Ultrafast Optical-Pump Terahertz-Probe Spectroscopy Recombination Dynamics in Epitaxial Graphene

Nano Letters

8, 4248-4251

DOI: 10.1021/nl8019399

Citation Report

#	Article	IF	Citations
1	Ultrafast Dynamics of Highly Excited Dirac Fermions in Few-Layer Graphene: Evidence for Three-Particle Auger Scattering. Materials Research Society Symposia Proceedings, 2009, 1230, 1.	0.1	0
2	Ultrafast THz Studies of Few-Layer Epitaxial Graphene. , 2009, , .		0
3	Atomicâ€Layer Graphene as a Saturable Absorber for Ultrafast Pulsed Lasers. Advanced Functional Materials, 2009, 19, 3077-3083.	7.8	2,310
4	Ultrafast graphene photodetector. Nature Nanotechnology, 2009, 4, 839-843.	15.6	2,748
5	Slowing hot-carrier relaxation in graphene using a magnetic field. Physical Review B, 2009, 80, .	1.1	94
6	Ultrafast dynamics in metallic and semiconducting carbon nanotubes. Physical Review B, 2009, 80, .	1.1	30
7	Broadband electromagnetic response and ultrafast dynamics of few-layer epitaxial graphene. Applied Physics Letters, 2009, 94, .	1.5	199
8	Ultrafast terahertz studies of dirac fermion dynamics in graphene. , 2009, , .		1
9	Carrier recombination and generation rates for intravalley and intervalley phonon scattering in graphene. Physical Review B, 2009, 79, .	1.1	213
10	Measurements of the Carrier Dynamics and Terahertz Response of Oriented Germanium Nanowires using Optical-Pump Terahertz-Probe Spectroscopy. Nano Letters, 2009, 9, 2967-2972.	4.5	58
11	Ultrafast relaxation dynamics of hot optical phonons in graphene. Applied Physics Letters, 2010, 96, .	1.5	234
12	Graphene and Graphene Oxide: Synthesis, Properties, and Applications. Advanced Materials, 2010, 22, 3906-3924.	11.1	8,959
13	Highâ€Gain Grapheneâ€Titanium Oxide Photoconductor Made from Inkjet Printable Ionic Solution. Advanced Materials, 2010, 22, 5265-5270.	11.1	131
14	Graphene analogue BCN: Femtosecond nonlinear optical susceptibility and hot carrier dynamics. Chemical Physics Letters, 2010, 499, 152-157.	1.2	33
15	Emission of terahertz radiation from two-dimensional electron systems in semiconductor nano-heterostructures. Comptes Rendus Physique, 2010, 11, 421-432.	0.3	12
16	Femtosecond UV-pump/visible-probe measurements of carrier dynamics in stacked graphene films. Applied Physics Letters, 2010, 97, 163103.	1.5	56
17	Hot carrier diffusion in graphene. Physical Review B, 2010, 82, .	1.1	75
18	Hot carriers in a bipolar graphene. Journal of Applied Physics, 2010, 107, 124312.	1.1	11

#	Article	IF	Citations
19	Transient response of intrinsic graphene under ultrafast interband excitation. Physical Review B, 2010, 81, .	1.1	13
20	Femtosecond pump-probe studies of reduced graphene oxide thin films. Applied Physics Letters, 2010, 96, 173106.	1.5	61
21	Measurement of the thermal conductance of the graphene/SiO2 interface. Applied Physics Letters, 2010, 97, .	1.5	161
22	Ultrafast Terahertz Dynamics and Broadband Optical Conductivity of Few-Layer Epitaxial Graphene. , 2010, , .		0
23	Multiple Exciton Generation in Graphene Nanostructures. Journal of Physical Chemistry C, 2010, 114, 14332-14338.	1.5	20
24	Ultrafast Photoluminescence from Graphene. Physical Review Letters, 2010, 105, 127404.	2.9	403
25	Carrier Multiplication in Graphene. Nano Letters, 2010, 10, 4839-4843.	4.5	295
26	Ultrafast Transient Absorption Microscopy Studies of Carrier Dynamics in Epitaxial Graphene. Nano Letters, 2010, 10, 1308-1313.	4.5	164
27	Dirac electronic states in graphene systems: optical spectroscopy studies. Semiconductor Science and Technology, 2010, 25, 063001.	1.0	158
28	Giant nonlinear response of terahertz nanoresonators on VO_2 thin film. Optics Express, 2010, 18, 16452.	1.7	47
29	Photo-Thermoelectric Effect at a Graphene Interface Junction. Nano Letters, 2010, 10, 562-566.	4.5	528
30	Active Terahertz Nanoantennas Based on VO₂ Phase Transition. Nano Letters, 2010, 10, 2064-2068.	4.5	331
31	Ultrafast carrier dynamics in pristine and FeCl3-intercalated bilayer graphene. Applied Physics Letters, 2010, 97, 141910.	1.5	28
32	Magnetoconcentration effect in intrinsic graphene ribbons. Applied Physics Letters, 2010, 97, .	1.5	3
33	Lifetimes of optical phonons in graphene and graphite by time-resolved incoherent anti-Stokes Raman scattering. Physical Review B, 2010, 81, .	1.1	120
34	Emission of terahertz radiation from two-dimensional electron systems in semiconductor nano-heterostructures. , 2010, , .		1
35	Ultrafast Electronâ˜Optical Phonon Scattering and Quasiparticle Lifetime in CVD-Grown Graphene. ACS Nano, 2011, 5, 3278-3283.	7.3	63
36	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.	0.8	35

#	Article	IF	Citations
37	Studies of Intrinsic Hot Phonon Dynamics in Suspended Graphene by Transient Absorption Microscopy. Nano Letters, 2011, 11, 3184-3189.	4.5	99
38	Nonlinear transmission dynamics in graphene close to the Dirac point. , 2011, , .		0
39	Intrinsic Response Time of Graphene Photodetectors. Nano Letters, 2011, 11, 2804-2808.	4.5	244
40	Ultrafast Dynamics and Nonlinear Optical Responses from sp²- and sp³-Hybridized Domains in Graphene Oxide. Journal of Physical Chemistry Letters, 2011, 2, 1972-1977.	2.1	166
41	Toward the creation of terahertz graphene injection laser. Journal of Applied Physics, 2011, 110, .	1.1	141
42	A Reel-Wound Carbon Nanotube Polarizer for Terahertz Frequencies. Nano Letters, 2011, 11, 4227-4231.	4.5	91
43	Performance of large-area few-layer graphene saturable absorber in femtosecond bulk laser. Applied Physics Letters, 2011, 99, .	1.5	52
44	Purely Coherent Nonlinear Optical Response in Solution Dispersions of Graphene Sheets. Nano Letters, 2011, 11, 5159-5164.	4.5	243
45	Very Slow Cooling Dynamics of Photoexcited Carriers in Graphene Observed by Optical-Pump Terahertz-Probe Spectroscopy. Nano Letters, 2011, 11, 4902-4906.	4.5	170
46	Hot Carrier Transport and Photocurrent Response in Graphene. Nano Letters, 2011, 11, 4688-4692.	4.5	380
47	Gate-Activated Photoresponse in a Graphene pâ€“n Junction. Nano Letters, 2011, 11, 4134-4137.	4.5	379
48	Near-field investigation of THz surface-wave emission from optically excited graphite flakes. Optics Express, 2011, 19, 4667.	1.7	10
49	Large energy laser pulses with high repetition rate by graphene Q-switched solid-state laser. Optics Express, 2011, 19, 9950.	1.7	102
50	Simulation of graphene nanoscale RF transistors including scattering and generation/recombination mechanisms. , 2011, , .		7
51	Terahertz Spectroscopy. Analytical Chemistry, 2011, 83, 4342-4368.	3.2	350
52	Giant Two-Photon Absorption in Bilayer Graphene. Nano Letters, 2011, 11, 2622-2627.	4.5	191
53	Vacuum Electronic High Power Terahertz Sources. IEEE Transactions on Terahertz Science and Technology, 2011, 1, 54-75.	2.0	841
54	Two-probe study of hot carriers in reduced graphene oxide. Journal of Applied Physics, 2011, 109, 084322.	1.1	9

#	Article	IF	Citations
55	Carrier dynamics in semiconductors studied with time-resolved terahertz spectroscopy. Reviews of Modern Physics, 2011, 83, 543-586.	16.4	978
56	Time-Domain ab Initio Study of Auger and Phonon-Assisted Auger Processes in a Semiconductor Quantum Dot. Nano Letters, 2011, 11, 1845-1850.	4.5	93
57	Hot phonon decay in supported and suspended exfoliated graphene. Physical Review B, 2011, 83, .	1.1	66
58	Carrier Relaxation in Epitaxial Graphene Photoexcited Near the Dirac Point. Physical Review Letters, 2011, 107, 237401.	2.9	269
59	Ultrafast carrier recombination and generation rates for plasmon emission and absorption in graphene. Physical Review B, 2011, 84, .	1.1	56
60	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.	1.2	41
61	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.	1.2	26
62	Monolayer graphene as a saturable absorber in a mode-locked laser. Nano Research, 2011, 4, 297-307.	5.8	408
63	Infrared Photodetectors Based on Reduced Graphene Oxide and Graphene Nanoribbons. Advanced Materials, 2011, 23, 5419-5424.	11.1	297
64	Ultrafast modulation of optical transitions in monolayer and multilayer graphene. Carbon, 2011, 49, 4781-4785.	5.4	27
65	Ultrafast relaxation of hot optical phonons in monolayer and multilayer graphene on different substrates. Surface Science, 2011, 605, 1657-1661.	0.8	50
66	Terahertz light amplification of stimulated emission of radiation in optically pumped graphene. , 2011, , .		0
67	Generation, transport, and detection of linear accelerator based femtosecond-terahertz pulses. Review of Scientific Instruments, 2011, 82, 013305.	0.6	33
68	FEMTOSECOND PHOTOEXCITED CARRIER DYNAMICS IN REDUCED GRAPHENE OXIDE SUSPENSIONS AND FILMS. International Journal of Nanoscience, 2011, 10, 669-673.	0.4	3
69	Spatially resolved pump-probe study of single-layer graphene produced by chemical vapor deposition [Invited]. Optical Materials Express, 2012, 2, 708.	1.6	47
70	Probing near Dirac point electron-phonon interaction in graphene. Optical Materials Express, 2012, 2, 1713.	1.6	10
71	Size-dependent radiative decay processes in graphene quantum dots. Applied Physics Letters, 2012, 101, .	1.5	27
72	Disorder-Assisted Electron-Phonon Scattering and Cooling Pathways in Graphene. Physical Review Letters, 2012, 109, 106602.	2.9	266

#	Article	IF	Citations
73	Infrared-terahertz double-resonance spectroscopy of CH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>F and CH<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>Cl at atmospheric pressure. Physical Review A, 2012, 85, .	1.0	9
74	Intraband conductivity response in graphene observed using ultrafast infrared-pump visible-probe spectroscopy. Physical Review B, 2012, 86, .	1.1	35
75	Energy relaxation for hot Dirac fermions in graphene and breakdown of the quantum Hall effect. Physical Review B, 2012, 85, .	1.1	52
76	Terahertz-wave generation using graphene. Materials Research Society Symposia Proceedings, 2012, 1437, 36.	0.1	0
77	Stimulated Near-Infrared Light Emission in Graphene. Physics Magazine, 2012, 5, .	0.1	4
78	Terahertz light amplification by stimulated emission of radiation in optically pumped graphene. Materials Research Society Symposia Proceedings, 2012, 1451, 169-177.	0.1	0
79	Graphene mode-locked femtosecond Yb:KLuW laser. Applied Physics Letters, 2012, 101, .	1.5	39
80	Extreme sensitivity of graphene photoconductivity to environmental gases. Nature Communications, 2012, 3, 1228.	5.8	120
81	Ultrafast spectroscopic imaging of exfoliated graphene. Physica Status Solidi (B): Basic Research, 2012, 249, 2497-2499.	0.7	7
82	Environment induced variation in the photoconductivity of graphene observed by terahertz spectroscopy. , 2012, , .		0
83	Gate-Controlled Nonlinear Conductivity of Dirac Fermion in Graphene Field-Effect Transistors Measured by Terahertz Time-Domain Spectroscopy. Nano Letters, 2012, 12, 551-555.	4.5	161
84	Optical spectroscopy of graphene: From the far infrared to the ultraviolet. Solid State Communications, 2012, 152, 1341-1349.	0.9	601
85	Anomalous Behaviors of Visible Luminescence from Graphene Quantum Dots: Interplay between Size and Shape. ACS Nano, 2012, 6, 8203-8208.	7.3	563
86	Ultrafast Carrier Dynamics in Graphene under a High Electric Field. Physical Review Letters, 2012, 109, 166603.	2.9	126
88	Graphene-based devices in terahertz science and technology. Journal Physics D: Applied Physics, 2012, 45, 303001.	1.3	234
89	Pump-Probe Spectroscopy at Terahertz Frequencies. Springer Series in Optical Sciences, 2012, , 251-271.	0.5	2
90	Femtosecond Population Inversion and Stimulated Emission of Dense Dirac Fermions in Graphene. Physical Review Letters, 2012, 108, 167401.	2.9	228
91	Ultrafast carrier phonon dynamics in NaOH-reacted graphite oxide film. Applied Physics Letters, 2012, 101, .	1.5	12

#	Article	IF	Citations
92	Grapheneâ€“nanowire hybrid structures for high-performance photoconductive devices. Journal of Materials Chemistry, 2012, 22, 8372.	6.7	47
93	The study of negative THz conductivity of graphene under the phonon scattering mechanism. Optics Communications, 2012, 285, 5410-5415.	1.0	5
94	Population inversion and terahertz lasing in graphene. Proceedings of SPIE, 2012, , .	0.8	0
95	Graphene materials and devices in terahertz science and technology. MRS Bulletin, 2012, 37, 1235-1243.	1.7	30
96	Nonlinear optical properties of graphene-based materials. Science Bulletin, 2012, 57, 2971-2982.	1.7	144
97	Electronic Excited State Paths of Stoneâ€“Wales Rearrangement in Pyrene: Roles of Conical Intersections. Journal of Physical Chemistry A, 2012, 116, 11441-11450.	1.1	15
98	Cooling of photoexcited carriers in graphene by internal and substrate phonons. Physical Review B, 2012, 86, .	1.1	100
99	Time-resolved ultrafast photocurrents and terahertz generation in freely suspended graphene. Nature Communications, 2012, 3, 646.	5.8	149
100	Hybrid grapheneâ€“quantum dot phototransistors with ultrahigh gain. Nature Nanotechnology, 2012, 7, 363-368.	15.6	1,936
101	Graphene Photonics, Plasmonics, and Broadband Optoelectronic Devices. ACS Nano, 2012, 6, 3677-3694.	7.3	1,749
102	Ultrafast carrier dynamics and terahertz emission in optically pumped graphene at room temperature. Physical Review B, 2012, 85, .	1.1	169
103	Novel Radiationâ€Induced Properties of Graphene and Related Materials. Macromolecular Chemistry and Physics, 2012, 213, 1146-1163.	1.1	67
104	A Review of the Terahertz Conductivity of Bulk and Nano-Materials. Journal of Infrared, Millimeter, and Terahertz Waves, 2012, 33, 871-925.	1.2	395
105	The effect of spinâ€“orbit interaction on optical conductivity in graphene. Journal of Physics Condensed Matter, 2012, 24, 035303.	0.7	10
106	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.	1.2	12
107	Terahertz Properties of Graphene. Journal of Infrared, Millimeter, and Terahertz Waves, 2012, 33, 797-815.	1.2	74
108	Passively Mode-Locked Fiber Laser Based on Reduced Graphene Oxide on Microfiber for Ultra-Wide-Band Doublet Pulse Generation. Journal of Lightwave Technology, 2012, 30, 984-989.	2.7	67
109	Observation of intra- and inter-band transitions in the transient optical response of graphene. New Journal of Physics, 2013, 15, 015009.	1.2	87

#	Article	IF	Citations
110	Graphene-Si Schottky IR Detector. IEEE Journal of Quantum Electronics, 2013, 49, 589-594.	1.0	112
111	Carrier Lifetime in Exfoliated Few-Layer Graphene Determined from Intersubband Optical Transitions. Physical Review Letters, 2013, 110, 217406.	2.9	50
112	Plasmon anomaly in the dynamical optical conductivity of graphene. Physical Review B, 2013, 88, .	1.1	13
113	Third harmonic generation in graphene and few-layer graphite films. Physical Review B, 2013, 87, .	1.1	244
114	Transient Absorption Spectroscopy of Excitons in an Individual Suspended Metallic Carbon Nanotube. Journal of Physical Chemistry Letters, 2013, 4, 3050-3055.	2.1	22
115	Enhanced photoresponse of large-sized photoactive graphene composite films based on water-soluble conjugated polymers. Chemical Communications, 2013, 49, 5538.	2.2	37
116	Double injection in graphene p-i-n structures. Journal of Applied Physics, 2013, 113, 244505.	1.1	32
117	Probing the electronic structure of multi-walled carbon nanotubes by transient optical transmittivity. Carbon, 2013, 57, 50-58.	5.4	8
118	Broadband Modulation of Terahertz Waves With Non-Resonant Graphene Meta-Devices. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 764-771.	2.0	36
119	Snapshots of non-equilibrium Dirac carrier distributions in graphene. Nature Materials, 2013, 12, 1119-1124.	13.3	397
120	A high response MoS<inf>2</inf>-graphene hetero-junction photodetector with broad spectral range. , 2013, , .		1
121	Effect of anisotropic band curvature on carrier multiplication in graphene. Physical Review B, 2013, 87, .	1.1	16
122	Composition-dependent ultra-high photoconductivity in ternary CdS x Se1â^'x nanobelts as measured by optical pump-terahertz probe spectroscopy. Nano Research, 2013, 6, 808-821.	5.8	23
123	Ultrafast zero balance of the oscillator-strength sum rule in graphene. Scientific Reports, 2013, 3, 2663.	1.6	8
124	Plasmons in graphene: Recent progress and applications. Materials Science and Engineering Reports, 2013, 74, 351-376.	14.8	323
125	Optically active heterostructures of graphene and ultrathin MoS2. Solid State Communications, 2013, 175-176, 35-42.	0.9	42
126	Transient absorption microscopy studies of energy relaxation in graphene oxide thin film. Journal of Physics Condensed Matter, 2013, 25, 144203.	0.7	12
127	The gain enhancement effect of surface plasmon polaritons on terahertz stimulated emission in optically pumped monolayer graphene. New Journal of Physics, 2013, 15, 075003.	1.2	94

#	Article	IF	Citations
128	Ultrafast refractive index control of terahertz graphene metamaterials. , 2013, , .		0
129	Photoconductivity of biased graphene. Nature Photonics, 2013, 7, 53-59.	15.6	467
130	Photoexcitation cascade and multiple hot-carrier generation in graphene. Nature Physics, 2013, 9, 248-252.	6.5	512
131	Size-dependence of Raman scattering from graphene quantum dots: Interplay between shape and thickness. Applied Physics Letters, 2013, 102, .	1.5	63
132	Hot Electron Injection from Graphene Quantum Dots to TiO₂. ACS Nano, 2013, 7, 1388-1394.	7.3	172
133	Intrinsic and Extrinsic Fluorescence in Carbon Nanodots: Ultrafast Timeâ€Resolved Fluorescence and Carrier Dynamics. Advanced Optical Materials, 2013, 1, 173-178.	3.6	156
134	Graphene terahertz uncooled bolometers. Journal Physics D: Applied Physics, 2013, 46, 065102.	1.3	38
135	Near-Infrared Photoluminescence in the Femtosecond Time Region in Monolayer Graphene on SiO₂. ACS Nano, 2013, 7, 2335-2343.	7.3	27
136	Observation of suppressed terahertz absorption in photoexcited graphene. Applied Physics Letters, 2013, 102, .	1.5	73
137	Nonlinear THz Pump/THz Probe Spectroscopy of n-doped IIIâ€“V Semiconductors. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 8401005-8401005.	1.9	3
138	Terahertz-Wave Generation Using Graphene: Toward New Types of Terahertz Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 8400209-8400209.	1.9	68
139	Observation of a Transient Decrease in Terahertz Conductivity of Single-Layer Graphene Induced by Ultrafast Optical Excitation. Nano Letters, 2013, 13, 524-530.	4.5	241
140	Visible Photoresponse of Singleâ€Layer Graphene Decorated with TiO₂ Nanoparticles. Small, 2013, 9, 2076-2080.	5.2	58
141	Broadband high photoresponse from pure monolayer graphene photodetector. Nature Communications, 2013, 4, 1811.	5.8	681
142	Photothermal Response in Dual-Gated Bilayer Graphene. Physical Review Letters, 2013, 110, 247402.	2.9	41
143	Photoexcited carrier dynamics and impact-excitation cascade in graphene. Physical Review B, 2013, 87, .	1.1	79
144	Microscopic theory of ultrafast dynamics of carriers photoexcited by THz and near-infrared linearly polarized laser pulses in graphene. New Journal of Physics, 2013, 15, 083038.	1.2	16
145	Nonlinear THz Conductivity Dynamics in P-Type CVD-Grown Graphene. Journal of Physical Chemistry B, 2013, 117, 15819-15824.	1.2	79

#	Article	IF	Citations
146	Gate-tunable nearly total absorption in graphene with resonant metal back reflector. Europhysics Letters, 2013, 104, 57002.	0.7	16
147	Charge Transport in ${hbox{TiO}}_{2}$ Films With Complex Percolation Pathways Investigated by Time-Resolved Terahertz Spectroscopy. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 302-313.	2.0	33
148	Transient charge and energy balance in graphene induced by ultrafast photoexcitation. Journal of Physics Condensed Matter, 2013, 25, 314201.	0.7	7
149	Ultra-fast transistor-based detectors for precise timing of near infrared and THz signals. Optics Express, 2013, 21, 17941.	1.7	31
150	Time-resolved spectroscopy on epitaxial graphene in the infrared spectral range: relaxation dynamics and saturation behavior. Journal of Physics Condensed Matter, 2013, 25, 054202.	0.7	59
151	Dual-wavelength synchronously Q-switched solid-state laser with multi-layered graphene as saturable absorber. Optics Express, 2013, 21, 3516.	1.7	40
152	Optoelectronic properties of graphene-MoS2 hybrid. Materials Research Society Symposia Proceedings, 2013, 1505, 1.	0.1	2
153	Negative differential transmission in graphene. Physical Review B, 2013, 88, .	1.1	7
154	Ultrafast dynamics of hot electrons and phonons in chemical vapor deposited graphene. Journal of Applied Physics, 2013, 113, 133511.	1.1	20
155	Graphene surface emitting terahertz laser: Diffusion pumping concept. Applied Physics Letters, 2013, 103, 251102.	1.5	40
156	Photoexcitation cascade and multiple hot carrier generation in graphene. , 2013, , .		0
157	Terahertz conductivity of reduced graphene oxide films. Optics Express, 2013, 21, 7633.	1.7	54
158	Amplification and lasing of terahertz radiation by plasmons in graphene with a planar distributed Bragg resonator. Journal of Optics (United Kingdom), 2013, 15, 114009.	1.0	44
159	Ultrafast refractive index control of a terahertz graphene metamaterial. Scientific Reports, 2013, 3, 2135.	1.6	46
160	Graphene Terahertz Lasers: Injection versus Optical Pumping. Materials Research Society Symposia Proceedings, 2013, 1505, 1.	0.1	0
161	Application of Graphene to Ultrahigh-Frequency Optoelectronic Devices. Journal of the Vacuum Society of Japan, 2014, 57, 444-450.	0.3	0
162	Ultrafast terahertz Faraday rotation in graphene. Journal of Applied Physics, 2014, 116, 214302.	1.1	7
163	Carrierâ€“phonon scattering in Landauâ€quantized graphene. Physica Status Solidi (B): Basic Research, 2014, 251, 2541-2544.	0.7	3

#	Article	IF	Citations
164	Intraband carrier dynamics in Landau-quantized multilayer epitaxial graphene. New Journal of Physics, 2014, 16, 123021.	1.2	17
165	Sapphire-based graphene saturable absorber for long-time working femtosecond lasers. Optics Letters, 2014, 39, 2707.	1.7	22
166	The effect of the Gouy phase in optical-pump-THz-probe spectroscopy. Optics Express, 2014, 22, 4256.	1.7	14
167	Tuning photoinduced terahertz conductivity in monolayer graphene: Optical-pump terahertz-probe spectroscopy. Physical Review B, 2014, 90, .	1.1	49
168	Room temperature broadband terahertz gains in graphene heterostructures based on inter-layer radiative transitions. AIP Advances, 2014, 4, 107138.	0.6	0
169	Low-loss terahertz waveguide with InAs-graphene-SiC structure. Chinese Physics B, 2014, 23, 054210.	0.7	3
170	Competing Channels for Hot-Electron Cooling in Graphene. Physical Review Letters, 2014, 112, 247401.	2.9	69
171	Passively Q-switched mode-locking Nd:GdVO4 laser with a chemically reduced graphene oxide saturable absorber. Optical Materials, 2014, 38, 42-45.	1.7	10
172	Two-dimensional material nanophotonics. Nature Photonics, 2014, 8, 899-907.	15.6	2,362
173	Many body effect induced energy gap in an optically pumped graphene system. Journal of Applied Physics, 2014, 115, 113704.	1.1	0
174	Strain-dependent conductivity in biased bilayer graphene. Physical Review B, 2014, 90, .	1.1	5
175	Possibility and design of resonant terahertz emitters based on nanoscale strained silicon plasma wave transistors with enhanced mobility. Japanese Journal of Applied Physics, 2014, 53, 06JE08.	0.8	2
176	Doping profile recognition in silicon using terahertz time-domain spectroscopy. , 2014, , .		0
177	Optical Magneto-Spectroscopy of Graphene-Based Systems. Nanoscience and Technology, 2014, , 113-140.	1.5	0
178	Device Concepts for Graphene-Based Terahertz Photonics. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 130-138.	1.9	118
179	Fiberâ€Based Flexible Allâ€Solidâ€State Asymmetric Supercapacitors for Integrated Photodetecting System. Angewandte Chemie - International Edition, 2014, 53, 1849-1853.	7.2	387
180	Detectivity enhancement in THz electrooptical sampling. Review of Scientific Instruments, 2014, 85, 013114.	0.6	20
181	Controlling Graphene Ultrafast Hot Carrier Response from Metal-like to Semiconductor-like by Electrostatic Gating. Nano Letters, 2014, 14, 1578-1582.	4.5	136

#	Article	IF	Citations
182	Plasmonâ€Enhanced Photocurrent Generation from Clickâ€Chemically Modified Graphene. Chemistry - A European Journal, 2014, 20, 7402-7409.	1.7	9
183	Effect of size variation on the cathodoluminescence characteristics of graphene quantum dots. Current Applied Physics, 2014, 14, S111-S114.	1.1	4
184	Terahertz science and technology of carbon nanomaterials. Nanotechnology, 2014, 25, 322001.	1.3	156
185	Quantum Carrier Reinvestment-Induced Ultrahigh and Broadband Photocurrent Responses in Grapheneâ€“Silicon Junctions. ACS Nano, 2014, 8, 10270-10279.	7.3	105
186	Dirac fermion relaxation and energy loss rate near the Fermi surface in monolayer and multilayer graphene. Nanoscale, 2014, 6, 8575-8578.	2.8	12
187	The role of defects in the nonlinear optical absorption behavior of carbon and ZnO nanostructures. Physical Chemistry Chemical Physics, 2014, 16, 8168.	1.3	57
188	Grapheneâ€“Environmental and Sensor Applications. Lecture Notes in Nanoscale Science and Technology, 2014, , 159-224.	0.4	3
189	Electrically Tunable Metasurface Perfect Absorbers for Ultrathin Mid-Infrared Optical Modulators. Nano Letters, 2014, 14, 6526-6532.	4.5	657
190	Colloquium: Graphene spectroscopy. Reviews of Modern Physics, 2014, 86, 959-994.	16.4	220
191	Ultrafast terahertz response of multilayer graphene in the nonperturbative regime. Physical Review B, 2014, 89, .	1.1	132
192	Dye-Sensitized MoS₂ Photodetector with Enhanced Spectral Photoresponse. ACS Nano, 2014, 8, 8285-8291.	7.3	268
193	Doping Profile Recognition Applied to Silicon Photovoltaic Cells Using Terahertz Time-Domain Spectroscopy. IEEE Transactions on Terahertz Science and Technology, 2014, 4, 560-567.	2.0	10
194	Competing Ultrafast Energy Relaxation Pathways in Photoexcited Graphene. Nano Letters, 2014, 14, 5839-5845.	4.5	97
195	Evolution of terahertz conductivity in ZnSe nanocrystal investigated with optical-pump terahertz-probe spectroscopy. Applied Physics A: Materials Science and Processing, 2014, 116, 45-50.	1.1	4
196	Unconventional Terahertz Carrier Relaxation in Graphene Oxide: Observation of Enhanced Auger Recombination Due to Defect Saturation. ACS Nano, 2014, 8, 2486-2494.	7.3	33
197	Nanotechnology for Water Treatment and Purification. Lecture Notes in Nanoscale Science and Technology, 2014, , .	0.4	29
198	A theoretical study of pumpâ€“probe experiment in single-layer, bilayer and multilayer graphene. Pramana - Journal of Physics, 2014, 82, 1085-1101.	0.9	6
199	Anisotropy of Excitation and Relaxation of Photogenerated Charge Carriers in Graphene. Nano Letters, 2014, 14, 1504-1507.	4.5	77

#	Article	IF	Citations
200	Photothermoelectric and Photoelectric Contributions to Light Detection in Metalâ€“Grapheneâ€“Metal Photodetectors. Nano Letters, 2014, 14, 3733-3742.	4.5	153
201	Diversity of ultrafast hot-carrier-induced dynamics and striking sub-femtosecond hot-carrier scattering times in graphene. Carbon, 2014, 72, 402-409.	5.4	14
202	Direct growth of graphene on quartz substrate as saturable absorber for femtosecond solid-state laser. Laser Physics Letters, 2014, 11, 085801.	0.6	11
204	Graphene Nanobubbles: A New Optical Nonlinear Material. Advanced Optical Materials, 2015, 3, 744-749.	3.6	52
205	Tunable Fano quantum-interference dynamics using a topological phase transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mm	1.1	37
206	Phy Ultrafast pseudospin dynamics in graphene. Physical Review B, 2015, 92, .	1.1	48
207	Tunable terahertz radiation from arbitrary profile dielectric grating coated with graphene excited by an electron beam. Chinese Physics B, 2015, 24, 094102.	0.7	10
208	Highly photosensitive graphene field-effect transistor with optical memory function. Scientific Reports, 2015, 5, 15491.	1.6	13
209	Photoconductivity in Dirac materials. AIP Advances, 2015, 5, 117213.	0.6	9
210	Evidence for bandgap opening in buckled epitaxial graphene from ultrafast time-resolved terahertz spectroscopy. Applied Physics Letters, 2015, 107, 173107.	1.5	7
211	Ultrafast recovery time and broadband saturable absorption properties of black phosphorus suspension. Applied Physics Letters, 2015, 107, .	1.5	168
212	Tracing Ultrafast Carrier Dynamics in Graphene with Femtosecond Time-resolved Photoemission Spectroscopy. Hyomen Kagaku, 2015, 36, 418-423.	0.0	0
213	Recombination channels in optically excited graphene. Physica Status Solidi (B): Basic Research, 2015, 252, 2456-2460.	0.7	4
214	Enhancing the saturable absorption and carrier dynamics of graphene with plasmonic nanowires. Physica Status Solidi (B): Basic Research, 2015, 252, 2159-2166.	0.7	17
215	Engineering Photophenomena in Large, 3D Structures Composed of Selfâ€Assembled van der Waals Heterostructure Flakes. Advanced Optical Materials, 2015, 3, 1551-1556.	3.6	17
216	Spectral characteristic of single layer graphene via terahertz time domain spectroscopy. Optik, 2015, 126, 1362-1365.	1.4	13
217	Grapheneâ€“Bi₂Te₃ Heterostructure as Saturable Absorber for Short Pulse Generation. ACS Photonics, 2015, 2, 832-841.	3.2	208
218	Electron-phonon interactions in MoS2 probed with ultrafast two-dimensional visible/far-infrared spectroscopy. Journal of Chemical Physics, 2015, 142, 212447.	1.2	16

#	Article	IF	Citations
219	Hot-carrier photocurrent effects at grapheneâ€“metal interfaces. Journal of Physics Condensed Matter, 2015, 27, 164207.	0.7	71
220	Effects of growth temperatures on the characteristics of n-GaN nanorodsâ€“graphene hybrid structures. Journal of Alloys and Compounds, 2015, 644, 808-813.	2.8	9
221	Photothermal electric effect of multilayer MoS<inf>2</inf>-graphene heterojunction. , 2015, , .		0
222	Graphene, graphene quantum dots and their applications in optoelectronics. Current Opinion in Colloid and Interface Science, 2015, 20, 439-453.	3.4	73
223	Superradiant amplification of terahertz radiation by plasmons in inverted graphene with a planar distributed Bragg resonator. Semiconductors, 2015, 49, 1468-1472.	0.2	2
224	Building graphene pâ€“n junctions for next-generation photodetection. Nano Today, 2015, 10, 701-716.	6.2	45
225	Monolayer graphene saturable absorber with sandwich structure for ultrafast solid-state laser. Optical Engineering, 2015, 55, 081304.	0.5	40
226	Fabrication of CVD graphene-based devices via laser ablation for wafer-scale characterization. 2D Materials, 2015, 2, 045003.	2.0	29
227	Ultrafast Dynamics of Defect-Assisted Electronâ€“Hole Recombination in Monolayer MoS₂. Nano Letters, 2015, 15, 339-345.	4.5	509
228	Microscopic View on the Ultrafast Photoluminescence from Photoexcited Graphene. Nano Letters, 2015, 15, 1141-1145.	4.5	22
229	Nonequilibrium plasmons with gain in graphene. Physical Review B, 2015, 91, .	1.1	36
230	Origin of Axial and Radial Expansions in Carbon Nanotubes Revealed by Ultrafast Diffraction and Spectroscopy. ACS Nano, 2015, 9, 1721-1729.	7.3	25
231	Active guiding of Dirac plasmons in graphene. Applied Physics Letters, 2015, 106, 061105.	1.5	22
232	New Insights into the Diverse Electronic Phases of a Novel Vanadium Dioxide Polymorph: A Terahertz Spectroscopy Study. Scientific Reports, 2015, 5, 9182.	1.6	37
233	Single-layer graphene saturable absorber for diode-pumped passively Q-switched Tm:KLu(WO₄)₂laser at 2Î¼m. Laser Physics Letters, 2015, 12, 095802.	0.6	3
234	Chemical Vapor Deposition Synthesized Atomically Thin Molybdenum Disulfide with Optoelectronic-Grade Crystalline Quality. ACS Nano, 2015, 9, 8822-8832.	7.3	132
235	13.7% Efficiency grapheneâ€“gallium arsenide Schottky junction solar cells with a P3HT hole transport layer. Nano Energy, 2015, 16, 91-98.	8.2	36
236	Coherent Generation of Photo-Thermo-Acoustic Wave from Graphene Sheets. Scientific Reports, 2015, 5, 10582.	1.6	33

#	Article	IF	Citations
237	Ultraviolet photoconductive devices with an n-GaN nanorod-graphene hybrid structure synthesized by metal-organic chemical vapor deposition. Scientific Reports, 2015, 5, 10808.	1.6	25
238	Carrier heating and negative photoconductivity in graphene. Journal of Applied Physics, 2015, 117, 015101.	1.1	24
239	Diode-pumped Yb,Y:CaF2 laser mode-locked by monolayer graphene. Optics and Laser Technology, 2015, 75, 83-86.	2.2	40
240	Invited Article: Single-shot THz detection techniques optimized for multidimensional THz spectroscopy. Review of Scientific Instruments, 2015, 86, 051301.	0.6	82
241	Population inversion in monolayer and bilayer graphene. Journal of Physics Condensed Matter, 2015, 27, 164204.	0.7	40
242	Recent advances in the research toward graphene-based terahertz lasers. , 2015, , .		4
243	THz saturable absorption in turbostratic multilayer graphene on silicon carbide. Optics Express, 2015, 23, 11632.	1.7	23
244	Energy flows in graphene: hot carrier dynamics and cooling. Journal of Physics Condensed Matter, 2015, 27, 164201.	0.7	53
245	Solvent Doping of PEDOT/PSS: Effect on Terahertz Optoelectronic Properties and Utilization in Terahertz Devices. Journal of Physical Chemistry C, 2015, 119, 6813-6818.	1.5	63
246	Phonon-Pump Extreme-Ultraviolet-Photoemission Probe in Graphene: Anomalous Heating of Dirac Carriers by Lattice Deformation. Physical Review Letters, 2015, 114, 125503.	2.9	29
247	Band-gap modulation of two-dimensional saturable absorbers for solid-state lasers. Photonics Research, 2015, 3, A10.	3.4	23
248	Generation of photovoltage in graphene on a femtosecond timescale through efficient carrier heating. Nature Nanotechnology, 2015, 10, 437-443.	15.6	210
249	A matter of symmetry: terahertz polarization detection properties of a multi-contact photoconductive antenna evaluated by a response matrix analysis. Optics Express, 2015, 23, 16184.	1.7	14
250	Sign of differential reflection and transmission in pump-probe spectroscopy of graphene on dielectric substrate. Photonics Research, 2015, 3, A1.	3.4	12
251	Time-resolved terahertz dynamics in thin films of the topological insulator Bi2Se3. Applied Physics Letters, 2015, 106, .	1.5	61
252	Tunable Carrier Multiplication and Cooling in Graphene. Nano Letters, 2015, 15, 326-331.	4.5	80
253	Saturable absorption of femtosecond optical pulses in multilayer turbostratic graphene. Optics Express, 2016, 24, 15261.	1.7	8
254	Tuning Chemical Potential Difference across Alternately Doped Graphene pâ€“n Junctions for High-Efficiency Photodetection. Nano Letters, 2016, 16, 4094-4101.	4.5	34

#	Article	IF	Citations
255	Hot carrier and hot phonon coupling during ultrafast relaxation of photoexcited electrons in graphene. Applied Physics Letters, 2016, 108, .	1.5	25
256	Long wavelength optical response of graphene-MoS2 heterojunction. Applied Physics Letters, 2016, 108, .	1.5	11
257	Observation of large nonlinear responses in a graphene-Bi2Te3 heterostructure at a telecommunication wavelength. Applied Physics Letters, 2016, 108, .	1.5	56
258	A generalization of the Drude-Smith formula for magneto-optical conductivities in Faraday geometry. Journal of Applied Physics, 2016, 119, .	1.1	13
259	Microscopic origins of the terahertz carrier relaxation and cooling dynamics in graphene. Nature Communications, 2016, 7, 11617.	5.8	73
260	Modification of the terahertz electromagnetic response of the semiconducting polymer polyfluorene by graphene oxide particles. Technical Physics Letters, 2016, 42, 1126-1129.	0.2	0
261	Coexistence of negative photoconductivity and hysteresis in semiconducting graphene. AIP Advances, 2016, 6, .	0.6	14
262	Tunable optical analog to electromagnetically induced transparency in graphene-ring resonators system. Scientific Reports, 2016, 6, 38891.	1.6	19
264	Thirty Gigahertz Optoelectronic Mixing in Chemical Vapor Deposited Graphene. Nano Letters, 2016, 16, 2988-2993.	4.5	26
265	Single-pixel camera with one graphene photodetector. Optics Express, 2016, 24, 400.	1.7	22
266	Reaction kinetics of bond rotations in graphene. Carbon, 2016, 105, 176-182.	5.4	18
267	GRAPHENE DEVICES FOR HIGH-FREQUENCY ELECTRONICS AND THz TECHNOLOGY. , 2016, , 167-188.		1
268	Role of Transient Reflection in Graphene Nonlinear Infrared Optics. ACS Photonics, 2016, 3, 1069-1075.	3.2	14
269	Ultrafast Pumpâ€“Probe Spectroscopy. , 2016, , 352-393.		3
270	Open-Shell Character and Nonlinear Optical Properties of Nanographenes. , 2016, , 437-456.		3
271	Powerful and Tunable THz Emitters Based on the Fe/Pt Magnetic Heterostructure. Advanced Optical Materials, 2016, 4, 1944-1949.	3.6	157
272	Plasmon modes of circular cylindrical double-layer graphene. Optics Express, 2016, 24, 20461.	1.7	15
273	Pumping electrons in graphene to theMpoint in the Brillouin zone: Emergence of anisotropic plasmons. Physical Review B, 2016, 94, .	1.1	5

#	Article	IF	Citations
274	Resonant tunneling and intrinsic bistability in twisted graphene structures. Physical Review B, 2016, 94, .	1.1	1
276	Nonequilibrium plasmon emission drives ultrafast carrier relaxation dynamics in photoexcited graphene. Physical Review B, 2016, 93, .	1.1	29
277	Subwavelength Terahertz Imaging of Graphene Photoconductivity. Nano Letters, 2016, 16, 7019-7024.	4.5	27
278	High- and Reproducible-Performance Graphene/II-VI Semiconductor Film Hybrid Photodetectors. Scientific Reports, 2016, 6, 28943.	1.6	29
279	Selectively enhanced photocurrent generation in twisted bilayer graphene with van Hove singularity. Nature Communications, 2016, 7, 10699.	5.8	136
280	THz-circuits driven by photo-thermoelectric, gate-tunable graphene-junctions. Scientific Reports, 2016, 6, 35654.	1.6	32
281	Optical-Electrical Characteristics and Carrier Dynamics of Semi-Insulation GaAs by Terahertz Spectroscopic Technique. Chinese Physics Letters, 2016, 33, 120701.	1.3	3
282	High-field nonlinear conductivities of n- and p-type GaAs thin films in the terahertz region. Current Applied Physics, 2016, 16, 793-798.	1.1	6
283	Ultrafast carrier dynamics of carbon nanodots in different pH environments. Physical Chemistry Chemical Physics, 2016, 18, 3838-3845.	1.3	63
284	Structural and optical characteristics of graphene quantum dots size-controlled and well-aligned on a large scale by polystyrene-nanosphere lithography. Journal Physics D: Applied Physics, 2016, 49, 025308.	1.3	12
285	Tuning ultrafast electron thermalization pathways in a van der Waals heterostructure. Nature Physics, 2016, 12, 455-459.	6.5	127
286	Graphene Schottky diodes: An experimental review of the rectifying graphene/semiconductor heterojunction. Physics Reports, 2016, 606, 1-58.	10.3	449
287	A high performance, visible to mid-infrared photodetector based on graphene nanoribbons passivated with HfO₂. Nanoscale, 2016, 8, 327-332.	2.8	74
288	Quantum Size Effects in the Terahertz Nonlinear Response of Metallic Armchair Graphene Nanoribbons. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 148-155.	1.9	7
289	Ultrafast relaxation dynamics of photoexcited Dirac fermions in the three-dimensional Dirac semimetal<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">d</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">A</mml:mi><mml:msub><mml:mi mathvariant="normal">s</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physi	1.1	47
290	Emerging Lowâ€Dimensional Materials for Nonlinear Optics and Ultrafast Photonics. Advanced Materials, 2017, 29, 1605886.	11.1	265
291	Substrate influence on the early relaxation stages of photoexcited carriers in monolayer graphene. Applied Surface Science, 2017, 424, 52-57.	3.1	9
292	Boosting the terahertz nonlinearity of graphene by orientation disorder. 2D Materials, 2017, 4, 025035.	2.0	13

#	Article	IF	Citations
293	Simultaneously coherent excitation of multi-modes THz radiation from dielectric loaded waveguide by pre-bunched electron beam. Journal Physics D: Applied Physics, 2017, 50, 075104.	1.3	6
294	Novel Electron-Phonon Relaxation Pathway in Graphite Revealed by Time-Resolved Raman Scattering and Angle-Resolved Photoemission Spectroscopy. Scientific Reports, 2017, 7, 40876.	1.6	35
295	Microscopic View on the Ultrafast Carrier Dynamics in Graphene. , 2017, , 135-182.		2
296	Optical Response of Graphene under Intense Terahertz Fields. , 2017, , 243-268.		0
297	Nonlinear Terahertz Spectroscopy on Multilayer Graphene. , 2017, , 269-293.		0
298	Ultrafast Manipulation of Terahertz Waves using Graphene Metamaterials. , 2017, , 295-322.		0
299	Unique properties of graphene quantum dots and their applications in photonic/electronic devices. Journal Physics D: Applied Physics, 2017, 50, 103002.	1.3	77
300	Single-Wavelength and Multiwavelength Q-Switched Fiber Laser Using Fe3O4 Nanoparticles. IEEE Photonics Journal, 2017, 9, 1-9.	1.0	16
301	High-harmonic generation in graphene enhanced by elliptically polarized light excitation. Science, 2017, 356, 736-738.	6.0	460
302	Terahertz saturable absorbers from liquid phase exfoliation of graphite. Nature Communications, 2017, 8, 15763.	5.8	93
303	Passive mode-locking at S-band by single-mode thulium-doped fluoride fiber using a thin film PtAg/N-G saturable absorber. Journal of Nanophotonics, 2017, 11, 026008.	0.4	6
304	Dynamic Wavelength-Tunable Photodetector Using Subwavelength Graphene Field-Effect Transistors. Scientific Reports, 2017, 7, 45873.	1.6	10
305	Nanostructured Materials and Architectures for Advanced Infrared Photodetection. Advanced Materials Technologies, 2017, 2, 1700005.	3.0	87
306	Bolometric detection of terahertz quantum cascade laser radiation with graphene-plasmonic antenna arrays. Journal Physics D: Applied Physics, 2017, 50, 174001.	1.3	22
307	Graphene integrated photodetectors and opto-electronic devices â€" a review. Chinese Physics B, 2017, 26, 034203.	0.7	27
308	Photoexcited terahertz conductivity dynamics of graphene tuned by oxygen-adsorption. Applied Physics Letters, 2017, 110, .	1.5	22
309	Ultraviolet photosensor based on few layered reduced graphene oxide nanosheets. Applied Surface Science, 2017, 418, 374-379.	3.1	25
310	Probing charge trapping and joule heating in graphene field-effect transistors by transient pulsing. Semiconductor Science and Technology, 2017, 32, 084005.	1.0	12

#	Article	IF	Citations
311	Plasmonic amplification of terahertz radiation in a periodic graphene structure with the carrier injection. Applied Physics Letters, 2017, 111, .	1.5	27
312	Time-Resolved Coherent Anti-Stokes Raman Scattering of Graphene: Dephasing Dynamics of Optical Phonon. Journal of Physical Chemistry Letters, 2017, 8, 4108-4112.	2.1	21
313	Negative terahertz photoconductivity in 2D layered materials. Nanotechnology, 2017, 28, 464001.	1.3	21
314	Recent advances in black phosphorus-based photonics, electronics, sensors and energy devices. Materials Horizons, 2017, 4, 997-1019.	6.4	296
315	A new strategy for integrating superior mechanical performance and high volumetric energy density into a Janus graphene film for wearable solid-state supercapacitors. Journal of Materials Chemistry A, 2017, 5, 20797-20807.	5.2	37
316	Ultrafast Processes in Graphene: From Fundamental Manybody Interactions to Device Applications. Annalen Der Physik, 2017, 529, 1700022.	0.9	10
317	Negative terahertz conductivity of graphene when pumping by optical plasmons. Technical Physics Letters, 2017, 43, 523-526.	0.2	5
318	Carrier Dynamics in Graphene: Ultrafast Manyâ€Particle Phenomena. Annalen Der Physik, 2017, 529, 1700038.	0.9	26
319	Reduced graphene oxide film based highly responsive infrared detector. Materials Research Express, 2017, 4, 085603.	0.8	8
320	Excitonic gap formation in pumped Dirac materials. Physical Review B, 2017, 95, .	1.1	24
321	Electron dynamics in MoS₂-graphite heterostructures. Nanoscale, 2017, 9, 14533-14539.	2.8	7
322	Stable Graphene-Two-Dimensional Multiphase Perovskite Heterostructure Phototransistors with High Gain. Nano Letters, 2017, 17, 7330-7338.	4.5	88
323	Graphene-Insulator-Semiconductor Junction for Hybrid Photodetection Modalities. Scientific Reports, 2017, 7, 14651.	1.6	20
324	Mechanistic view on efficient photodetection by solvothermally reduced graphene oxide. Journal of Materials Science: Materials in Electronics, 2017, 28, 14818-14826.	1.1	9
325	Ultrafast sublattice pseudospin relaxation in graphene probed by polarization-resolved photoluminescence. Physical Review B, 2017, 95, .	1.1	9
326	Surface charge transfer doping induced inversion layer for high-performance graphene/silicon heterojunction solar cells. Journal of Materials Chemistry A, 2017, 5, 285-291.	5.2	52
327	Incoherent optical modulation of graphene based on an in-line fiber Machâ€“Zehnder interferometer. Optics Letters, 2017, 42, 1708.	1.7	16
328	Observation of Nanosecond Hot Carrier Decay in Graphene. Journal of Physical Chemistry Letters, 2018, 9, 1485-1490.	2.1	7

#	Article	IF	Citations
329	Reduced graphene oxide (rGO) based wideband optical sensor and the role of Temperature, Defect States and Quantum Efficiency. Scientific Reports, 2018, 8, 3537.	1.6	209
330	Infrared photodetectors based on reduced graphene oxide nanoparticles and graphene oxide. Laser Physics, 2018, 28, 066204.	0.6	12
331	AtomicallyÂthin noble metal dichalcogenide: a broadband mid-infrared semiconductor. Nature Communications, 2018, 9, 1545.	5.8	367
332	Excitonic instability in optically pumped three-dimensional Dirac materials. Physical Review B, 2018, 97, .	1.1	15
333	Polarization and plasmons in hot photoexcited graphene. Physical Review B, 2018, 97, .	1.1	7
334	Ultrafast Spectral Photoresponse of Bilayer Graphene: Optical Pumpâ€“Terahertz Probe Spectroscopy. ACS Nano, 2018, 12, 1785-1792.	7.3	23
335	THz photonics in two dimensional materials and metamaterials: properties, devices and prospects. Journal of Materials Chemistry C, 2018, 6, 1291-1306.	2.7	124
336	Terahertz magneto-optical properties of bi- and tri-layer graphene. Journal of Physics Condensed Matter, 2018, 30, 175701.	0.7	16
337	A critical review on the carrier dynamics in 2D layered materials investigated using THz spectroscopy. Optics Communications, 2018, 406, 24-35.	1.0	22
338	Watt-Level Continuous-Wave and Black Phosphorus Passive Q-Switching Operation of Ho3+,Pr 3+:LiLuF4 Bulk Laser at 2.95 Î¼m. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-5.	1.9	29
339	All-integrated terahertz modulators. Nanophotonics, 2018, 7, 127-144.	2.9	72
340	Bursts of efficient terahertz radiation with saturation effect from metal-based ferromagnetic heterostructures. Journal Physics D: Applied Physics, 2018, 51, 034001.	1.3	27
341	Sizeâ€Controlled Graphene Nanodot Arrays/ZnO Hybrids for Highâ€Performance UV Photodetectors. Advanced Science, 2018, 5, 1700334.	5.6	70
342	2D bismuthene fabricated via acid-intercalated exfoliation showing strong nonlinear near-infrared responses for mode-locking lasers. Nanoscale, 2018, 10, 21106-21115.	2.8	115
343	Tutorial: Time-domain thermoreflectance (TDTR) for thermal property characterization of bulk and thin film materials. Journal of Applied Physics, 2018, 124, .	1.1	197
344	Tutorial: An introduction to terahertz time domain spectroscopy (THz-TDS). Journal of Applied Physics, 2018, 124, .	1.1	333
345	Low-Dimensional Materials and State-of-the-Art Architectures for Infrared Photodetection. Sensors, 2018, 18, 4163.	2.1	19
346	The Interaction between Quantum Dots and Graphene: The Applications in Grapheneâ€Based Solar Cells and Photodetectors. Advanced Functional Materials, 2018, 28, 1804712.	7.8	69

#	Article	IF	Citations
347	Low-dimensional nanomaterial saturable absorbers for ultrashort-pulsed waveguide lasers. Optical Materials Express, 2018, 8, 3055.	1.6	48
348	One-Dimensional Assembly on Two-Dimensions: AuCN Nanowire Epitaxy on Graphene for Hybrid Phototransistors. Nano Letters, 2018, 18, 6214-6221.	4.5	30
349	Spatially-resolved fluorescence-detected two-dimensional electronic spectroscopy probes varying excitonic structure in photosynthetic bacteria. Nature Communications, 2018, 9, 4219.	5.8	86
350	Reduced graphene oxide-based broad band photodetector and temperature sensor: effect of gas adsorption on optoelectrical properties. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	14
352	Unipolar optical doping and extended photocarrier lifetime in graphene by band-alignment engineering. Nano Futures, 2018, 2, 035003.	1.0	9
353	Enhanced Surface Carrier Response by Field Overlapping in Metal Nanopatterned Semiconductor. ACS Photonics, 2018, 5, 4739-4744.	3.2	10
354	Enhancement of Out-of-Plane Charge Transport in a Vertically Stacked Two-Dimensional Heterostructure Using Point Defects. ACS Nano, 2018, 12, 10529-10536.	7.3	56
355	Graphene biointerfaces for optical stimulation of cells. Science Advances, 2018, 4, eaat0351.	4.7	68
356	Signatures of bulk topology in the non-linear optical spectra of Dirac-Weyl materials. European Physical Journal B, 2018, 91, 1.	0.6	7
357	Anharmonicities in phonon combinations and overtones in bilayered graphene: A temperature-dependent approach. Physical Review B, 2018, 97, .	1.1	5
358	Few-Layer Platinum Diselenide as a New Saturable Absorber for Ultrafast Fiber Lasers. ACS Applied Materials & Interfaces, 2018, 10, 21534-21540.	4.0	67
359	Tunable terahertz photoconductivity of hydrogen functionalized graphene using optical pump-terahertz probe spectroscopy. Nanoscale, 2018, 10, 14321-14330.	2.8	10
360	Robust and accurate terahertz time-domain spectroscopic ellipsometry. Photonics Research, 2018, 6, 768.	3.4	20
361	Dependence of Excited Carrier Dynamics of PtSe2 thin films on Thickness. , 2018, , .		0
362	Extracting the Energy Sensitivity of Charge Carrier Transport and Scattering. Scientific Reports, 2018, 8, 10597.	1.6	2
363	Superluminal plasmons with resonant gain in population inverted bilayer graphene. Physical Review B, 2018, 98, .	1.1	26
364	Grapheneâ€™s nonlinear-optical physics revealed through exponentially growing self-phase modulation. Nature Communications, 2018, 9, 2675.	5.8	67
365	Interminiband Optical Transitions in Graphene Lateral Superlattices. ACS Photonics, 2018, 5, 3331-3337.	3.2	2

#	Article	IF	Citations
366	Thermoelectrically Driven Photocurrent Generation in Femtosecond Laser Patterned Graphene Junctions. ACS Photonics, 2018, 5, 3107-3115.	3.2	17
367	The ultrafast dynamics and conductivity of photoexcited graphene at different Fermi energies. Science Advances, 2018, 4, eaar5313.	4.7	95
368	Visible-infrared dual-mode MoS ₂ -graphene-MoS ₂ phototransistor with high ratio of the I _{ph} / I _{dark}. 2D Materials, 2018, 5, 045027.	2.0	28
369	Feasibility of Room-Temperature GHz-THz Direct Detection in Graphene Through Hot-Carrier Effect. IEEE Transactions on Device and Materials Reliability, 2018, 18, 429-437.	1.5	22
370	Silicon-graphene photonic devices. Journal of Semiconductors, 2018, 39, 061009.	2.0	12
371	Engineering triangular carbon quantum dots with unprecedented narrow bandwidth emission for multicolored LEDs. Nature Communications, 2018, 9, 2249.	5.8	676
372	Manipulating the Optical Properties of Carbon Dots by Fineâ€Tuning their Structural Features. ChemSusChem, 2019, 12, 4432-4441.	3.6	33
373	Graphene Hybrid Structures for Integrated and Flexible Optoelectronics. Advanced Materials, 2020, 32, e1902039.	11.1	127
374	Nonlinear Optical Signatures of the Transition from Semiconductor to Semimetal in PtSe₂. Laser and Photonics Reviews, 2019, 13, 1900052.	4.4	64
375	Analysis of graphene based miniaturized terahertz patch antennas for single band and dual band operation. Optik, 2019, 194, 163012.	1.4	30
376	Highly Sensitive, Fast Graphene Photodetector with Responsivity >10⁶ A/W Using a Floating Quantum Well Gate. ACS Applied Materials & Interfaces, 2019, 11, 30010-30018.	4.0	23
377	Research and Implementation of Efficient Parallel Processing of Big Data at TELBE User Facility. , 2019, , .		3
378	Optical deposition of PtSe2 on fiber end face for Yb-doped mode-locked fiber laser. Optik, 2019, 198, 163298.	1.4	11
379	Demonstration of Ultrafast THz Absorption Modulation in a Graphene-Based Thin Absorber. , 2019, , .		0
380	Accessing electromagnetic properties of matter with cylindrical vector beams. New Journal of Physics, 2019, 21, 073010.	1.2	12
381	Nonequilibrium electron relaxation in graphene. International Journal of Modern Physics B, 2019, 33, 1950183.	1.0	3
382	Graphite-like dynamical behaviour of graphite oxide. EPJ Web of Conferences, 2019, 205, 04014.	0.1	0
383	Terahertz absorption characteristics of multilayer graphene/polymer. Integrated Ferroelectrics, 2019, 200, 232-237.	0.3	0

#	Article	IF	Citations
384	Theory of the strongly nonlinear electrodynamic response of graphene: A hot electron model. Physical Review B, 2019, 100, .	1.1	24
385	Band Tuning of a Phosphorene Semiconductor via Floquet Theory. Journal of Electronic Materials, 2019, 48, 8193-8205.	1.0	4
386	Ultrafast Hyperspectral Transient Absorption Spectroscopy: Application to Single Layer Graphene. Photonics, 2019, 6, 95.	0.9	12
387	Energy dissipation in van der Waals 2D devices. 2D Materials, 2019, 6, 032005.	2.0	26
388	Terahertz Radiation Modulated by Confinement of Picosecond Current Based on Patterned Ferromagnetic Heterostructures. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1900057.	1.2	24
389	Graphene quantum dot arrays: Pros and cons of photodetection in the Coulomb blockade regime. Carbon, 2019, 149, 499-511.	5.4	12
390	Large-scale spin-polarized DFT calculation of electronic properties of GaAs with defects. Materials Research Express, 2019, 6, 055914.	0.8	7
391	Plasmon Excited Ultrahot Carriers and Negative Differential Photoresponse in a Vertical Graphene van der Waals Heterostructure. Nano Letters, 2019, 19, 3295-3304.	4.5	28
392	Photoconductivity, carrier lifetime and mobility evaluation of GaAs films on Si (100) using optical pump terahertz probe measurements. Semiconductor Science and Technology, 2019, 34, 035031.	1.0	13
393	PdSe₂ Multilayer on Germanium Nanocones Array with Light Trapping Effect for Sensitive Infrared Photodetector and Image Sensing Application. Advanced Functional Materials, 2019, 29, 1900849.	7.8	90
394	Manifestation of Kinetic Inductance in Terahertz Plasmon Resonances in Thin-Film Cd₃As₂. ACS Nano, 2019, 13, 4091-4100.	7.3	24
395	Ultrafast free carrier dynamics in black phosphorusâ€“molybdenum disulfide (BP/MoS₂) heterostructures. Nanoscale Horizons, 2019, 4, 1099-1105.	4.1	36
396	Analysis of Defect Recovery in Reduced Graphene Oxide and Its Application as a Heater for Self-Healing Polymers. ACS Applied Materials & Interfaces, 2019, 11, 16804-16814.	4.0	19
397	Mode-locking in Er-doped fiber laser with reduced graphene oxide on a side-polished fiber as saturable absorber. Optical Fiber Technology, 2019, 50, 177-182.	1.4	32
398	Graphene-tuned optical manipulation on microparticle by Bessel beam. AIP Advances, 2019, 9, 035154.	0.6	2
399	Ultrafast spectroscopy of voltage reconfigurable graphene saturable absorbers in the visible and near infrared. 2D Materials, 2019, 6, 035013.	2.0	10
400	Generation of two-color terahertz radiation using Smithâ€“Purcell emitter and periodic dielectric layers. Optical and Quantum Electronics, 2019, 51, 1.	1.5	6
401	Experimental Demonstration of Ultrafast THz Modulation in a Graphene-Based Thin Film Absorber through Negative Photoinduced Conductivity. ACS Photonics, 2019, 6, 720-727.	3.2	128

#	Article	IF	Citations
402	Passively Q-Switched Nd:YVO4 Laser Based on Silver-Plated Graphene Saturable Absorber. , 2019, , .		0
403	Nonlinear optical properties of tungsten disulfide as saturable absorber based on Q-switched fiber laser. Optik, 2019, 198, 163251.	1.4	3
404	Including the Effects of Covering Layers in the Determination of Graphene Conductivity from THz-TDS Measurements. , 2019, , .		0
405	Quasi-industrially produced large-area microscale graphene flakes assembled film with extremely high thermoelectric power factor. Nano Energy, 2019, 58, 63-68.	8.2	30
406	Recent Advances in Fiber Supercapacitors: Materials, Device Configurations, and Applications. Advanced Materials, 2020, 32, e1901806.	11.1	225
407	Terahertz Spectroscopy of Nanomaterials: a Close Look at Chargeâ€Carrier Transport. Advanced Optical Materials, 2020, 8, 1900623.	3.6	53
408	Ultrasensitive Fieldâ€Effect Biosensors Enabled by the Unique Electronic Properties of Graphene. Small, 2020, 16, e1902820.	5.2	75
409	2D Materials for Terahertz Modulation. Advanced Optical Materials, 2020, 8, 1900550.	3.6	59
410	Timeâ€Resolved Terahertz Spectroscopy Studies on 2D Van der Waals Materials. Advanced Optical Materials, 2020, 8, 1900533.	3.6	37
411	Graphene patch antennas with different substrate shapes and materials. Optik, 2020, 202, 163700.	1.4	35
412	Twoâ€Dimensional GePâ€Based Broadâ€Band Optical Switches and Photodetectors. Advanced Optical Materials, 2020, 8, 1901490.	3.6	45
413	Influence of Oxidized Graphene Quantum Dots as Photosensitizers. Journal of Nanoscience and Nanotechnology, 2020, 20, 3432-3436.	0.9	5
414	Graphene Aerogels: Structure Control, Thermal Characterization and Thermal Transport. International Journal of Thermophysics, 2020, 41, 1.	1.0	14
415	Single Copper Atoms Enhance Photoconductivity in g-C₃N₄. Journal of Physical Chemistry Letters, 2020, 11, 8873-8879.	2.1	25
416	Emerging uniform Cu₂O nanocubes for 251st harmonic ultrashort pulse generation. Journal of Materials Chemistry C, 2020, 8, 14386-14392.	2.7	57
417	Relevance of collinear processes to the ultrafast dynamics of photoexcited carriers in graphene. Physica E: Low-Dimensional Systems and Nanostructures, 2020, 123, 114211.	1.3	1
418	An Effort Towards Full Graphene Photodetectors. Photonic Sensors, 2022, 12, 31-67.	2.5	16
419	Bioâ€interface behaviour of graphene and semiconducting SWCNT:C₆₀blend based nano photodiode for subretinal implant. Biosurface and Biotribology, 2020, 6, 53-58.	0.6	4

#	Article	IF	Citations
420	Terahertz Spectroscopy: Encoding the Discovery, Instrumentation, and Applications toward Pharmaceutical Prospectives. Critical Reviews in Analytical Chemistry, 2022, 52, 343-355.	1.8	21
422	Colloidal Nanosurfactants for 3D Conformal Printing of 2D van der Waals Materials. Advanced Materials, 2020, 32, e2003081.	11.1	23
423	Tuning Ultrafast Charge Carrier Dynamics of Monolayer Graphene using Substrates. Journal of Physical Chemistry C, 2020, 124, 21147-21154.	1.5	2
424	Emerging High-Performance SnS/CdS Nanoflower Heterojunction for Ultrafast Photonics. ACS Applied Materials & Interfaces, 2020, 12, 43098-43105.	4.0	74
425	Quenching of the relaxation pathway in the Weyl semimetal TaAs. Physical Review B, 2020, 102, .	1.1	4
426	Near- and Mid-Infrared Graphene-Based Photonic Architectures for Ultrafast and Low-Power Electro-Optical Switching and Ultra-High Resolution Imaging. ACS Applied Nano Materials, 2020, 3, 12218-12230.	2.4	20
427	InSe Schottky Diodes Based on Van Der Waals Contacts. Advanced Functional Materials, 2020, 30, 2001307.	7.8	44
428	Ultrafast electron imaging of surface charge carrier dynamics at low voltage. Structural Dynamics, 2020, 7, 021001.	0.9	3
429	Mid-infrared transient reflectance study of the Dirac semimetal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">d</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="normal">A</mml:mi><mml:msub><mml:mi mathvariant="normal">s</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> under	1.1	12
430	Tunable Terahertz Graphene-Based Absorber Design Method Based on a Circuit Model Approach. IEEE Access, 2020, 8, 70343-70354.	2.6	35
431	High-Performance Graphene Patch Antenna with Superstrate Cover for Terahertz Band Application. Plasmonics, 2020, 15, 1719-1727.	1.8	37
432	Ferromagnetic CoSe broadband photodetector at room temperature. Nanotechnology, 2020, 31, 374002.	1.3	15
433	Artificial Metaphotonics Born Naturally in Two Dimensions. Chemical Reviews, 2020, 120, 6197-6246.	23.0	78
434	Photoconductivity calculations of bilayer graphene from first principles and deformation-potential approach. Physical Review B, 2020, 101, .	1.1	4
435	Bandwidth Enhancement of Planar Terahertz Metasurfaces via Overlapping of Dipolar Modes. Plasmonics, 2020, 15, 1925-1934.	1.8	14
436	Wafer-scale fabrication of single-crystal graphene on Ge(1 1 0) substrate by optimized CH4/H2 ratio. Applied Surface Science, 2020, 529, 147066.	3.1	17
437	Toward Intelligent Metasurfaces: The Progress from Globally Tunable Metasurfaces to Softwareâ€Defined Metasurfaces with an Embedded Network of Controllers. Advanced Optical Materials, 2020, 8, 2000783.	3.6	145
438	Graphene-based all-optical modulators. Frontiers of Optoelectronics, 2020, 13, 114-128.	1.9	47

#	Article	IF	Citations
439	Error-free data transmission through fast broadband all-optical modulation in grapheneâ€“silicon optoelectronics. Applied Physics Letters, 2020, 116, 221106.	1.5	4
440	Terahertz transitions between Landau levels in graphene with different concentrations of electrons. Fullerenes Nanotubes and Carbon Nanostructures, 2020, 28, 135-139.	1.0	1
441	Dynamically Induced Excitonic Instability in Pumped Dirac Materials. Annalen Der Physik, 2020, 532, 1900549.	0.9	11
442	Influence of Dye Sensitizers on Charge Dynamics in SnO₂ Nanoparticles Probed with THz Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 3482-3488.	1.5	9
443	Broadband and Ultrasensitive Graphene-Based Mechanical Wave Detector with Nanosecond Response Used for Biological Photoacoustic Imaging. ACS Applied Materials & Interfaces, 2020, 12, 17268-17275.	4.0	6
444	Hydrogen Bond Interaction Promotes Flash Energy Transport at MXene-Solvent Interface. Journal of Physical Chemistry C, 2020, 124, 10306-10314.	1.5	32
445	Numerical Investigation of the Impact of the Saturable Absorber Recovery Time on the Mode-Locking Performance of Fiber Lasers. Journal of Lightwave Technology, 2020, 38, 4124-4132.	2.7	32
446	Analytical design of tunable THz refractive index sensor for TE and TM modes using graphene disks. Journal Physics D: Applied Physics, 2020, 53, 295107.	1.3	48
447	Terahertz-wave generation using graphene: Toward new types of terahertz lasers. Proceedings of the IEEE, 2024, , 1-13.	16.4	1
448	Position-sensitive detectors based on two-dimensional materials. Nano Research, 2021, 14, 1889-1900.	5.8	14
449	High-gain and ultrawide-band graphene patch antenna with photonic crystal covering 96.48% of the terahertz band. Optik, 2021, 227, 166056.	1.4	18
450	The nonlinear optical transition bleaching in tellurene. Nanoscale, 2021, 13, 15882-15890.	2.8	10
451	Hot carriers in graphene â€“ fundamentals and applications. Nanoscale, 2021, 13, 8376-8411.	2.8	75
452	Ultrafast Momentum-Resolved Free-Electron Probing of Optically Pumped Plasmon Thermal Dynamics. ACS Photonics, 2021, 8, 614-624.	3.2	4
453	Unveiling the dimension-dependence of femtosecond nonlinear optical properties of tellurium nanostructures. Nanoscale Horizons, 2021, 6, 918-927.	4.1	12
454	High Efficiency Electro-Optic Modulation in a Graphene Silicon Hybrid Tapered Microring Resonator. IEEE Access, 2021, 9, 87869-87876.	2.6	6
455	A pattern reconfigurable graphene-based Yagi-Uda antenna with TM01Î´ mode generation for THz applications. Journal of Materials Science: Materials in Electronics, 2021, 32, 5325-5338.	1.1	13
456	Intrinsic and extrinsic effects on intraband optical conductivity of hot carriers in photoexcited graphene. Physical Review Research, 2021, 3, .	1.3	3

#	Article	IF	Citations
457	Femtosecond carrier dynamics and saturable absorption in few layer germanium sulfide. Optik, 2021, 229, 166226.	1.4	5
458	Recent Advances in Terahertz Photonic Technologies Based on Graphene and Their Applications. Advanced Photonics Research, 2021, 2, 2000168.	1.7	12
459	Linear and Nonlinear Optical Properties of Graphene: A Review. Journal of Electronic Materials, 2021, 50, 3773.	1.0	13
460	Two-Dimensional Bismuthene Showing Radiation-Tolerant Third-Order Optical Nonlinearities. ACS Applied Materials & Interfaces, 2021, 13, 21626-21634.	4.0	19
461	THz-TDS parameter extraction: empirical correction terms for the analytical transfer function solution. Applied Optics, 2021, 60, 4013.	0.9	1
462	Terahertz Emission and Ultrafast Carrier Dynamics of Ar-Ion Implanted Cu(In,Ga)Se2 Thin Films. Crystals, 2021, 11, 411.	1.0	2
463	Optimizing the Photothermoelectric Effect in Graphene. Physical Review Applied, 2021, 15, .	1.5	5
464	Augmented Allâ€Optical Active Terahertz Device Using Grapheneâ€Based Metasurface. Advanced Optical Materials, 2021, 9, 2100462.	3.6	9
465	2D Materials for Nonlinear Photonics and Electroâ€Optical Applications. Advanced Materials Interfaces, 2021, 8, 2100367.	1.9	30
467	Hot-Carrier Cooling in High-Quality Graphene Is Intrinsically Limited by Optical Phonons. ACS Nano, 2021, 15, 11285-11295.	7.3	43
468	Access to Ultrafast Surface and Interface Carrier Dynamics Simultaneously in Space and Time. Journal of Physical Chemistry C, 2021, 125, 14495-14516.	1.5	6
469	Data Science for Physics in Laser Processing. Journal of the Japan Society for Precision Engineering, 2021, 87, 7_601-7_605.	0.0	0
470	Narrow-bandgap materials for optoelectronics applications. Frontiers of Physics, 2022, 17, 1.	2.4	28
471	On-chip ultrafast pulse generation based on graphene-silicon hybrid waveguides. Photonics Research, 2021, 9, 1660.	3.4	7
472	Ultrafast Plasmon Thermalization in Epitaxial Graphene Probed by Timeâ€Resolved THz Spectroscopy. Advanced Functional Materials, 2021, 31, 2105763.	7.8	8
473	Revealing Ultrafast Charge-Carrier Thermalization in Tin-Iodide Perovskites through Novel Pumpâ€“Pushâ€“Probe Terahertz Spectroscopy. ACS Photonics, 2021, 8, 2509-2518.	3.2	14
474	Pseudo-magnetic field-induced slow carrier dynamics in periodically strained graphene. Nature Communications, 2021, 12, 5087.	5.8	31
475	Time-Resolved Raman Scattering in Exfoliated and CVD Graphene Crystals. Journal of Physical Chemistry C, 2021, 125, 21003-21010.	1.5	6

#	Article	IF	Citations
476	Fully Automated Data Acquisition for Laser Production Cyber-Physical System. IEEE Journal of Selected Topics in Quantum Electronics, 2021, 27, 1-8.	1.9	7
477	Recent advances and prospects in reduced graphene oxide-based photodetectors. Journal of Materials Chemistry C, 2021, 9, 8129-8157.	2.7	22
478	Characteristics of Graphene/Reduced Graphene Oxide. Springer Series in Materials Science, 2020, , 155-177.	0.4	28
479	Photodetectors based on controllable growth of large-area graphene films. Thin Solid Films, 2020, 709, 138129.	0.8	7
480	Determining Quasiparticle Bandgap of Two-Dimensional Transition Metal Dichalcogenides by Observation of Hot Carrier Relaxation Dynamics. Journal of Physical Chemistry Letters, 2021, 12, 585-591.	2.1	4
481	2D van der Waals heterostructures: processing, optical properties and applications in ultrafast photonics. Materials Horizons, 2020, 7, 2903-2921.	6.4	44
482	High-performance mid-infrared photodetection based on Bi₂Se₃ maze and free-standing nanoplates. Nanotechnology, 2021, 32, 105705.	1.3	9
483	Adiabatic invariants for surface plasmons on temporally dynamic graphene. Journal of Optics (United) Tj ETQq1 1 0.784314 rgBT /Ove	1.0	2
484	Amplified propagating plasmon in asymmetrical graphene periodic structure. Journal of Physics Communications, 2020, 4, 071001.	0.5	6
485	Excitation Enhancement of Hot Electrons by Ultrafast Optical Pumping in Heavily <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"><mml:mi>p</mml:mi></mml:math> -Doped Graphene Stacks. Physical Review Applied, 2020, 14, .	1.5	5
486	Ultrasensitive and ultrathin phototransistors and photonic synapses using perovskite quantum dots grown from graphene lattice. Science Advances, 2020, 6, eaay5225.	4.7	178
487	Dynamic Control of High-Range Photoresponsivity in a Graphene Nanoribbon Photodetector. Nanoscale Research Letters, 2020, 15, 124.	3.1	13
488	Time-Domain and Ultrafast Terahertz Spectroscopy. , 2016, , 420-465.		2
490	Toward real-time terahertz imaging. Advances in Optics and Photonics, 2018, 10, 843.	12.1	301
491	Synthesis of high quality silver nanowires and their applications in ultrafast photonics. Optics Express, 2019, 27, 16440.	1.7	66
492	Coherent optical modulation of graphene based on coherent population oscillation. Optics Letters, 2019, 44, 223.	1.7	2
493	Passively Q-switched mode-locked ytterbium-doped fiber laser based on an Fe₃O₄-nanoparticle saturable absorber. Optical Materials Express, 2020, 10, 588.	1.6	10
494	Graphene plasmonic devices for terahertz optoelectronics. Nanophotonics, 2020, 9, 1901-1920.	2.9	59

#	Article	IF	Citations
495	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.	0.8	37
496	The evolution of properties with deposition time of vertical graphene nanosheets produced by microwave plasma-enhanced chemical vapor deposition. Surfaces and Interfaces, 2021, 27, 101529.	1.5	2
497	Ultrafast THz Response of Few-Layer Epitaxial Graphene. , 2010, , .		0
498	Probing Intraband Conductivity Dynamics in Graphene. , 2010, , .		0
499	Principle of Linear Accelerator Based fs-THz Generation and Its Application. , 2012, , 73-91.		0
500	Toward the Creation of Graphene Terahertz Lasers. The Review of Laser Engineering, 2012, 40, 491.	0.0	0
501	Hot-Fermi Carrier Multiplication in Monolayer Graphene. , 2013, , .		0
502	Effect of cooling of electron-hole plasma in electrically pumped graphene layer structures with split gates. Wuli Xuebao/Acta Physica Sinica, 2013, 62, 097202.	0.2	0
504	Graphene Terahertz Devices. , 2015, , 105-122.		0
505	Gain characteristics of grapheme plasmain terahertz range. Wuli Xuebao/Acta Physica Sinica, 2016, 65, 015201.	0.2	1
506	Ultrafast carrier dynamics in atomically thin two-dimensional crystals. , 2018, , .		1
507	Control of the ultrafast photo-electronic dynamics of a chemical-vapor-deposited-grown graphene by ozone oxidation. Photonics Research, 2020, 8, 17.	3.4	3
508	Electronic and Thermoelectric Properties of Graphene on 4H-SiC (0001) Nanofacets Functionalized with F4-TCNQ. Journal of Electronic Materials, 2020, 49, 6872-6880.	1.0	0
509	Terahertz Detectors Based on Carbon Nanomaterials. Advanced Functional Materials, 2022, 32, 2107499.	7.8	19
510	Review: Optoelectronic Response andÂvan der Waals Materials. Springer Theses, 2020, , 37-77.	0.0	0
511	Photoresponse in Graphene-on-MoS$$_2$$ Heterostructures. Springer Theses, 2020, , 141-156.	0.0	1
512	Characterization of thermal conductivity, diffusivity, specific heat, and interface thermal resistance of carbon nanostructures. , 2020, , 57-89.		0
513	Ï€â€“Ï€ Interactions Mediated Pyrene Based Ligand Enhanced Photoresponse in Hybrid Graphene/PbS Quantum Dots Photodetectors. Advanced Electronic Materials, 2022, 8, 2100672.	2.6	5

#	Article	IF	Citations
514	Fluence and wavelength dependent ultrafast differential transmission dynamics in graphene. Materials Research Express, 2020, 7, 095601.	0.8	7
515	Mid-infrared photonics and optoelectronics in 2D materials. Materials Today, 2021, 51, 294-316.	8.3	28
516	Hot carrier dynamics and electron-optical phonon coupling in photoexcited graphene via time-resolved ultrabroadband terahertz spectroscopy. Physical Review Research, 2021, 3, .	1.3	1
517	Ultrafast photocarrier and coherent phonon dynamics in type-II Dirac semimetal PtTe₂ thin films probed by optical spectroscopy. Photonics Research, 2022, 10, 653.	3.4	12
518	â€œLight onâ€•fluorescence carbon dots with intramolecular hydrogen bond-regulated co-planarization for cell imaging and temperature sensing. Journal of Materials Chemistry A, 2022, 10, 2085-2095.	5.2	28
519	Investigation of the third-order optical nonlinearity of Au/GO-CeO2 nanocomposites under different high-energy ball milling parameters. Optical Materials, 2022, 124, 112010.	1.7	5
520	Spectrally periodic pulses for enhancement of optical nonlinear effects. Nature Physics, 2022, 18, 59-66.	6.5	40
522	Preparation of graphene aerogel and application in photon-enhanced thermionic emission. RSC Advances, 2022, 12, 11113-11118.	1.7	1
523	Electrically Tunable Nonequilibrium Optical Response of Graphene. ACS Nano, 2022, 16, 3613-3624.	7.3	13
524	Multi-Pass Free Electron Laser Assisted Spectral and Imaging Applications in the Terahertz/Far-IR Range Using the Future Superconducting Electron Source BriXSinO. Frontiers in Physics, 2022, 10, .	1.0	6
525	The physics of terahertz negative photoconductivity in low-dimensional materials. Materials Today Physics, 2022, 23, 100631.	2.9	10
526	Study of carrier dynamics in strained graphene with giant pseudo-magnetic fields. , 2022, , .		0
527	The tunable bandgap of phosphorus-arsenic alloys for mid-and long-infrared regime photodetectors. Materials Science in Semiconductor Processing, 2022, 144, 106552.	1.9	7
528	Ultrafast Vibrational Dephasing Times of Modified Graphene. Journal of Physical Chemistry C, 2022, 126, 7571-7575.	1.5	2
529	Strong Coupling of Carbon Quantum Dots in Liquid Crystals. Journal of Physical Chemistry Letters, 2022, 13, 3562-3570.	2.1	7
530	The Rise of Graphene Photonic Crystal Fibers. Advanced Functional Materials, 2022, 32, .	7.8	6
531	Electrical activating of the â€œnonradiativeâ€•terahertz plasmon modes in a periodic grating-gate graphene structure with asymmetrical gating. Photonics and Nanostructures - Fundamentals and Applications, 2022, 50, 101027.	1.0	0
532	Highly Nonlinear Biexcitonic Photocurrent from Ultrafast Interlayer Charge Transfer. ACS Nano, 2022, 16, 9728-9735.	7.3	3

#	Article	IF	Citations
534	Graphene BioFET sensors for SARS-CoV-2 detection: a multiscale simulation approach. Nanoscale Advances, 0, , .	2.2	5
535	Engineering van der Waals Materials for Advanced Metaphotonics. Chemical Reviews, 2022, 122, 15204-15355.	23.0	33
536	Chocolate inspection by means of phase-contrast imaging using multiple-plane terahertz phase retrieval. Optics Letters, 2022, 47, 3283.	1.7	4
537	Unravelling the Surface-State Assisted Ultrafast Charge Transfer Dynamics of Graphene Quantum Dot-Based Nanohybrids via Transient Absorption Spectroscopy. Journal of Physical Chemistry C, 2022, 126, 11182-11192.	1.5	8
538	Highâ€Efficiency Infrared Sensing with Optically Excited Grapheneâ€Transition Metal Dichalcogenide Heterostructures. Small, 2022, 18, .	5.2	10
539	Terahertz response of ultrafast spin polarization in semi-insulating GaAs. Applied Physics Letters, 2022, 121, 021101.	1.5	1
540	Ultrafast dynamics of electrons and phonons: from the two-temperature model to the time-dependent Boltzmann equation. Advances in Physics: X, 2022, 7, .	1.5	14
541	Ultrafast intrinsic optical-to-electrical conversion dynamics in a graphene photodetector. Nature Photonics, 2022, 16, 718-723.	15.6	32
542	Ultrafast modulation of a THz metamaterial/graphene array integrated device. Applied Physics Letters, 2022, 121, 091102.	1.5	3
543	Charge carrier dynamics in 2D materials probed by ultrafast THzspectroscopy. Advances in Physics: X, 2023, 8, .	1.5	2
544	Third-Order Optical Nonlinearities of Two-dimensional SnS under Irradiation: Implications for Space Use. Journal of Materials Chemistry C, 0, , .	2.7	5
545	G-Optrode Bio-Interfaces for Non-Invasive Optical Cell Stimulation: Design and Evaluation. Biosensors, 2022, 12, 808.	2.3	1
546	Photo-dynamics in 2D materials: Processes, tunability and device applications. Physics Reports, 2022, 993, 1-70.	10.3	4
547	In-Situ Monitoring of Reciprocal Charge Transfer and Losses in Graphene-Silicon CCD Pixels. Sensors, 2022, 22, 9341.	2.1	5
548	Ultrafast Dynamic Terahertz Response of Ti₂O₃ Film during Photoinduced Metalâ€“Insulator Transition. Journal of Physical Chemistry C, 2022, 126, 20491-20497.	1.5	2
549	Ultrafast hot-carrier cooling in quasi freestanding bilayer graphene with hydrogen intercalated atoms. Nanoscale Advances, 2023, 5, 485-492.	2.2	0
550	Configurationâ€dependent stretchable allâ€solidâ€state supercapacitors and hybrid supercapacitors. , 2023, 5, .		36
551	Graphene Field-Effect-Coupled Detection of Avalanche Multiplication in Silicon. IEEE Transactions on Electron Devices, 2023, 70, 2370-2377.	1.6	4

#	Article	IF	Citations
552	Observation of hydrodynamic plasmons and energy waves in graphene. Nature, 2023, 614, 688-693.	13.7	9
553	Graphene Nanogap Interdigitated Asymmetric Electrodes for Photodetection. Chemosensors, 2023, 11, 181.	1.8	1
554	Probing the photocarrier dynamics of pressurized graphene using time-resolved Terahertz spectroscopy. Chinese Physics B, 0, , .	0.7	0
555	Temporally probing the thermal phonon and charge transfer induced out-of-plane acoustical displacement of monolayer and bi-layer MoS2/GaN heterojunction. Photoacoustics, 2023, 30, 100477.	4.4	4
556	Some Aspects of Novel Materials from Optical to THz Engineering. Progress in Optical Science and Photonics, 2023, , 59-80.	0.3	1
557	Graphene Channel Electron-Multiplying Charge-Coupled Pixel. IEEE Access, 2023, 11, 37424-37436.	2.6	1
574	Ultrafast semiconductor phenomena/THz properties. , 2024, , .		0