375	A distributed selector IC using GaAs MESFET's with multilayer-interconnection structure. IEEE Journal of Solid-State Circuits, 2000, 35, 258-267.	5.4	4
376	Compression of Electrical Pulses Using Traveling-Wave Field Effect Transistors. Japanese Journal of Applied Physics, 1999, 38, 4688-4695.	1.5	2
377	A Traveling-wave Time-division Demultiplexer. Japanese Journal of Applied Physics, 1999, 38, 4021-4026.	1.5	2
378	80 Gbit/s optoelectronic delayed flip-flop circuit using resonant tunnelling diodes and uni-travelling-carrier photodiode. Electronics Letters, 1999, 35, 1376.	1.0	11

#	Article	IF	CITATIONS
379	45 Gbit/s decision IC module using InAlAs/InGaAs/InP HEMTs. Electronics Letters, 1999, 35, 1379.	1.0	23
380	Wide-band high-efficiency optical-to-electrical conversion stimulus probe heads for testing large-signal responses of high-speed electronic devices. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 525-533.	4.6	8
381	A novel clock recovery circuit for fully monolithic integration. IEEE Transactions on Microwave Theory and Techniques, 1999, 47, 2528-2533.	4.6	15
382	40-Gbit/s TDM transmission technologies based on ultra-high-speed ICs. IEEE Journal of Solid-State Circuits, 1999, 34, 1246-1253.	5.4	36
383	A 105-GHz bandwidth optical-to-electrical conversion stimulus probe head employing a unitraveling-carrier photodiode. IEEE Photonics Technology Letters, 1999, 11, 1033-1035.	2.5	11
384	Ultra-High Speed Optical Fiber Communication ICs Based on Compound Semiconductor Devices. , 1999, , $\cdot$		0
385	An Optically-Controlled Phase Shifter for Traveling-Wave Retiming Circuit. , 1999, , .		0
386	Ultrafast optical signal measurementusing optoelectronic techniques. Optical and Quantum Electronics, 1998, 30, 1119-1133.	3.3	2
387	High-speed and low-power operation of a resonant tunneling logic gate MOBILE. IEEE Electron Device Letters, 1998, 19, 80-82.	3.9	113
388	An 80-Gbit/s multiplexer IC using InAlAs/InGaAs/InP HEMTs. IEEE Journal of Solid-State Circuits, 1998, 33, 1321-1327.	5.4	53
389	A 40-Gbit/s superdynamic decision IC fabricated with 0.12-μm GaAs MESFET's. IEEE Journal of Solid-State Circuits, 1998, 33, 1527-1535.	5.4	17
390	20-40-Gbit/s-CLASS GaAs MESFET DIGITAL ICs FOR FUTURE OPTICAL FIBER COMMUNICATIONS SYSTEMS. International Journal of High Speed Electronics and Systems, 1998, 09, 399-435.	0.7	6
391	A Large Output Voltage Swing of a Resonant Tunneling Flip-Flop Circuit Employing a Monostable-Bistable Transition Logic Element (MOBILE). Japanese Journal of Applied Physics, 1998, 37, L1286-L1287.	1.5	4
392	Characterization of Wave Propagation on Traveling-Wave Field Effect Transistors. Japanese Journal of Applied Physics, 1998, 37, 6328-6339.	1.5	11
393	A Novel Delayed Flip-Flop Circuit Using Resonant Tunneling Logic Gates. Japanese Journal of Applied Physics, 1998, 37, L212-L213.	1.5	11
394	Ultra-fast optoelectronic circuit using resonant tunnelling diodes and uni-travelling-carrier photodiode. Electronics Letters, 1998, 34, 215.	1.0	27
395	Ultrahigh-Speed Integrated Circuits Using InP-Based HEMTs. Japanese Journal of Applied Physics, 1998, 37, 1359-1364.	1.5	86
396	High-speed operation of static binary frequency divider using resonant tunnelling diodes and HEMTs. Electronics Letters, 1998, 34, 70.	1.0	22

#	Article	IF	CITATIONS
397	80 Gbit/s multiplexer IC using InAlAs/InGaAs/InP HEMTs. Electronics Letters, 1998, 34, 113.	1.0	3
398	Exclusive OR/NOR IC for > 40 Gbit/s optical transmission systems. Electronics Letters, 1998, 34, 764.	1.0	17
399	Ultra-high-speed distributed selector IC using GaAs MESFETs. Electronics Letters, 1998, 34, 2442.	1.0	1
400	46 Gbit/s super-dynamic decision circuit module using InAlAs/InGaAs HEMTs. Electronics Letters, 1997, 33, 1472.	1.0	6
401	64 Gbit/s multiplexer IC using InAlAs/InGaAs/InP HEMTs. Electronics Letters, 1997, 33, 1488.	1.0	35
402	Ultra-high speed, low power monolithic photoreceiver using InP/InGaAs double-heterojunction bipolar transistors. Electronics Letters, 1997, 33, 1047.	1.0	24
403	40 Gbit/s, fully-integrated 1:2 demultiplexer IC using InAlAs/InGaAs/InP HEMTs. Electronics Letters, 1997, 33, 1409.	1.0	4
404	40 Gbit/s optical repeater circuit using InAlAs/InGaAs HEMT digital IC modules. Electronics Letters, 1997, 33, 1977.	1.0	20
405	Optical repeater circuit design based on InAlAs/InGaAs HEMT digital IC technology. IEEE Transactions on Microwave Theory and Techniques, 1997, 45, 2274-2282.	4.6	46
406	32 Gbit/s super-dynamic decision IC using 0.13 [micro sign]m GaAs MESFETs with multilayer-interconnection structure. Electronics Letters, 1997, 33, 480.	1.0	3
407	Static frequency divider featuring reduced circuit complexity by utilizing resonant tunneling diodes in combination with HEMTs. IEEE Electron Device Letters, 1997, 18, 544-546.	3.9	16
408	2–46.5 GHz quasi-static 2:1 frequency divider IC using InAlAs/InGaAs/InP HEMTs. Electronics Letters, 1997, 33, 1376.	1.0	12
409	A super-dynamic flip-flop circuit for broad-band applications up to 24 Gb/s utilizing production-level 0.2-μm GaAs MESFETs. IEEE Journal of Solid-State Circuits, 1997, 32, 1357-1362.	5.4	42
410	40-Gb/s ICs for future lightwave communications systems. IEEE Journal of Solid-State Circuits, 1997, 32, 1363-1370.	5.4	39
411	NRZ operation at 40 Gb/s of a compact module containing an MQW electroabsorption modulator integrated with a DFB laser. IEEE Photonics Technology Letters, 1997, 9, 572-574.	2.5	40
412	Very high-speed light-source module up to 40 Gb/s containing an MQW electroabsorption modulator integrated with a DFB laser. IEEE Journal of Selected Topics in Quantum Electronics, 1997, 3, 336-343.	2.9	58
413	High-speed operation of resonant tunnelling flip-flop circuit employing MOBILE (monostable-bistable) Tj ETQq1	1 0.784314 1.0	l rgBT /Over
414	50-GHz bandwidth, 0.75-A/W, optoelectronic stimulus probe head employing multimode waveguide p-i-n photodiode. IEEE Photonics Technology Letters, 1996, 8, 411-413.	2.5	5

#	Article	IF	CITATIONS
415	10-80-Gb/s highly extinctive electrooptic pulse pattern generation. IEEE Journal of Selected Topics in Quantum Electronics, 1996, 2, 643-649.	2.9	59
416	Analysis and application of a novel model for estimating power dissipation of optical interconnections as a function of transmission bit error rate. Journal of Lightwave Technology, 1996, 14, 13-22.	4.6	13
417	Widely tunable electrooptic pulse-pattern generation and its application to on-wafer large-signal characterization of ultra high-speed electronic devices. Optical and Quantum Electronics, 1996, 28, 991-1005.	3.3	11
418	46 Gbit/s multiplexer and 40 Gbit/s demultiplexer IC modules using InAlAs/InGaAs/InP HEMTs. Electronics Letters, 1996, 32, 685.	1.0	38
419	A novel high-speed latching operation flip-flop (HLO-FF) circuit and its application to a 19-Gb/s decision circuit using a 0.2-μm GaAs MESFET. IEEE Journal of Solid-State Circuits, 1995, 30, 1101-1108.	5.4	39
420	A picosecond-accuracy, 700-MHz range, Si bipolar time interval counter LSI. IEEE Journal of Solid-State Circuits, 1993, 28, 941-947.	5.4	18
421	A 3-ns range, 8-ps resolution, timing generator LSI utilizing Si bipolar gate array. IEEE Journal of Solid-State Circuits, 1991, 26, 806-811.	5.4	18
422	A 10-ps resolution, process-insensitive timing generator IC. IEEE Journal of Solid-State Circuits, 1989, 24, 1412-1417.	5.4	10
423	Strainâ€induced level in copperâ€doped silicon. Journal of Applied Physics, 1985, 57, 4623-4625.	2.5	2
424	A super-dynamic flip-flop circuit for broadband applications up to 24 Gbit/s utilizing production-level 0.2-1¼m GaAs MESFETs. , 0, , .		10
425	40-Gbit/s ICs for future lightwave communications systems. , 0, , .		15
426	Ultrafast Optical Eye Diagram Measurement Using Optoelectronic Techniques. , 0, , .		0
427	High-speed operation of a resonant tunneling flip-flop circuit employing a MOBILE (monostable-bistable transition logic element). , 0, , .		8
428	Circuit design technologies for high-speed lightwave communications beyond 40 Gbit/s. , 0, , .		0
429	Terahertz plasma-wave excitation in 80-nm gate-length GaAs MESFET by photomixing long-wavelength CW laser sources. , 0, , .		1
430	Highly frequency-tunable terahertz plasmon-resonant photomixer with super-grating gate structure. , 0, , .		0
431	Device Model for Graphene Nanoribbon Phototransistor. Applied Physics Express, 0, 1, 063002.	2.4	76
432	Source and Drain Structures for Suppressing Ambipolar Characteristics of Graphene Field-Effect Transistors. Applied Physics Express, 0, 2, 061601.	2.4	11

#	Article	IF	CITATIONS
433	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
434	Ballistic Injection Terahertz Plasma Instability in Graphene n + ―i – n – n + Fieldâ€Effect Transistors and Lateral Diodes. Physica Status Solidi (A) Applications and Materials Science, 0, , .	1.8	6

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