

Graphene photodetectors for high-speed optical commu

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Citation Report

#	ARTICLE	IF	CITATIONS
2	Graphene: Electronic and Photonic Properties and Devices. Nano Letters, 2010, 10, 4285-4294.	4.5	1,312
3	<i>Colloquium</i>: The transport properties of graphene: An introduction. Reviews of Modern Physics, 2010, 82, 2673-2700.	16.4	884
4	Theoretical Study of Optical Rectification at Radio Frequencies in a Slot Waveguide. IEEE Journal of Quantum Electronics, 2010, 46, 1634-1641.	1.0	7
5	Graphene analogue BCN: Femtosecond nonlinear optical susceptibility and hot carrier dynamics. Chemical Physics Letters, 2010, 499, 152-157.	1.2	33
6	Graphene photonics and optoelectronics. Nature Photonics, 2010, 4, 611-622.	15.6	6,719
7	Direct transformation of a resist pattern into a graphene field effect transistor through interfacial graphitization of liquid gallium. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C6D1-C6D4.	0.6	9
8	Fluorescence of laser-created electron-hole plasma in graphene. Physical Review B, 2010, 82, .	1.1	72
9	Ultrabroadband photodetection based on graphene ink. Nanotechnology, 2010, 21, 455202.	1.3	13
10	Triplet States and Electronic Relaxation in Photoexcited Graphene Quantum Dots. Nano Letters, 2010, 10, 2679-2682.	4.5	269
11	Chemical Functionalization of Graphene Enabled by Phage Displayed Peptides. Nano Letters, 2010, 10, 4559-4565.	4.5	190
12	Graphene for Microwaves. IEEE Microwave Magazine, 2010, 11, 81-86.	0.7	97
13	Graphene nanophotonics. , 2010, , .		1
14	Excitonic absorption in gate-controlled graphene quantum dots. Physical Review B, 2010, 82, .	1.1	121
15	The evolution of graphene-based electronic devices. International Journal of Smart and Nano Materials, 2010, 1, 201-223.	2.0	40
16	Fabrication of graphene devices for infrared detection. , 2010, , .		3
17	Fast graphene-based electronics and optoelectronics. , 2010, , .		2
18	Multilayered graphene efficiently formed by mechanical exfoliation for nonlinear saturable absorbers in fiber mode-locked lasers. Applied Physics Letters, 2010, 97, .	1.5	156
19	Spin and electronic correlations in gated graphene quantum rings. Physical Review B, 2010, 82, .	1.1	49

#	ARTICLE	IF	CITATIONS
20	First principles study of electronic transport through a Cu(111)-graphene junction. Applied Physics Letters, 2010, 97, 142105.	1.5	33
21	Magnetoconcentration effect in intrinsic graphene ribbons. Applied Physics Letters, 2010, 97, .	1.5	3
23	Direct patterning on reduced graphene oxide nanosheets using femtosecond laser pulses. Journal of Optics (United Kingdom), 2011, 13, 085601.	1.0	18
24	Recent progress on surface pattern fabrications based on monolayer colloidal crystal templates and related applications. Nanoscale, 2011, 3, 2768.	2.8	62
25	Solution processed reduced graphene oxide ultraviolet detector. Applied Physics Letters, 2011, 99, .	1.5	101
26	Localized States and Resultant Band Bending in Graphene Antidot Superlattices. Nano Letters, 2011, 11, 1254-1258.	4.5	48
27	Graphene Transistors via in Situ Voltage-Induced Reduction of Graphene-Oxide under Ambient Conditions. Journal of the American Chemical Society, 2011, 133, 14320-14326.	6.6	55
28	Scaling of High-Field Transport and Localized Heating in Graphene Transistors. ACS Nano, 2011, 5, 7936-7944.	7.3	79
29	Intrinsic Response Time of Graphene Photodetectors. Nano Letters, 2011, 11, 2804-2808.	4.5	244
30	Laser Patterning of Epitaxial Graphene for Schottky Junction Photodetectors. ACS Nano, 2011, 5, 5969-5975.	7.3	63
31	Electronic and magnetic properties of triangular graphene quantum rings. Physical Review B, 2011, 83, .	1.1	56
32	Graphene optical modulator. , 2011, , .		5
33	Controlled Growth of Semiconducting Nanowire, Nanowall, and Hybrid Nanostructures on Graphene for Piezoelectric Nanogenerators. ACS Nano, 2011, 5, 4197-4204.	7.3	178
34	High-Yield Production and Transfer of Graphene Flakes Obtained by Anodic Bonding. ACS Nano, 2011, 5, 7700-7706.	7.3	43
36	Far-infrared study of substrate-effect on large scale graphene. Applied Physics Letters, 2011, 98, .	1.5	58
37	Nanotechnology Research Directions for Societal Needs in 2020. , 2011, , .		202
38	Time-Resolved Picosecond Photocurrents in Contacted Carbon Nanotubes. Nano Letters, 2011, 11, 269-272.	4.5	50
39	Contacting graphene. Applied Physics Letters, 2011, 98, .	1.5	292

#	ARTICLE	IF	CITATIONS
40	Uncooled infrared sensing using graphene. , 2011, , .		1
41	Hot Carrier Transport and Photocurrent Response in Graphene. Nano Letters, 2011, 11, 4688-4692.	4.5	380
42	Development of graphene-based optical detectors for infrared sensing applications. , 2011, , .		3
43	Gate-Activated Photoresponse in a Graphene p-n Junction. Nano Letters, 2011, 11, 4134-4137.	4.5	379
44	A role for graphene in silicon-based semiconductor devices. Nature, 2011, 479, 338-344.	13.7	667
45	Graphene-based plasmonic waveguides for photonic integrated circuits. Optics Express, 2011, 19, 24557.	1.7	143
46	Reversible Electrical Reduction and Oxidation of Graphene Oxide. ACS Nano, 2011, 5, 2475-2482.	7.3	161
47	Photocurrent in a visible-light graphene photodiode. Physical Review B, 2011, 83, .	1.1	16
48	Theoretical Study on Magnetoelectric and Thermoelectric Properties for Graphene Devices. Japanese Journal of Applied Physics, 2011, 50, 070115.	0.8	8
49	Broadband graphene polarizer. Nature Photonics, 2011, 5, 411-415.	15.6	961
50	Electron transport and excitations in graphene. Procedia Chemistry, 2011, 3, 352-362.	0.7	5
51	Graphene-Driven Revolutions in ICT and Beyond. Procedia Computer Science, 2011, 7, 30-33.	1.2	10
52	Breakthroughs in Photonics 2010. IEEE Photonics Journal, 2011, 3, 241-336.	1.0	1
53	Graphene Sensors. IEEE Sensors Journal, 2011, 11, 3161-3170.	2.4	364
54	Strong plasmonic enhancement of photovoltage in graphene. Nature Communications, 2011, 2, 458.	5.8	775
55	Infrared Spectroscopy of Wafer-Scale Graphene. ACS Nano, 2011, 5, 9854-9860.	7.3	187
56	Single Layer vs Bilayer Graphene: A Comparative Study of the Effects of Oxygen Plasma Treatment on Their Electronic and Optical Properties. Journal of Physical Chemistry C, 2011, 115, 16619-16624.	1.5	60
57	Ultrafast carrier recombination and generation rates for plasmon emission and absorption in graphene. Physical Review B, 2011, 84, .	1.1	56

#	ARTICLE	IF	CITATIONS
58	Theoretical calculation of excitonic binding energies and optical absorption spectra for Armchair graphene nanoribbons. <i>European Physical Journal B</i> , 2011, 84, 249-253.	0.6	18
59	Plasmon resonance enhanced multicolour photodetection by graphene. <i>Nature Communications</i> , 2011, 2, 579.	5.8	639
60	New directions in science and technology: two-dimensional crystals. <i>Reports on Progress in Physics</i> , 2011, 74, 082501.	8.1	206
61	Hot Carrier-Assisted Intrinsic Photoresponse in Graphene. <i>Science</i> , 2011, 334, 648-652.	6.0	876
62	Infrared Photodetectors Based on Reduced Graphene Oxide and Graphene Nanoribbons. <i>Advanced Materials</i> , 2011, 23, 5419-5424.	11.1	297
63	Theoretical Calculation of Optical Absorption Spectrum for Armchair Graphene Nanoribbon. <i>Procedia Engineering</i> , 2011, 8, 25-29.	1.2	16
64	Graphene-based quantum Hall effect infrared photodetector operating at liquid Nitrogen temperatures. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	20
65	Thermoelectric Vs. Photoelectric Response of Graphene-Metal Photodetectors. , 2011, , .		0
66	Graphene Nanophotonics. <i>IEEE Photonics Journal</i> , 2011, 3, 293-295.	1.0	10
67	Field-enhanced electron mobility by nonlinear phonon scattering of Dirac electrons in semiconducting graphene nanoribbons. <i>Physical Review B</i> , 2011, 83, .	1.1	13
68	Enhanced photosensitivity of electro-oxidized epitaxial graphene. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	21
69	Influence of carrier density on the electronic cooling channels of bilayer graphene. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	5
70	Generation-recombination noise in bipolar graphene. <i>Journal of Applied Physics</i> , 2011, 110, 044327.	1.1	5
71	A spectrally-tunable photocurrent microscope for characterizing nanoelectronic devices. , 2011, , .		4
72	Graphene optoelectronics based on antidot superlattices. , 2011, , .		0
73	Lateral Photocurrent Scanning of Donor and Acceptor Polymers on Graphene Coated Substrates. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 061602.	0.8	3
74	Zero-bandgap graphene for infrared sensing applications. <i>Proceedings of SPIE</i> , 2011, , .	0.8	2
75	High-Efficiency Graphene Photo Sensor Using a Transparent Electrode. <i>Chinese Physics Letters</i> , 2011, 28, 107301.	1.3	0

#	ARTICLE	IF	CITATIONS
76	Investigation and characterization of graphene for optical sensing. , 2011, , .		0
77	Optical modulation effects on nonlinear electron transport in graphene in terahertz frequency range. Journal of Modern Optics, 2011, 58, 1898-1907.	0.6	6
78	Evaluation of Photodetection Properties of Graphene-Silicon Schottky IR Detector. International Journal of Green Nanotechnology, 2012, 4, 464-469.	0.3	0
79	Synthesis, electromechanical characterization, and applications of graphene nanostructures. Journal of Nanophotonics, 2012, 6, 064501.	0.4	10
80	Graphene plasmons and retardation: Strong light-matter coupling. Europhysics Letters, 2012, 99, 27006.	0.7	20
81	Graphene-based polymer waveguide polarizer. Optics Express, 2012, 20, 3556.	1.7	124
82	New concepts and geometries for graphene-based photodetectors. , 2012, , .		0
83	Graphene on SiC as a Q-switcher for a 2 μ m laser. Optics Letters, 2012, 37, 395.	1.7	104
84	Plasma Treatment to Improve Chemical Vapor Deposition-Grown Graphene to Metal Electrode Contact. Japanese Journal of Applied Physics, 2012, 51, 04DN04.	0.8	8
85	Intrinsic Speed Limit of Graphene-based Photodetectors. , 2012, , .		0
86	Shifting of surface plasmon resonance due to electromagnetic coupling between graphene and Au nanoparticles. Optics Express, 2012, 20, 19690.	1.7	43
87	Switching energy limits of waveguide-coupled graphene-on-graphene optical modulators. Optics Express, 2012, 20, 20330.	1.7	59
88	Graphene-protein bioelectronic devices with wavelength-dependent photoresponse. Applied Physics Letters, 2012, 100, .	1.5	41
89	Photoresponse in epitaxial graphene with asymmetric metal contacts. Applied Physics Letters, 2012, 100, .	1.5	18
90	Optical absorption in graphene integrated on silicon waveguides. Applied Physics Letters, 2012, 101, .	1.5	169
91	First-principles analysis of photocurrent in graphene $P-N$ junctions. Physical Review B, 2012, 85, .	1.1	118
92	Unipolar time-differential pulse response with a solid-state Charpak photoconductor. Applied Physics Letters, 2012, 101, 213503.	1.5	13
93	Self-powered microwave devices based on graphene ink decorated with gold nanoislands. Journal of Applied Physics, 2012, 112, 064327.	1.1	6

#	ARTICLE	IF	CITATIONS
94	Local charge transfer doping in suspended graphene nanojunctions. Applied Physics Letters, 2012, 100, 023306.	1.5	3
95	Graphene for future electronics. Physica Scripta, 2012, T146, 014025.	1.2	30
96	PadÃ© approximant spectral fit for FDTD simulation of graphene in the near infrared. Optical Materials Express, 2012, 2, 771.	1.6	70
97	Experimental Review of Graphene. , 2012, 2012, 1-56.		404
98	Free-standing nano-scale graphite saturable absorber for passively mode-locked erbium doped fiber ring laser. Laser Physics Letters, 2012, 9, 398-404.	0.6	77
99	Low energy electron microscopy and photoemission electron microscopy investigation of graphene. Journal of Physics Condensed Matter, 2012, 24, 314209.	0.7	18
100	Graphene-based quantum hall effect infrared photodetectors. , 2012, , .		0
101	Graphene Photonics and Optoelectronics. , 2012, , .		28
102	Graphene for microelectronics: Can it make a difference?. , 2012, , .		1
103	Nonequilibrium phenomena in high Landau levels. Reviews of Modern Physics, 2012, 84, 1709-1763.	16.4	184
104	Graphene plasmonics. Nature Photonics, 2012, 6, 749-758.	15.6	2,682
105	Synthesis and structural, spectroscopic and nonlinear optical measurements of graphene oxide and its composites with metal and metal free porphyrins. Journal of Materials Chemistry, 2012, 22, 3059.	6.7	156
106	Effect of plasma resonances on dynamic characteristics of double graphene-layer optical modulator. Journal of Applied Physics, 2012, 112, .	1.1	50
107	Graphene applications in electronics and photonics. MRS Bulletin, 2012, 37, 1225-1234.	1.7	186
108	Extraordinary Control of Terahertz Beam Reflectance in Graphene Electro-absorption Modulators. Nano Letters, 2012, 12, 4518-4522.	4.5	235
109	Spectroscopic imaging ellipsometry and Fano resonance modeling of graphene. Journal of Applied Physics, 2012, 112, .	1.1	54
110	Ratchet effects in two-dimensional systems with a lateral periodic potential. Physical Review B, 2012, 86, .	1.1	39
111	Schottky barrier inhomogeneities at the interface of few layer epitaxial graphene and silicon carbide. Applied Physics Letters, 2012, 100, .	1.5	75

#	ARTICLE	IF	CITATIONS
112	Enhanced performance of photodetector and photovoltaic based on carrier reflector and back surface field generated by doped graphene. Applied Physics Letters, 2012, 101, 073906.	1.5	2
113	Graphene for microelectronics: Can it make a difference?. , 2012, , .		1
114	N-Doped Helical Carbon Nanotubes: Single Helix Photoconductivity and Photoluminescence Properties. Journal of Physical Chemistry C, 2012, 116, 14584-14590.	1.5	13
115	Photovoltaic response of N-doped graphene-based photodetector. , 2012, , .		1
116	Polarization dependence of photocurrent in a metal-graphene-metal device. Applied Physics Letters, 2012, 101, 073103.	1.5	20
117	Robust mesoscopic fluctuations in disordered graphene. Applied Physics Letters, 2012, 101, 093110.	1.5	18
118	Electronic properties of gated triangular graphene quantum dots: Magnetism, correlations, and geometrical effects. Physical Review B, 2012, 85, .	1.1	97
119	Alternative graphene devices: beyond field effect transistors. , 2012, , .		2
120	Dual-gated bilayer graphene hot-electron bolometer. Nature Nanotechnology, 2012, 7, 472-478.	15.6	409
121	A roadmap for graphene. Nature, 2012, 490, 192-200.	13.7	8,011
122	Strong Enhancement of Light-Matter Interaction in Graphene Coupled to a Photonic Crystal Nanocavity. Nano Letters, 2012, 12, 5626-5631.	4.5	248
123	Plasmons in layered structures including graphene. New Journal of Physics, 2012, 14, 105018.	1.2	51
124	Graphene: An Emerging Electronic Material. Advanced Materials, 2012, 24, 5782-5825.	11.1	718
125	Infrared Photodetectors Based on CVD-Grown Graphene and PbS Quantum Dots with Ultrahigh Responsivity. Advanced Materials, 2012, 24, 5878-5883.	11.1	698
126	Direct Chemical Vapor Deposition of Large-Area Carbon Thin Films on Gallium Nitride for Transparent Electrodes: A First Attempt. IEEE Transactions on Semiconductor Manufacturing, 2012, 25, 494-501.	1.4	23
127	Self-powered, visible-light photodetector based on thermally reduced graphene oxide-ZnO (rGO-ZnO) hybrid nanostructure. Journal of Materials Chemistry, 2012, 22, 2589-2595.	6.7	285
128	Ultrafast hot-carrier-dominated photocurrent in graphene. Nature Nanotechnology, 2012, 7, 114-118.	15.6	362
129	Graphene-based devices in terahertz science and technology. Journal Physics D: Applied Physics, 2012, 45, 303001.	1.3	234

#	ARTICLE	IF	CITATIONS
130	Gate-dependent photoconductivity of single layer graphene grafted with metalloporphyrin molecules. Applied Physics Letters, 2012, 100, .	1.5	6
131	Graphene for More Moore and More Than Moore applications. , 2012, , .		4
132	Kinetics of Low-Pressure, Low-Temperature Graphene Growth: Toward Single-Layer, Single-Crystalline Structure. ACS Nano, 2012, 6, 10276-10286.	7.3	54
133	Graphene and Carbon Nanotube Applications in Mobile Devices. IEEE Transactions on Electron Devices, 2012, 59, 2876-2887.	1.6	14
134	Quantum mechanical simulation of graphene photodetectors. Journal of Applied Physics, 2012, 112, .	1.1	21
135	Production and processing of graphene and 2d crystals. Materials Today, 2012, 15, 564-589.	8.3	866
136	Graphene-nanowire hybrid structures for high-performance photoconductive devices. Journal of Materials Chemistry, 2012, 22, 8372.	6.7	47
137	The optical responsivity in IR-photodetector based on armchair graphene nanoribbons with p-n structure. Superlattices and Microstructures, 2012, 52, 605-611.	1.4	20
138	Infrared imaging system using nanocarbon materials. , 2012, , .		0
139	Double-Layer Graphene Optical Modulator. Nano Letters, 2012, 12, 1482-1485.	4.5	731
140	A Communication Theoretical Modeling of Single-Layer Graphene Photodetectors and Efficient Multireceiver Diversity Combining. IEEE Nanotechnology Magazine, 2012, 11, 601-610.	1.1	14
141	Graphene materials and devices in terahertz science and technology. MRS Bulletin, 2012, 37, 1235-1243.	1.7	30
142	Graphene-based ambipolar electronics for radio frequency applications. Science Bulletin, 2012, 57, 2956-2970.	1.7	22
143	Two-dimensional crystals-based heterostructures: materials with tailored properties. Physica Scripta, 2012, T146, 014006.	1.2	258
144	High photocurrent and quantum efficiency of graphene photodetector using layer-by-layer stack structure and trap assistance. , 2012, , .		1
145	Dipole-dipole interaction between a quantum dot and a graphene nanodisk. Physical Review B, 2012, 86, .	1.1	92
146	Photochemical oxidation of CVD-grown single layer graphene. Nanotechnology, 2012, 23, 355703.	1.3	52
147	Current relaxation due to hot carrier scattering in graphene. New Journal of Physics, 2012, 14, 105012.	1.2	39

#	ARTICLE	IF	CITATIONS
148	Nonlinear optical properties of graphene-based materials. <i>Science Bulletin</i> , 2012, 57, 2971-2982.	1.7	144
149	Time-resolved ultrafast photocurrents and terahertz generation in freely suspended graphene. <i>Nature Communications</i> , 2012, 3, 646.	5.8	149
150	Nano- and microstructuring of graphene using UV-NIL. <i>Nanotechnology</i> , 2012, 23, 335301.	1.3	9
151	Transverse current rectification in a graphene-based superlattice. <i>Semiconductors</i> , 2012, 46, 109-116.	0.2	31
152	Hybrid graphene-quantum dot phototransistors with ultrahigh gain. <i>Nature Nanotechnology</i> , 2012, 7, 363-368.	15.6	1,936
153	Microcavity-Integrated Graphene Photodetector. <i>Nano Letters</i> , 2012, 12, 2773-2777.	4.5	753
154	Graphene Photonics, Plasmonics, and Broadband Optoelectronic Devices. <i>ACS Nano</i> , 2012, 6, 3677-3694.	7.3	1,749
155	Plasmon-polaritons on graphene-metal surface and their use in biosensors. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	169
156	Bandgap Tailoring and Synchronous Microdevices Patterning of Graphene Oxides. <i>Journal of Physical Chemistry C</i> , 2012, 116, 3594-3599.	1.5	111
157	Regenerative oscillation and four-wave mixing in graphene optoelectronics. <i>Nature Photonics</i> , 2012, 6, 554-559.	15.6	519
158	Plasmons and near-field amplification in double-layer graphene. <i>Physical Review B</i> , 2012, 85, .	1.1	100
159	Broadband graphene terahertz modulators enabled by intraband transitions. <i>Nature Communications</i> , 2012, 3, 780.	5.8	893
160	Synthesis of Few-Layer GaSe Nanosheets for High Performance Photodetectors. <i>ACS Nano</i> , 2012, 6, 5988-5994.	7.3	788
161	Giant Optical Response from Graphene-Plasmonic System. <i>ACS Nano</i> , 2012, 6, 6244-6249.	7.3	78
162	Novel Radiation-Induced Properties of Graphene and Related Materials. <i>Macromolecular Chemistry and Physics</i> , 2012, 213, 1146-1163.	1.1	67
163	The Development of an Infrared Camera Using Graphene: Achieving Efficient High-Resolution Infrared Images.. <i>IEEE Nanotechnology Magazine</i> , 2012, 6, 4-7.	0.9	4
164	Graphene-based photonic devices for soft hybrid optoelectronic systems. <i>Nanotechnology</i> , 2012, 23, 344005.	1.3	15
165	High Thermal Responsiveness of a Reduced Graphene Oxide Field-Effect Transistor. <i>Advanced Materials</i> , 2012, 24, 5254-5260.	11.1	73

#	ARTICLE	IF	CITATIONS
166	Binary and Ternary Atomic Layers Built from Carbon, Boron, and Nitrogen. <i>Advanced Materials</i> , 2012, 24, 4878-4895.	11.1	219
167	Quantum-Enhanced Tunable Second-Order Optical Nonlinearity in Bilayer Graphene. <i>Nano Letters</i> , 2012, 12, 2032-2036.	4.5	115
168	Graphene: synthesis and applications. <i>Materials Today</i> , 2012, 15, 86-97.	8.3	798
169	Direct ESR evidence for magnetic behavior of graphite oxide. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2012, 44, 1036-1039.	1.3	21
170	Coplanar Asymmetrical Reduced Graphene Oxideâ€“Titanium Electrodes for Polymer Photodetectors. <i>Advanced Materials</i> , 2012, 24, 1566-1570.	11.1	24
171	Plasmon-Enhanced Photothermoelectric Conversion in Chemical Vapor Deposited Graphene pâ€“n Junctions. <i>Journal of the American Chemical Society</i> , 2013, 135, 10926-10929.	6.6	61
172	Raman study on defective graphene: Effect of the excitation energy, type, and amount of defects. <i>Physical Review B</i> , 2013, 88, .	1.1	279
173	Photoresponse mechanisms of ultraviolet photodetectors based on colloidal ZnO quantum dot-graphene nanocomposites. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	85
174	Raman scattering efficiency of graphene. <i>Physical Review B</i> , 2013, 87, .	1.1	82
175	Graphene-based integrated electronic, photonic and spintronic circuit. , 2013, , .		0
176	Graphene-Si Schottky IR Detector. <i>IEEE Journal of Quantum Electronics</i> , 2013, 49, 589-594.	1.0	112
177	Terahertz relativistic spatial solitons in doped graphene metamaterials. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2013, 46, 155401.	0.6	38
178	Manipulating light absorption of graphene using plasmonic nanoparticles. <i>Nanoscale</i> , 2013, 5, 7785.	2.8	74
179	Carrier Lifetime in Exfoliated Few-Layer Graphene Determined from Intersubband Optical Transitions. <i>Physical Review Letters</i> , 2013, 110, 217406.	2.9	50
180	Ultrafast graphene-based broadband THz detector. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	174
181	Third harmonic generation in graphene and few-layer graphite films. <i>Physical Review B</i> , 2013, 87, .	1.1	244
182	Violation of Hund's rule and quenching of long-range electron-electron interactions in graphene nanoflakes. <i>Physical Review B</i> , 2013, 88, .	1.1	16
183	Variability Effects in Graphene: Challenges and Opportunities for Device Engineering and Applications. <i>Proceedings of the IEEE</i> , 2013, 101, 1670-1688.	16.4	29

#	ARTICLE	IF	CITATIONS
184	Photocatalytic reduction of GO/ZnO to achieve GNRs for optoelectronic applications. Journal Physics D: Applied Physics, 2013, 46, 385101.	1.3	12
185	Double injection in graphene p-i-n structures. Journal of Applied Physics, 2013, 113, 244505.	1.1	32
186	Terahertz magnetoplasmon energy concentration and splitting in Graphene PN Junctions. Optics Express, 2013, 21, 25356.	1.7	25
188	Substrate Engineering by Hexagonal Boron Nitride/SiO ₂ for Hysteresis-Free Graphene FETs and Large-Scale Graphene p-n Junctions. Chemistry - an Asian Journal, 2013, 8, 2446-2452.	1.7	26
190	Mechanism of the effects of low temperature Al ₂ O ₃ passivation on graphene field effect transistors. Carbon, 2013, 53, 182-187.	5.4	53
191	Graphene-MoS ₂ hybrid structures for multifunctional photoresponsive memory devices. Nature Nanotechnology, 2013, 8, 826-830.	15.6	1,232
192	Photovoltaic infrared photoresponse of the high-mobility graphene quantum Hall system due to cyclotron resonance. Physical Review B, 2013, 88, .	1.1	14
193	Highly efficient gate-tunable photocurrent generation in vertical heterostructures of layered materials. Nature Nanotechnology, 2013, 8, 952-958.	15.6	1,017
194	Enhanced photoresponse in curled graphene ribbons. Nanoscale, 2013, 5, 12206.	2.8	8
195	Excitonic effects of bilayer graphene: A simple approach. Optik, 2013, 124, 6126-6131.	1.4	2
196	Field-effect transistors based on two-dimensional materials for logic applications. Chinese Physics B, 2013, 22, 098505.	0.7	32
197	Optimizing performance parameters of graphene-silicon and thin transparent graphite-silicon heterojunction solar cells. Carbon, 2013, 57, 329-337.	5.4	59
198	Substrate effects on quasiparticles and excitons in graphene nanoflakes. Applied Physics Letters, 2013, 103, 143109.	1.5	24
199	Transient Absorption and Photocurrent Microscopy Show That Hot Electron Supercollisions Describe the Rate-Limiting Relaxation Step in Graphene. Nano Letters, 2013, 13, 5497-5502.	4.5	54
200	Photoelectrical response of hybrid graphene-PbS quantum dot devices. Applied Physics Letters, 2013, 103, .	1.5	56
201	Nanostructure-based optoelectronic sensing of vapor phase explosives - a promising but challenging method. Nanoscale, 2013, 5, 10693.	2.8	50
202	Improved photoresponse with enhanced photoelectric contribution in fully suspended graphene photodetectors. Scientific Reports, 2013, 3, 2791.	1.6	68
203	Enhanced photodetection in graphene-integrated photonic crystal cavity. Applied Physics Letters, 2013, 103, .	1.5	68

#	ARTICLE	IF	CITATIONS
204	Polarization dependence of the photocurrent due to an anisotropic electron-photon interaction in Pd-graphene-Pd devices. <i>Journal of the Korean Physical Society</i> , 2013, 63, 1019-1022.	0.3	1
205	Chip-integrated ultrafast graphene photodetector with high responsivity. <i>Nature Photonics</i> , 2013, 7, 883-887.	15.6	971
206	High-responsivity graphene/silicon-heterostructure waveguide photodetectors. <i>Nature Photonics</i> , 2013, 7, 888-891.	15.6	731
207	CMOS-compatible graphene photodetector covering all optical communication bands. <i>Nature Photonics</i> , 2013, 7, 892-896.	15.6	679
208	Flicker noise and magnetic resolution of graphene hall sensors at low frequency. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	39
209	Interface-Engineered Bistable [2]Rotaxane-Graphene Hybrids with Logic Capabilities. <i>Advanced Materials</i> , 2013, 25, 6752-6759.	11.1	53
210	Rapid Large-Area Multiphoton Microscopy for Characterization of Graphene. <i>ACS Nano</i> , 2013, 7, 8441-8446.	7.3	81
211	Large nonlinear optical rectification in atomic hexagonal layers with broken space inversion symmetry. <i>Journal of Optics (United Kingdom)</i> , 2013, 15, 105204.	1.0	7
212	Batch-fabricated high-performance graphene Hall elements. <i>Scientific Reports</i> , 2013, 3, 1207.	1.6	72
213	Ultra-Sensitive Graphene-Plasmonic Hybrid Platform for Label-Free Detection. <i>Advanced Materials</i> , 2013, 25, 4918-4924.	11.1	193
214	Intrinsic photocurrent characteristics of graphene photodetectors passivated with Al ₂ O ₃ . <i>Optics Express</i> , 2013, 21, 23391.	1.7	28
215	Mode-locked fiber laser using graphene on silicon waveguide. , 2013, , .		2
216	Graphene-channel FETs for photonic frequency double-mixing conversion over the sub-THz band. , 2013, , .		2
217	Zero-energy states of graphene triangular quantum dots in a magnetic field. <i>Physical Review B</i> , 2013, 88, .	1.1	33
218	Synthesis of a CdSe-graphene hybrid composed of CdSe quantum dot arrays directly grown on CVD-graphene and its ultrafast carrier dynamics. <i>Nanoscale</i> , 2013, 5, 1483.	2.8	33
219	Carbon nanomaterials for electronics, optoelectronics, photovoltaics, and sensing. <i>Chemical Society Reviews</i> , 2013, 42, 2824-2860.	18.7	1,105
220	Tunable Graphene-Silicon Heterojunctions for Ultrasensitive Photodetection. <i>Nano Letters</i> , 2013, 13, 909-916.	4.5	538
221	Ultraviolet, visible, and near infrared photoresponse properties of solution processed graphene oxide. <i>Applied Surface Science</i> , 2013, 266, 332-336.	3.1	39

#	ARTICLE	IF	CITATIONS
222	Electrochemical biosensor based on reduced graphene oxide modified electrode with Prussian blue and poly(toluidine blue O) coating. <i>Electrochimica Acta</i> , 2013, 89, 454-460.	2.6	51
223	The influence of dilution gases on multilayer graphene formation in laser pyrolysis. <i>Applied Surface Science</i> , 2013, 278, 313-316.	3.1	10
224	Photocurrent measurements of supercollision cooling in graphene. <i>Nature Physics</i> , 2013, 9, 103-108.	6.5	266
225	Carrier generation and recombination rate in armchair graphene nanoribbons. <i>European Physical Journal B</i> , 2013, 86, 1.	0.6	4
226	Increased Responsivity of Suspended Graphene Photodetectors. <i>Nano Letters</i> , 2013, 13, 1644-1648.	4.5	171
227	Metal-graphene-metal photodetectors. <i>Proceedings of SPIE</i> , 2013, , .	0.8	5
228	Spatially resolved photocurrents in graphene nanoribbon devices. <i>Applied Physics Letters</i> , 2013, 102, 043106.	1.5	15
229	Scalable fabrication of graphene devices through photolithography. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	53
230	Graphene terahertz uncooled bolometers. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 065102.	1.3	38
231	Electrical, enzymatic graphene biosensing of 5-aminosalicylic acid. <i>Analyst, The</i> , 2013, 138, 1325.	1.7	11
232	Concept of infrared photodetector based on grapheneâ€“graphene nanoribbon structure. <i>Infrared Physics and Technology</i> , 2013, 59, 137-141.	1.3	7
233	Controllable unzipping for intramolecular junctions of graphene nanoribbons and single-walled carbon nanotubes. <i>Nature Communications</i> , 2013, 4, 1374.	5.8	125
234	Photoelectrochemical sensing for hydroquinone based on porphyrin-functionalized Au nanoparticles on graphene. <i>Biosensors and Bioelectronics</i> , 2013, 47, 45-49.	5.3	77
235	Grapheneâ€“Based Nanomaterials: Synthesis, Properties, and Optical and Optoelectronic Applications. <i>Advanced Functional Materials</i> , 2013, 23, 1984-1997.	7.8	257
236	Few-Layer MoS ₂ with High Broadband Photogain and Fast Optical Switching for Use in Harsh Environments. <i>ACS Nano</i> , 2013, 7, 3905-3911.	7.3	584
237	All-Graphene Photodetectors. <i>ACS Nano</i> , 2013, 7, 5052-5057.	7.3	102
238	Highly Responsive Ultrathin GaS Nanosheet Photodetectors on Rigid and Flexible Substrates. <i>Nano Letters</i> , 2013, 13, 1649-1654.	4.5	683
239	Observation of a Transient Decrease in Terahertz Conductivity of Single-Layer Graphene Induced by Ultrafast Optical Excitation. <i>Nano Letters</i> , 2013, 13, 524-530.	4.5	241

#	ARTICLE	IF	CITATIONS
240	Influence of graphite oxide drying temperature on ultra-fast microwave synthesis of graphene. <i>Journal of Materials Science: Materials in Electronics</i> , 2013, 24, 1298-1302.	1.1	10
241	Visible Photoresponse of Single-Layer Graphene Decorated with TiO ₂ Nanoparticles. <i>Small</i> , 2013, 9, 2076-2080.	5.2	58
242	Atomically Flat, Large-Sized, Two-Dimensional Organic Nanocrystals. <i>Small</i> , 2013, 9, 990-995.	5.2	51
243	Graphene based piezoresistive pressure sensor. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	274
244	Broadband high photoresponse from pure monolayer graphene photodetector. <i>Nature Communications</i> , 2013, 4, 1811.	5.8	681
245	Modeling of the infrared photodetector based on multi layer armchair graphene nanoribbons. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	10
246	Mass Detection Using a Graphene-Based Nanomechanical Resonator. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 025101.	0.8	35
247	The Interaction of Light and Graphene: Basics, Devices, and Applications. <i>Proceedings of the IEEE</i> , 2013, 101, 1717-1731.	16.4	94
248	Photothermal Response in Dual-Gated Bilayer Graphene. <i>Physical Review Letters</i> , 2013, 110, 247402.	2.9	41
249	SYNTHETIC GRAPHENE GROWN BY CHEMICAL VAPOR DEPOSITION ON COPPER FOILS. <i>International Journal of Modern Physics B</i> , 2013, 27, 1341002.	1.0	30
250	Broadband saturable absorption and optical limiting in graphene-polymer composites. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	47
251	Enhanced reverse saturable absorption in graphene/Ag ₂ S organic glasses. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 11048.	1.3	14
252	Intrinsic plasmons in two-dimensional Dirac materials. <i>Physical Review B</i> , 2013, 87, .	1.1	73
253	Regulating Infrared Photoresponses in Reduced Graphene Oxide Phototransistors by Defect and Atomic Structure Control. <i>ACS Nano</i> , 2013, 7, 6310-6320.	7.3	112
254	Focused-Laser-Enabled p-n Junctions in Graphene Field-Effect Transistors. <i>ACS Nano</i> , 2013, 7, 5850-5857.	7.3	76
255	Tunable photoresponse of epitaxial graphene on SiC. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	26
256	Coherent and Broadband Enhanced Optical Absorption in Graphene. <i>ACS Nano</i> , 2013, 7, 4810-4817.	7.3	190
257	Ultrasensitive photodetectors based on monolayer MoS ₂ . <i>Nature Nanotechnology</i> , 2013, 8, 497-501.	15.6	4,202

#	ARTICLE	IF	CITATIONS
258	A review of recent progress in lasers on silicon. <i>Optics and Laser Technology</i> , 2013, 46, 103-110.	2.2	42
259	Dark current of infrared photodetectors based on armchair graphene nanoribbons. <i>Physica Scripta</i> , 2013, T157, 014003.	1.2	4
260	Photon induced tunneling of electron through a graphene electrostatic barrier. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	15
261	THERMOELECTRIC AND THERMOMAGNETIC PROPERTIES OF GRAPHENE IN THE PRESENCE OF DIFFERENT SCATTERING PROCESSES. <i>Modern Physics Letters B</i> , 2013, 27, 1350060.	1.0	4
262	Theory of the plasma-wave photoresponse of a gated graphene sheet. <i>Physical Review B</i> , 2013, 88, .	1.1	85
263	Enhanced absorption of graphene in the visible region by use of plasmonic nanostructures. <i>Journal of Optics (United Kingdom)</i> , 2013, 15, 055003.	1.0	60
264	Integration of Graphene Photodetectors with Silicon-on-Insulator Waveguides. , 2013, , .		0
265	Broadband Responsivity of a Graphene Photodetector. , 2013, , .		0
266	Non-reciprocal magnetoplasmon graphene coupler. <i>Optics Express</i> , 2013, 21, 11248.	1.7	49
267	A 3D tunable and multi-frequency graphene plasmonic cloak. <i>Optics Express</i> , 2013, 21, 12592.	1.7	83
268	Thermo-optic mode extinction modulator based on graphene plasmonic waveguide. <i>Optics Express</i> , 2013, 21, 15280.	1.7	52
269	Low-chirp high-extinction-ratio modulator based on grapheneâ€“silicon waveguide. <i>Optics Letters</i> , 2013, 38, 2512.	1.7	55
270	Greatly enhanced ultrabroadband light absorption by monolayer graphene. <i>Optics Letters</i> , 2013, 38, 4342.	1.7	45
271	Thermally Induced Asymmetric Buckling of Circular Monolayer Graphene. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-6.	1.5	1
272	Time-resolved spectroscopy on epitaxial graphene in the infrared spectral range: relaxation dynamics and saturation behavior. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 054202.	0.7	59
273	Characterization of Optical Absorption and Polarization Dependence of Single-Layer Graphene Integrated on a Silicon Wire Waveguide. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 060203.	0.8	29
274	Effect of optical pumping on the momentum relaxation time of graphene in the terahertz range. <i>Chinese Physics B</i> , 2013, 22, 097304.	0.7	9
275	Fabrication of large-area twisted bilayer graphene for high-speed ultra-sensitive tunable photodetectors. <i>Proceedings of SPIE</i> , 2013, , .	0.8	5

#	ARTICLE	IF	CITATIONS
276	Great light absorption enhancement in a graphene photodetector integrated with a metamaterial perfect absorber. <i>Nanoscale</i> , 2013, 5, 9615.	2.8	146
277	Sensitivity analysis of single-layer graphene resonators using atomic finite element method. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	14
278	Low temperature nanoscale electronic transport on the MoS ₂ surface. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	16
279	Graphene assisted nanostructures. , 2013, , .		0
280	Fabrication of doubly resonant plasmonic nanopatch arrays on graphene. <i>Applied Physics Letters</i> , 2013, 102, 231111.	1.5	19
281	Terahertz conductivity of reduced graphene oxide films. <i>Optics Express</i> , 2013, 21, 7633.	1.7	54
282	Modeling and optimization of a RF ballistic graphene demodulator. , 2013, , .		1
283	Gate-controlled Schottky barrier modulation for superior photoresponse of MoS ₂ field effect transistor. , 2013, , .		2
284	Terahertz transmission and sheet conductivity of randomly stacked multi-layer graphene. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	38
285	Deep subwavelength plasmonic waveguide switch in double graphene layer structure. <i>Applied Physics Letters</i> , 2013, 103, .	1.5	21
286	Broadband, Polarization-Sensitive Photodetector Based on Optically-Thick Films of Macroscopically Long, Dense and Aligned Carbon Nanotubes. <i>Scientific Reports</i> , 2013, 3, 1335.	1.6	110
287	Fluorescence quenching of CdSe quantum dots on graphene. <i>Applied Physics Letters</i> , 2013, 103, 201909.	1.5	16
288	Ultrafast graphene-based THz detection at room temperature. , 2013, , .		0
290	Graphene-Based Materials in Gas Sensors. , 2013, , 91-132.		0
291	Synthesis and enhanced nonlinear optical properties of graphene/CdS organic glass. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	47
292	Graphene Plasmonic Photodetector for Planar-Type Photonic Integrated Circuits. , 2014, , .		0
293	Investigation of structural and electronic properties of epitaxial graphene on 3C‐SiC(100)/Si(100) substrates. <i>Nanotechnology, Science and Applications</i> , 2014, 7, 85.	4.6	10
294	Carbon Nanoelectronics. <i>Electronics (Switzerland)</i> , 2014, 3, 22-25.	1.8	3

#	ARTICLE	IF	CITATIONS
295	Graphene enhanced evanescent field in microfiber multimode interferometer for highly sensitive gas sensing. Optics Express, 2014, 22, 28154.	1.7	71
296	Graphene Bragg gratings on microfiber. Optics Express, 2014, 22, 23829.	1.7	18
297	Chemical vapor deposited graphene: From synthesis to applications. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 2439-2449.	0.8	81
298	Scalability of the Channel Capacity in Graphene-enabled Wireless Communications to the Nanoscale. IEEE Transactions on Communications, 2014, , 1-1.	4.9	13
299	Preparation, Applications of Two-Dimensional Graphene-like Molybdenum Disulfide. Integrated Ferroelectrics, 2014, 158, 26-42.	0.3	20
300	Deep-Subwavelength MIMO Using Graphene-Based Nanoscale Communication Channel. IEEE Access, 2014, 2, 1240-1247.	2.6	3
301	Highly tunable quantum Hall far-infrared photodetector by use of GaAs/Al _x Ga _{1-x} As-graphene composite material. Applied Physics Letters, 2014, 105, 181103.	1.5	5
302	Graphene Active Plasmonics for New Types of Terahertz Lasers. International Journal of High Speed Electronics and Systems, 2014, 23, 1450016.	0.3	1
303	Graphene based optoelectronics. , 2014, , .		1
304	Characterization of Fast Temporal Photoreponse in a Broadband Graphene Photodetector. , 2014, , .		0
305	Broadband Terahertz Spectroscopy of Electrically Gated Graphene. , 2014, , .		0
306	Graphene and Beyond for Ultrafast Optical Communications and Interconnects. , 2014, , .		0
307	Dual detection of ultraviolet and visible lights using a DNA-CTMA/GaN photodiode with electrically different polarity. Optics Express, 2014, 22, 908.	1.7	28
308	Ultra-large nonlinear parameter in graphene-silicon waveguide structures. Optics Express, 2014, 22, 22820.	1.7	50
309	Tunable subwavelength photonic lattices and solitons in periodically patterned graphene monolayer. Optics Express, 2014, 22, 30108.	1.7	20
310	Platform for enhanced light-graphene interaction length and miniaturizing fiber stereo devices. Optica, 2014, 1, 307.	4.8	36
311	Approaching total absorption at near infrared in a large area monolayer graphene by critical coupling. Applied Physics Letters, 2014, 105, 181105.	1.5	103
312	Size-dependent hot-phonon dynamics in graphene flakes. Applied Physics Letters, 2014, 104, 181907.	1.5	4

#	ARTICLE	IF	CITATIONS
313	Reduced graphene oxide/ZnO hybrid structure for high-performance photodetection. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	19
314	Room temperature broadband terahertz gains in graphene heterostructures based on inter-layer radiative transitions. AIP Advances, 2014, 4, 107138.	0.6	0
315	Disorder density of states in supported graphene. Journal of Applied Physics, 2014, 116, 074516.	1.1	1
316	Graphene vertical hot-electron terahertz detectors. Journal of Applied Physics, 2014, 116, 114504.	1.1	18
317	Wide-Area Strain Sensors based upon Graphene-Polymer Composite Coatings Probed by Raman Spectroscopy. Advanced Functional Materials, 2014, 24, 2865-2874.	7.8	122
318	Local and Nonlocal Optically Induced Transparency Effects in Graphene-Silicon Hybrid Nanophotonic Integrated Circuits. ACS Nano, 2014, 8, 11386-11393.	7.3	55
319	Ternary $\text{CuIn}_7\text{Se}_{11}$: Towards Ultra-Thin Layered Photodetectors and Photovoltaic Devices. Advanced Materials, 2014, 26, 7666-7672.	11.1	43
320	Ultrahigh Infrared Photoresponse from Core-Shell Single-Domain $\text{VO}_2/\text{V}_2\text{O}_5$ Heterostructure in Nanobeam. Advanced Functional Materials, 2014, 24, 1821-1830.	7.8	87
321	Enhancement of near-infrared absorption in graphene with metal gratings. Applied Physics Letters, 2014, 105, .	1.5	188
322	Dual function armchair graphene nanoribbon-based spin-photodetector: Optical spin-valve and light helicity detector. Applied Physics Letters, 2014, 105, 072407.	1.5	19
323	Gated graphene/titanium dioxide-based photodetector. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	11
324	Strong enhancement of Faraday rotation using one-dimensional conjugated photonic crystals containing graphene layers. Applied Optics, 2014, 53, 8374.	2.1	10
325	Synergetically Enhanced Near-Infrared Photoresponse of Reduced Graphene Oxide by Upconversion and Gold Plasmon. Small, 2014, 10, 3637-3643.	5.2	31
326	On-chip graphene optoelectronic devices for high-speed modulation and photodetection. Proceedings of SPIE, 2014, , .	0.8	2
327	Graphene-based photonic waveguide devices. Proceedings of SPIE, 2014, , .	0.8	2
328	Graphene nano-objects tailored by interference lithography. Proceedings of SPIE, 2014, , .	0.8	0
329	Novel approaches to enhance graphene absorption and electro-optic property. Proceedings of SPIE, 2014, , .	0.8	0
330	Graphene-based absorber exploiting guided mode resonances in one-dimensional gratings. Optics Express, 2014, 22, 31511.	1.7	110

#	ARTICLE	IF	CITATIONS
331	Observation of optically induced transparency effect in silicon nanophotonic wires with graphene. Proceedings of SPIE, 2014, , .	0.8	1
332	Nanophotonics with two-dimensional atomic crystals. , 2014, , .		1
333	A large-area 15 nm graphene nanoribbon array patterned by a focused ion beam. Nanotechnology, 2014, 25, 135301.	1.3	23
334	Wettability of graphene-laminated micropillar structures. Journal of Applied Physics, 2014, 116, .	1.1	7
335	Controllable S-doping of graphene through annealing with hydrogen sulfide. , 2014, , .		0
336	Infrared to terahertz absorption window in mono- and multi-layer graphene systems. Optics Communications, 2014, 328, 135-142.	1.0	9
337	Waveguide-Coupled Graphene Optoelectronics. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 84-94.	1.9	64
338	Graphene Photonics, Plasmonics, and Optoelectronics. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 72-83.	1.9	153
339	Graphene Covered on Microfiber Exhibiting Polarization and Polarization-dependent Saturable Absorption. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 55-61.	1.9	13
340	Graphene-assisted liquid-phase exfoliation. Chemical Society Reviews, 2014, 43, 381-398.	18.7	976
341	25th Anniversary Article: Hybrid Nanostructures Based on Two-dimensional Nanomaterials. Advanced Materials, 2014, 26, 2185-2204.	11.1	579
342	Resonance tuning and broadening of bowtie nanoantennas on graphene. Photonics and Nanostructures - Fundamentals and Applications, 2014, 12, 199-204.	1.0	8
343	High photoresponsivity in an all-graphene p-n vertical junction photodetector. Nature Communications, 2014, 5, 3249.	5.8	161
344	The study of few-layer graphene based Mach-Zehnder modulator. Optics Communications, 2014, 323, 49-53.	1.0	41
345	Graphene photodetectors with ultra-broadband and high responsivity at room temperature. Nature Nanotechnology, 2014, 9, 273-278.	15.6	999
346	High Responsivity and Gate Tunable Graphene-MoS ₂ Hybrid Phototransistor. Small, 2014, 10, 2300-2306.	5.2	301
347	Ultra-broadband Photodetector for the Visible to Terahertz Range by Self-assembling Reduced Graphene Oxide-Silicon Nanowire Array Heterojunctions. Small, 2014, 10, 2345-2351.	5.2	109
348	Increase of the grating coupler bandwidth with a graphene overlay. Applied Physics Letters, 2014, 104, .	1.5	9

#	ARTICLE	IF	CITATIONS
349	Optical bistability and free carrier dynamics in graphene-silicon photonic crystal cavities. Optics Communications, 2014, 314, 23-27.	1.0	8
350	Flexible and Transparent Nanocomposite of Reduced Graphene Oxide and P(VDF-TrFE) Copolymer for High Thermal Responsivity in a Field-Effect Transistor. Advanced Functional Materials, 2014, 24, 3438-3445.	7.8	110
351	A graphene-based transparent electrode for use in flexible optoelectronic devices. Journal of Materials Chemistry C, 2014, 2, 2646-2656.	2.7	145
352	Graphene-based plasmonic photodetector for photonic integrated circuits. Optics Express, 2014, 22, 803.	1.7	45
353	Transport properties of graphene/metal planar junction. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 1321-1325.	0.9	14
354	Voltage-tunable terahertz and infrared photodetectors based on double-graphene-layer structures. Applied Physics Letters, 2014, 104, .	1.5	32
355	Photosensitive Graphene Transistors. Advanced Materials, 2014, 26, 5239-5273.	11.1	290
356	Energy Harvesting for Nanostructured Self-Powered Photodetectors. Advanced Functional Materials, 2014, 24, 2591-2610.	7.8	217
357	Trilayered MoS ₂ Metal-Semiconductor-Metal Photodetectors: Photogain and Radiation Resistance. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 30-35.	1.9	40
358	Ultra-high sensitivity graphene photosensors. Applied Physics Letters, 2014, 104, 041110.	1.5	16
359	The Direct Synthesis of Graphene on a Gallium Nitride Substrate. Chemical Vapor Deposition, 2014, 20, 125-129.	1.4	10
360	Graphene and Graphene-like Two-Dimensional Materials in Photodetection: Mechanisms and Methodology. ACS Nano, 2014, 8, 4133-4156.	7.3	507
361	Multifunctional Graphene Optical Modulator and Photodetector Integrated on Silicon Waveguides. Nano Letters, 2014, 14, 2741-2746.	4.5	217
362	Graphene nano-ink biosensor arrays on a microfluidic paper for multiplexed detection of metabolites. Analytica Chimica Acta, 2014, 813, 90-96.	2.6	60
363	Highly sensitive wide bandwidth photodetectors using chemical vapor deposited graphene. Applied Physics Letters, 2014, 104, .	1.5	20
364	Graphene-Ruthenium Complex Hybrid Photodetectors with Ultrahigh Photoresponsivity. Small, 2014, 10, 3700-3706.	5.2	35
365	Photodetection Based on Ionic Liquid Gated Plasmonic Ag Nanoparticle/Graphene Nanohybrid Field Effect Transistors. Advanced Optical Materials, 2014, 2, 729-736.	3.6	36
366	Synthesis of two-dimensional $\text{In}_2\text{Ga}_2\text{O}_3$ nanosheets for high-performance solar blind photodetectors. Journal of Materials Chemistry C, 2014, 2, 3254-3259.	2.7	167

#	ARTICLE	IF	CITATIONS
367	In-Plane Optical Absorption and Free Carrier Absorption in Graphene-on-Silicon Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 43-48.	1.9	75
368	Thermally reduced solution-processed graphene oxide thin film: An efficient infrared photodetector. Chemical Physics Letters, 2014, 593, 198-203.	1.2	26
369	Ultrafast All-Optical Graphene Modulator. Nano Letters, 2014, 14, 955-959.	4.5	610
370	Enhancing the photocurrent and photoluminescence of single crystal monolayer MoS ₂ with resonant plasmonic nanoshells. Applied Physics Letters, 2014, 104, 031112.	1.5	208
371	Photodetectors with armchair graphene nanoribbons and asymmetric source and drain contacts. Applied Surface Science, 2014, 318, 108-112.	3.1	13
372	Optical conductivity of hydrogenated graphene from first principles. Physical Review B, 2014, 89, .	1.1	15
373	Graphene Plasmonics for Terahertz to Mid-Infrared Applications. ACS Nano, 2014, 8, 1086-1101.	7.3	1,165
374	Simple metal/SiO ₂ /Si planar photodetector utilizing leakage current flows through a SiO ₂ layer. Journal of Materials Chemistry C, 2014, 2, 2045-2050.	2.7	11
375	Evolution of the Electronic Band Structure and Efficient Photo-Detection in Atomic Layers of InSe. ACS Nano, 2014, 8, 1263-1272.	7.3	534
376	Assessing <i>in vivo</i> toxicity of graphene materials: current methods and future outlook. Nanomedicine, 2014, 9, 1565-1580.	1.7	37
377	Comparison of Goos-Hänchen shifts of the reflected beam from graphene on dielectrics and metals. Optik, 2014, 125, 7025-7029.	1.4	13
378	Thermal plasmonic interconnects in graphene. Physical Review B, 2014, 90, .	1.1	33
379	A Highly Sensitive Graphene-Organic Hybrid Photodetector with a Piezoelectric Substrate. Advanced Functional Materials, 2014, 24, 6818-6825.	7.8	84
380	Mode locked oscillation in ultrafast fiber laser using bilayer graphene saturable absorbers. , 2014, , .		0
381	Highly sensitive and multispectral responsive phototransistor using tungsten-doped VO ₂ nanowires. Nanoscale, 2014, 6, 7619-7627.	2.8	42
382	A deep ultraviolet to near-infrared photoresponse from glucose-derived graphene oxide. Journal of Materials Chemistry C, 2014, 2, 6971-6977.	2.7	40
383	How good can CVD-grown monolayer graphene be?. Nanoscale, 2014, 6, 15255-15261.	2.8	48
384	Waveguide engineering of graphene's nonlinearity. Applied Physics Letters, 2014, 105, 111110.	1.5	42

#	ARTICLE	IF	CITATIONS
385	Two-dimensional materials for electronic applications. MRS Bulletin, 2014, 39, 711-718.	1.7	104
386	Waveguide-Integrated Light-Emitting Carbon Nanotubes. Advanced Materials, 2014, 26, 3465-3472.	11.1	56
387	Terahertz science and technology of carbon nanomaterials. Nanotechnology, 2014, 25, 322001.	1.3	156
388	Graphene based flexible electrochromic devices. Scientific Reports, 2014, 4, 6484.	1.6	92
389	CVD synthesis of large-area, highly crystalline MoSe ₂ atomic layers on diverse substrates and application to photodetectors. Nanoscale, 2014, 6, 8949.	2.8	418
390	Aqueous Graphene Dispersions-Optical Properties and Stimuli-Responsive Phase Transfer. ACS Nano, 2014, 8, 11191-11205.	7.3	68
391	Tunability Analysis of a Graphene-Embedded Ring Modulator. IEEE Photonics Technology Letters, 2014, 26, 2008-2011.	1.3	60
392	Quantum Carrier Reinvestment-Induced Ultrahigh and Broadband Photocurrent Responses in Graphene-Silicon Junctions. ACS Nano, 2014, 8, 10270-10279.	7.3	105
393	Embedded graphene photodetectors for silicon photonics. , 2014, , .		2
394	Photoresponsivity of silver nanoparticles decorated graphene-silicon Schottky junction. RSC Advances, 2014, 4, 26866-26871.	1.7	27
395	Active graphene plasmonics for terahertz device applications. Journal Physics D: Applied Physics, 2014, 47, 094006.	1.3	101
396	Photoresponse of an Electrically Tunable Ambipolar Graphene Infrared Thermocouple. Nano Letters, 2014, 14, 901-907.	4.5	44
397	Operation of thin-film gated SOI lateral PIN photodetectors with gate voltage applied and intrinsic length variation. Optik, 2014, 125, 6483-6487.	1.4	4
398	50 GBit/s Photodetectors Based on Wafer-Scale Graphene for Integrated Silicon Photonic Communication Systems. ACS Photonics, 2014, 1, 781-784.	3.2	162
399	Hot carriers in epitaxial graphene sheets with and without hydrogen intercalation: role of substrate coupling. Nanoscale, 2014, 6, 10562-10568.	2.8	4
400	Patterning of Graphene via an In Situ Electrochemical Method using Ni Opal or Inverse-Opal Structures. Journal of Physical Chemistry C, 2014, 118, 22785-22791.	1.5	2
401	Polarization-locked vector solitons in a mode-locked fiber laser using polarization-sensitive few-layer graphene deposited D-shaped fiber saturable absorber. Journal of the Optical Society of America B: Optical Physics, 2014, 31, 1377.	0.9	15
402	Contact properties to CVD-graphene on GaAs substrates for optoelectronic applications. Nanotechnology, 2014, 25, 335707.	1.3	17

#	ARTICLE	IF	CITATIONS
403	Driving forces for the self-assembly of graphene oxide on organic monolayers. <i>Nanoscale</i> , 2014, 6, 11344-11350.	2.8	14
404	Dye-Sensitized MoS ₂ Photodetector with Enhanced Spectral Photoresponse. <i>ACS Nano</i> , 2014, 8, 8285-8291.	7.3	268
405	Current self-amplification effect of graphene-based transistor in high-field transport. <i>Carbon</i> , 2014, 77, 1090-1094.	5.4	10
406	Chemically enhanced double-gate bilayer graphene field-effect transistor with neutral channel for logic applications. <i>Nanotechnology</i> , 2014, 25, 345203.	1.3	4
407	Infrared Wavefront Control Based on Graphene Metasurfaces. <i>Advanced Optical Materials</i> , 2014, 2, 794-799.	3.6	45
408	Chemistry Makes Graphene beyond Graphene. <i>Journal of the American Chemical Society</i> , 2014, 136, 12194-12200.	6.6	235
409	Electromagnetic chirality induced by graphene inclusions in multilayered metamaterials. <i>Photonics Research</i> , 2014, 2, 121.	3.4	12
410	Ultra-fast solitons in a long cavity multi-mode-fiber-based graphene mode-locked fiber laser with high slope efficiency. <i>Laser Physics</i> , 2014, 24, 085109.	0.6	3
411	Mechanisms of Photoconductivity in Atomically Thin MoS ₂ . <i>Nano Letters</i> , 2014, 14, 6165-6170.	4.5	563
412	Sensitive room-temperature terahertz detection via the photothermoelectric effect in graphene. <i>Nature Nanotechnology</i> , 2014, 9, 814-819.	15.6	474
413	Graphene/GaN diodes for ultraviolet and visible photodetectors. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	73
414	Stochastic Resonance in Graphene Bilayer Optical Nanoreceivers. <i>IEEE Nanotechnology Magazine</i> , 2014, 13, 1107-1117.	1.1	4
415	Direct Laser Writing of Air-Stable p-n Junctions in Graphene. <i>ACS Nano</i> , 2014, 8, 8831-8836.	7.3	54
416	Room-Temperature Near-Infrared Photodetectors Based on Single Heterojunction Nanowires. <i>Nano Letters</i> , 2014, 14, 694-698.	4.5	134
417	Electroluminescence and Photocurrent Generation from Atomically Sharp WSe ₂ /MoS ₂ Heterojunction p-n Diodes. <i>Nano Letters</i> , 2014, 14, 5590-5597.	4.5	937
418	Modulating light with graphene embedded into an optical waveguide. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 335101.	1.3	10
419	Photodetectors based on graphene, other two-dimensional materials and hybrid systems. <i>Nature Nanotechnology</i> , 2014, 9, 780-793.	15.6	3,017
420	High-Sensitivity Photodetectors Based on Multilayer GaTe Flakes. <i>ACS Nano</i> , 2014, 8, 752-760.	7.3	319

#	ARTICLE	IF	CITATIONS
421	Full duplex CO-OFDM MIMO graphene nano-photonics E-O-E transceiver for 4G LTE-advanced radio over fiber network. , 2014, , .		0
422	Ideal Graphene/Silicon Schottky Junction Diodes. Nano Letters, 2014, 14, 4660-4664.	4.5	218
423	Defect-Induced Enhancement and Quenching Control of Photocurrent in Few-Layer Graphene Photodetectors. ACS Applied Materials & Interfaces, 2014, 6, 7485-7490.	4.0	26
424	Localization and electron-electron interactions in few-layer epitaxial graphene. Nanotechnology, 2014, 25, 245201.	1.3	3
425	High-Responsivity Mid-Infrared Graphene Detectors with Antenna-Enhanced Photocarrier Generation and Collection. Nano Letters, 2014, 14, 3749-3754.	4.5	231
426	Stability and wrinkling of defective graphene sheets under shear deformation. Current Applied Physics, 2014, 14, 533-537.	1.1	17
427	Laser-Mediated Programmable N Doping and Simultaneous Reduction of Graphene Oxides. Advanced Optical Materials, 2014, 2, 120-125.	3.6	64
428	Controlled Light-Matter Interaction in Graphene Electrooptic Devices Using Nanophotonic Cavities and Waveguides. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 95-105.	1.9	20
429	The Edge Magnetization and Strip Phase of Graphene Quantum Dots with Long-Range Coulomb Interaction. Chinese Physics Letters, 2014, 31, 047303.	1.3	0
430	High-Performance Flexible Broadband Photodetector Based on Organolead Halide Perovskite. Advanced Functional Materials, 2014, 24, 7373-7380.	7.8	791
431	Arbitrary Shape Designable Microscale Organic Light-Emitting Devices by Using Femtosecond Laser Reduced Graphene Oxide as a Patterned Electrode. ACS Photonics, 2014, 1, 690-695.	3.2	47
432	Lateral MoS ₂ p-n Junction Formed by Chemical Doping for Use in High-Performance Optoelectronics. ACS Nano, 2014, 8, 9332-9340.	7.3	507
433	Enhanced Photoresponse in Monolayer Hydrogenated Graphene Photodetector. ACS Applied Materials & Interfaces, 2014, 6, 16763-16768.	4.0	19
434	Enhanced light-matter interaction of graphene-gold nanoparticle hybrid films for high-performance SERS detection. Journal of Materials Chemistry C, 2014, 2, 4683-4691.	2.7	81
435	Photothermoelectric and Photoelectric Contributions to Light Detection in Metal-Graphene-Metal Photodetectors. Nano Letters, 2014, 14, 3733-3742.	4.5	153
436	Adsorption of Polycyclic Aromatic Hydrocarbons by Graphene and Graphene Oxide Nanosheets. Environmental Science & Technology, 2014, 48, 4817-4825.	4.6	668
437	Graphene for Electron Devices: The Panorama of a Decade. IEEE Journal of the Electron Devices Society, 2014, 2, 77-104.	1.2	25
438	Large-Area Atomically Thin MoS ₂ Nanosheets Prepared Using Electrochemical Exfoliation. ACS Nano, 2014, 8, 6902-6910.	7.3	400

#	ARTICLE	IF	CITATIONS
439	An electronic structure perspective of graphene interfaces. <i>Nanoscale</i> , 2014, 6, 3444.	2.8	76
440	Microscopic theory of the optical properties of colloidal graphene quantum dots. <i>Physical Review B</i> , 2014, 89, .	1.1	55
441	Potential application of graphene nanomechanical resonator as pressure sensor. <i>Solid State Communications</i> , 2014, 193, 30-33.	0.9	23
442	Large-Area, Transparent, and Flexible Infrared Photodetector Fabricated Using P-N Junctions Formed by N-Doping Chemical Vapor Deposition Grown Graphene. <i>Nano Letters</i> , 2014, 14, 3702-3708.	4.5	201
443	Wavelength-selective visible-light detector based on integrated graphene transistor and surface plasmon coupler. , 2014, , .		1
444	Photoinduced conductivity enhancement in quantum dot/multilayer graphene nanostructures. <i>Materials Research Society Symposia Proceedings</i> , 2015, 1787, 15-19.	0.1	5
445	All-carbon based graphene field effect transistor with graphitic electrodes fabricated by e-beam direct writing on PMMA. <i>Scientific Reports</i> , 2015, 5, 12198.	1.6	11
446	Graphene-nonlinearity unleashing at lasing threshold in graphene-assisted cavities. <i>Physical Review A</i> , 2015, 91, .	1.0	10
447	Tuning the electronic structure of monolayer graphene/ MoS_2 van der Waals heterostructures via interlayer twist. <i>Physical Review B</i> , 2015, 92, .	1.1	56
448	Graphene as gain medium for broadband lasers. <i>Physical Review B</i> , 2015, 92, .	1.1	22
449	High-performance ultraviolet photodetectors based on solution-grown ZnS nanobelts sandwiched between graphene layers. <i>Scientific Reports</i> , 2015, 5, 12345.	1.6	62
450	Bistability and pH Hysteresis of Graphene Oxide Solution in Circle Acid-Base Titration. <i>Chemistry Letters</i> , 2015, 44, 454-456.	0.7	1
451	Graphene/Conjugated Polymer Nanocomposites for Optoelectronic and Biological Applications. , 2015, , 229-279.		1
452	Approach to multifunctional device platform with epitaxial graphene on transition metal oxide. <i>Scientific Reports</i> , 2015, 5, 14374.	1.6	31
453	Ultrasensitive nonlinear absorption response of large-size topological insulator and application in low-threshold bulk pulsed lasers. <i>Scientific Reports</i> , 2015, 5, 14856.	1.6	48
454	Terahertz bolometric detection by thermal noise in graphene field effect transistor. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	5
455	Cost-Effective and Highly Photoresponsive Nanophosphor-P3HT Photoconductive Nanocomposite for Near-Infrared Detection. <i>Scientific Reports</i> , 2015, 5, 16761.	1.6	11
456	Ultrabroadband, More than One Order Absorption Enhancement in Graphene with Plasmonic Light Trapping. <i>Scientific Reports</i> , 2015, 5, 16998.	1.6	83

#	ARTICLE	IF	CITATIONS
457	Pulsed Near-IR Photoresponse in a Bi-metal Contacted Graphene Photodetector. Scientific Reports, 2015, 5, 14803.	1.6	7
458	A general method for large-area and broadband enhancing photoresponsivity in graphene photodetectors. Applied Physics Letters, 2015, 107, .	1.5	15
459	Monolithic of SOI wafer waveguide and InP-laser with DVS-BCB coating and bonding. Microelectronic Engineering, 2015, 148, 44-50.	1.1	1
460	ReS ₂ -Based Field-Effect Transistors and Photodetectors. Advanced Functional Materials, 2015, 25, 4076-4082.	7.8	282
461	Effects of Photoexcitation on Intense Terahertz Field-induced Nonlinearity in Monolayer Epitaxial Graphene. , 2015, , .		0
462	High Responsivity, Broadband, and Fast Graphene/Silicon Photodetector in Photoconductor Mode. Advanced Optical Materials, 2015, 3, 1207-1214.	3.6	141
463	Revealing Optical Properties of Reduced-Dimensionality Materials at Relevant Length Scales. Advanced Materials, 2015, 27, 5693-5719.	11.1	29
464	Photocurrent generation of a single-gate graphene p-n junction fabricated by interfacial modification. Nanotechnology, 2015, 26, 385203.	1.3	15
466	Graphene quantum interference photodetector. Beilstein Journal of Nanotechnology, 2015, 6, 726-735.	1.5	10
467	Review of Graphene Technology and Its Applications for Electronic Devices. , 0, , .		21
468	Investigating the Effect of Thermal Annealing Process on the Photovoltaic Performance of the Graphene-Silicon Solar Cell. International Journal of Photoenergy, 2015, 2015, 1-6.	1.4	1
469	High Sensitive Sensor Fabricated by Reduced Graphene Oxide/Polyvinyl Butyral Nanofibers for Detecting Cu (II) in Water. International Journal of Analytical Chemistry, 2015, 2015, 1-7.	0.4	14
470	Theoretical Analysis on Optical Limiting Properties of Newly Synthesized Graphene Oxide-Porphyrin Composites. Chinese Journal of Chemical Physics, 2015, 28, 257-262.	0.6	4
471	Graphene Assisted TE/TM-Independent Polarizer Based on Mach-Zehnder Interferometer. IEEE Photonics Technology Letters, 2015, 27, 1112-1115.	1.3	36
472	Lateral graphene p-n junctions formed by the graphene/MoS ₂ hybrid interface. Nanoscale, 2015, 7, 11611-11619.	2.8	53
473	Graphene photodetector integrated on silicon nitride waveguide. Journal of Applied Physics, 2015, 117, .	1.1	46
474	Synthesis and Photovoltaic Properties of Cd ₃ As ₂ Faceted Nanoplates and Nano-Octahedrons. Crystal Growth and Design, 2015, 15, 3264-3270.	1.4	17
475	Sulfonated Graphene Nanosheets as a Superb Adsorbent for Various Environmental Pollutants in Water. Environmental Science & Technology, 2015, 49, 7364-7372.	4.6	255

#	ARTICLE	IF	CITATIONS
476	Bipolar doping of double-layer graphene vertical heterostructures with hydrogenated boron nitride. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 11692-11699.	1.3	9
477	Ultrasensitive graphene far-infrared power detectors. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 164203.	0.7	14
479	Communication: Generalization of Koopmans's™ theorem to optical transitions in the Hubbard model of graphene nanodots. <i>Journal of Chemical Physics</i> , 2015, 142, 021102.	1.2	14
480	Application of Graphene Within Optoelectronic Devices and Transistors. <i>Progress in Optical Science and Photonics</i> , 2015, , 191-221.	0.3	23
481	Simscape Based Ultra-Fast Design Exploration of Graphene-Nanoelectronic Systems. , 2015, , .		1
482	Graphene Silicon ring resonators for wavelength routers in Photonic Network-on-Chip. , 2015, , .		2
483	Graphene, graphene quantum dots and their applications in optoelectronics. <i>Current Opinion in Colloid and Interface Science</i> , 2015, 20, 439-453.	3.4	73
484	An all-optical modulator based on a stereo graphene's microfiber structure. <i>Light: Science and Applications</i> , 2015, 4, e360-e360.	7.7	124
485	Hybrid graphene plasmonic waveguide modulators. <i>Nature Communications</i> , 2015, 6, 8846.	5.8	232
486	Is graphene a good transparent electrode for photovoltaics and display applications?. <i>IET Circuits, Devices and Systems</i> , 2015, 9, 403-412.	0.9	30
487	Bandgap-engineered GaAsSb alloy nanowires for near-infrared photodetection at 1.31 μm . <i>Semiconductor Science and Technology</i> , 2015, 30, 105033.	1.0	52
488	Radio-frequency transport Electromagnetic Properties of chemical vapour deposition graphene from direct current to 110 MHz. <i>IET Circuits, Devices and Systems</i> , 2015, 9, 46-51.	0.9	2
489	Formation and field emission properties of multilayer graphene hybrid films grown on laser pretreated Ni layer. <i>Materials Research Innovations</i> , 2015, 19, S5-273-S5-276.	1.0	0
490	Building graphene p-n junctions for next-generation photodetection. <i>Nano Today</i> , 2015, 10, 701-716.	6.2	45
491	RF and THz detection using two dimensional materials on flexible substrates. , 2015, , .		0
492	Two-dimensional materials for nanophotonics application. <i>Nanophotonics</i> , 2015, 4, 128-142.	2.9	97
493	Angle- and position-insensitive electrically tunable absorption in graphene by epsilon-near-zero effect. <i>Optics Express</i> , 2015, 23, 33350.	1.7	26
494	Bilayer graphene: physics and application outlook in photonics. <i>Nanophotonics</i> , 2015, 4, 115-127.	2.9	21

#	ARTICLE	IF	CITATIONS
495	Flexible graphene devices related to energy conversion and storage. Energy and Environmental Science, 2015, 8, 790-823.	15.6	328
496	Absorption enhancement of graphene Salisbury screen in the mid-infrared regime. Journal of Optics (India), 2015, 44, 59-67.	0.8	6
497	Epitaxial graphene contact electrode for silicon carbide based ultraviolet photodetector. Journal Physics D: Applied Physics, 2015, 48, 095104.	1.3	42
498	Ultrahigh Field Enhancement and Photoresponse in Atomically Separated Arrays of Plasmonic Dimers. Advanced Materials, 2015, 27, 1751-1758.	11.1	59
499	Infrared Detection Using Transparent and Flexible Field-Effect Transistor Array with Solution Processable Nanocomposite Channel of Reduced Graphene Oxide and P(VDF-TrFE). Advanced Functional Materials, 2015, 25, 1745-1754.	7.8	32
500	Strong enhancement of photoresponsivity with shrinking the electrodes spacing in few layer GaSe photodetectors. Scientific Reports, 2015, 5, 8130.	1.6	106
501	Electrically Tunable Coherent Optical Absorption in Graphene with Ion Gel. Nano Letters, 2015, 15, 1570-1576.	4.5	85
502	Bifunctional Sensing Characteristics of Chemical Vapor Deposition Synthesized Atomic-Layered MoS ₂ . ACS Applied Materials & Interfaces, 2015, 7, 2952-2959.	4.0	162
503	Raman characterization of defects and dopants in graphene. Journal of Physics Condensed Matter, 2015, 27, 083002.	0.7	451
504	Solution-Processed Graphene Quantum Dot Deep-UV Photodetectors. ACS Nano, 2015, 9, 1561-1570.	7.3	249
505	Tunable enhanced optical absorption of graphene using plasmonic perfect absorbers. Applied Physics Letters, 2015, 106, .	1.5	195
506	Graphene synthesis, characterization and its applications in nanophotonics, nanoelectronics, and nanosensing. Journal of Materials Science: Materials in Electronics, 2015, 26, 4347-4379.	1.1	135
507	Nonlinear terahertz field-induced carrier dynamics in photoexcited epitaxial monolayer graphene. Physical Review B, 2015, 91, .	1.1	60
508	Distinct photoresponse in graphene induced by laser irradiation. Applied Physics Letters, 2015, 106, .	1.5	10
509	Freestanding ZnO nanorod/graphene/ZnO nanorod epitaxial double heterostructure for improved piezoelectric nanogenerators. Nano Energy, 2015, 12, 268-277.	8.2	72
510	Surface Plasmon-Enhanced Photodetection in Few Layer MoS ₂ Phototransistors with Au Nanostructure Arrays. Small, 2015, 11, 2392-2398.	5.2	359
511	Broadband Photodetectors Based on Graphene-Bi ₂ Te ₃ Heterostructure. ACS Nano, 2015, 9, 1886-1894.	7.3	338
512	Nonequilibrium plasmons with gain in graphene. Physical Review B, 2015, 91, .	1.1	36

#	ARTICLE	IF	CITATIONS
513	3D hierarchical porous graphene aerogels for highly improved adsorption and recycled capacity. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2015, 194, 62-67.	1.7	55
514	Graphene-Based Optoelectronics. <i>Journal of Lightwave Technology</i> , 2015, 33, 1100-1108.	2.7	52
515	Numerical Study of Graphene Superlattice-Based Photodetectors. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 593-600.	1.6	17
516	Factors Affecting the Exfoliation of Graphite Intercalation Compounds for Graphene Synthesis. <i>Chemistry of Materials</i> , 2015, 27, 2067-2073.	3.2	65
517	Application and Uses of Graphene. , 2015, , 1-38.		27
518	Large scale integration of graphene transistors for potential applications in the back end of the line. <i>Solid-State Electronics</i> , 2015, 108, 61-66.	0.8	19
519	Waveguide-integrated black phosphorus photodetector with high responsivity and low dark current. <i>Nature Photonics</i> , 2015, 9, 247-252.	15.6	778
521	Antenna Enhanced Graphene THz Emitter and Detector. <i>Nano Letters</i> , 2015, 15, 5295-5301.	4.5	138
522	Direct On-Chip Optical Plasmon Detection with an Atomically Thin Semiconductor. <i>Nano Letters</i> , 2015, 15, 5477-5481.	4.5	40
523	Geometry-induced high performance ultraviolet photodetectors in kinked SnO ₂ nanowires. <i>Journal of Materials Chemistry C</i> , 2015, 3, 8300-8306.	2.7	31
524	Gate dependent photoresponse in self-assembled graphene p-n junctions. <i>Chinese Physics B</i> , 2015, 24, 068101.	0.7	1
525	One-pot solution-phase preparation of a MoS ₂ /graphene oxide hybrid. <i>Carbon</i> , 2015, 94, 568-576.	5.4	40
526	Coherent Generation of Photo-Thermo-Acoustic Wave from Graphene Sheets. <i>Scientific Reports</i> , 2015, 5, 10582.	1.6	33
527	Flexible phototransistors based on graphene nanoribbon decorated with MoS ₂ nanoparticles. <i>Sensors and Actuators A: Physical</i> , 2015, 232, 285-291.	2.0	18
528	Tunable Electrical and Optical Characteristics in Monolayer Graphene and Few-Layer MoS ₂ Heterostructure Devices. <i>Nano Letters</i> , 2015, 15, 5017-5024.	4.5	150
529	Dielectric Force Microscopy: Imaging Charge Carriers in Nanomaterials without Electrical Contacts. <i>Accounts of Chemical Research</i> , 2015, 48, 1788-1796.	7.6	28
530	Photocurrent generation in lateral graphene p-n junction created by electron-beam irradiation. <i>Scientific Reports</i> , 2015, 5, 12014.	1.6	69
531	Progress in Graphene-Based Two-Dimensional Heterostructures and their Photoelectric Properties. <i>Applied Mechanics and Materials</i> , 0, 733, 231-235.	0.2	2

#	ARTICLE	IF	CITATIONS
532	A spectrally tunable all-graphene-based flexible field-effect light-emitting device. Nature Communications, 2015, 6, 7767.	5.8	113
533	Highly responsive MoS ₂ photodetectors enhanced by graphene quantum dots. Scientific Reports, 2015, 5, 11830.	1.6	155
534	Plasmon-enhanced photodetection in nanostructures. Nanotechnology Reviews, 2015, 4, .	2.6	6
535	Ultra-broadband and high response of the Bi ₂ Te ₃ –Si heterojunction and its application as a photodetector at room temperature in harsh working environments. Nanoscale, 2015, 7, 12535-12541.	2.8	214
536	Synthesis, properties and applications of 2D non-graphene materials. Nanotechnology, 2015, 26, 292001.	1.3	101
537	Size-dependent deformation behavior of nanocrystalline graphene sheets. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2015, 198, 95-101.	1.7	17
538	Arrayed van der Waals Vertical Heterostructures Based on 2D GaSe Grown by Molecular Beam Epitaxy. Nano Letters, 2015, 15, 3571-3577.	4.5	146
539	Photocurrent generation with two-dimensional van der Waals semiconductors. Chemical Society Reviews, 2015, 44, 3691-3718.	18.7	802
540	Tunable THz Angular/Frequency Filters in the Modified Kretschmann–Raether Configuration With the Insertion of Single Layer Graphene. IEEE Photonics Journal, 2015, 7, 1-8.	1.0	12
541	A self-powered graphene–MoS ₂ hybrid phototransistor with fast response rate and high on–off ratio. Carbon, 2015, 92, 126-132.	5.4	80
542	Transparent, Broadband, Flexible, and Bifacial-Operable Photodetectors Containing a Large-Area Graphene–Gold Oxide Heterojunction. ACS Nano, 2015, 9, 5093-5103.	7.3	62
543	Hybrid structures of organic dye and graphene for ultrahigh gain photodetectors. Carbon, 2015, 88, 165-172.	5.4	67
544	Plasmonic Hot Electron Induced Photocurrent Response at MoS ₂ –Metal Junctions. ACS Nano, 2015, 9, 5357-5363.	7.3	91
545	Graphene vertical cascade interband terahertz and infrared photodetectors. 2D Materials, 2015, 2, 025002.	2.0	20
546	Hybrid Graphene–Perovskite Phototransistors with Ultrahigh Responsivity and Gain. Advanced Optical Materials, 2015, 3, 1389-1396.	3.6	240
547	Preparation of efficient magnetic biosorbents by clicking carbohydrates onto graphene oxide. Journal of Materials Science, 2015, 50, 5348-5361.	1.7	36
548	Graphene/Si CMOS Hybrid Hall Integrated Circuits. Scientific Reports, 2014, 4, 5548.	1.6	46
549	Enhanced absorption in two-dimensional materials via Fano-resonant photonic crystals. Applied Physics Letters, 2015, 106, .	1.5	86

#	ARTICLE	IF	CITATIONS
550	Enhancement of thermoelectric efficiency by embedding hexagonal boron-nitride cells in zigzag graphene nanoribbons. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 235304.	1.3	17
551	Enhanced performance of graphene-based electro-absorption waveguide modulators by engineered optical modes. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 235101.	1.3	21
552	Plasmon-Assisted Designable Multi-Resonance Photodetection by Graphene via Nanopatterning of Block Copolymer. <i>ACS Photonics</i> , 2015, 2, 506-514.	3.2	17
553	Spectral sensitivity of a graphene/silicon pn-junction photodetector. , 2015, , .		6
554	A high performance graphene/few-layer InSe photo-detector. <i>Nanoscale</i> , 2015, 7, 5981-5986.	2.8	143
555	Graphene Composites Based Photodetectors. , 2015, , 193-222.		3
556	Nanocavity absorption enhancement for two-dimensional material monolayer systems. <i>Optics Express</i> , 2015, 23, 7120.	1.7	23
557	An Atomically Layered InSe Avalanche Photodetector. <i>Nano Letters</i> , 2015, 15, 3048-3055.	4.5	253
558	MoS ₂ /Si Heterojunction with Vertically Standing Layered Structure for Ultrafast, High-Responsivity, Self-Driven Visible-Near Infrared Photodetectors. <i>Advanced Functional Materials</i> , 2015, 25, 2910-2919.	7.8	554
559	Comparative Study of Potential Applications of Graphene, MoS ₂ , and Other Two-Dimensional Materials in Energy Devices, Sensors, and Related Areas. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 7809-7832.	4.0	362
560	One-dimension-based spatially ordered architectures for solar energy conversion. <i>Chemical Society Reviews</i> , 2015, 44, 5053-5075.	18.7	367
561	Graphene Saturable Absorber Based on Slightly Tapered Fiber With Inner Air-Cavity. <i>Journal of Lightwave Technology</i> , 2015, 33, 2332-2336.	2.7	11
562	Ultrafast electron dynamics in epitaxial graphene investigated with time- and angle-resolved photoemission spectroscopy. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 164206.	0.7	37
563	Generation of photovoltage in graphene on a femtosecond timescale through efficient carrier heating. <i>Nature Nanotechnology</i> , 2015, 10, 437-443.	15.6	210
564	High Responsivity Silicon-Graphene Schottky Avalanche Photodetectors for Visible and Telecom Wavelengths. , 2015, , .		0
565	Graphene-covered perovskites: an effective strategy to enhance light absorption and resist moisture degradation. <i>RSC Advances</i> , 2015, 5, 82346-82350.	1.7	43
566	Design of optical metamaterial mirror with metallic nanoparticles for floating-gate graphene optoelectronic devices. <i>Optics Express</i> , 2015, 23, 21809.	1.7	11
567	Ultrafast carrier dynamics in Landau-quantized graphene. <i>Nanophotonics</i> , 2015, 4, 224-249.	2.9	33

#	ARTICLE	IF	CITATIONS
568	Effect of initial tension on mechanics of adhered graphene blisters. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 120, 1503-1509.	1.1	3
569	Broadband photodetection in a microfiber-graphene device. <i>Optics Express</i> , 2015, 23, 25209.	1.7	30
570	Engineered bio-compatible graphene nanomaterials for nonlinear applications. <i>Optical Materials Express</i> , 2015, 5, 102.	1.6	7
571	Image preprocessing with a parallel optoelectronic processor. <i>Computers and Electrical Engineering</i> , 2015, 46, 554-565.	3.0	2
572	State-of-the-art photodetectors for optoelectronic integration at telecommunication wavelength. <i>Nanophotonics</i> , 2015, 4, 277-302.	2.9	76
573	A highly efficient thermo-optic microring modulator assisted by graphene. <i>Nanoscale</i> , 2015, 7, 20249-20255.	2.8	99
574	Universal ultrafast detector for short optical pulses based on graphene. <i>Optics Express</i> , 2015, 23, 28728.	1.7	23
575	Ultra-broadband and high-responsive photodetectors based on bismuth film at room temperature. <i>Scientific Reports</i> , 2015, 5, 12320.	1.6	79
576	Gate-tunable photocurrent in ZnO nanowires mediated by nanowire-substrate interface states. <i>Applied Physics Letters</i> , 2015, 106, 093111.	1.5	1
577	Theory of biexcitons and biexciton-exciton cascade in graphene quantum dots. <i>Physical Review B</i> , 2015, 91, .	1.1	21
578	Black phosphorus saturable absorber for ultrashort pulse generation. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	288
579	Extremely high near field enhancement in a novel plasmonic nano material used for photovoltage generation. <i>Proceedings of SPIE</i> , 2015, , .	0.8	0
580	Photovoltaic Effect and Evidence of Carrier Multiplication in Graphene Vertical Homojunctions with Asymmetrical Metal Contacts. <i>ACS Nano</i> , 2015, 9, 8851-8858.	7.3	19
581	ZnO quantum dots and graphene based heterostructure for excellent photoelastic and highly sensitive ultraviolet photodetector. <i>RSC Advances</i> , 2015, 5, 90838-90846.	1.7	23
582	Photochemical doping of graphene oxide thin film with nitrogen for photoconductivity enhancement. <i>Carbon</i> , 2015, 94, 1037-1043.	5.4	10
583	Enhancement of photodetection characteristics of MoS ₂ field effect transistors using surface treatment with copper phthalocyanine. <i>Nanoscale</i> , 2015, 7, 18780-18788.	2.8	101
584	Electronic transport in NbSe ₂ two-dimensional nanostructures: semiconducting characteristics and photoconductivity. <i>Nanoscale</i> , 2015, 7, 18964-18970.	2.8	42
585	Dual Mode Photocurrent Generation of Graphene-Oxide Semiconductor Junction. <i>ECS Journal of Solid State Science and Technology</i> , 2015, 4, N131-N136.	0.9	4

#	ARTICLE	IF	CITATIONS
586	Black Phosphorus: Narrow Gap, Wide Applications. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 4280-4291.	2.1	631
587	Planar carbon nanotube-graphene hybrid films for high-performance broadband photodetectors. <i>Nature Communications</i> , 2015, 6, 8589.	5.8	258
588	Surfactant mediated liquid phase exfoliation of graphene. <i>Nano Convergence</i> , 2015, 2, 20.	6.3	128
589	Graphene-Based Thermopile for Thermal Imaging Applications. <i>Nano Letters</i> , 2015, 15, 7211-7216.	4.5	81
590	Fractional photo-current dependence of graphene quantum dots prepared from carbon nanotubes. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 24566-24569.	1.3	14
591	Magnetotransport Properties of Cd ₃ As ₂ Nanostructures. <i>ACS Nano</i> , 2015, 9, 8843-8850.	7.3	57
592	Enhanced graphene absorption and linewidth sharpening enabled by Fano-like geometric resonance at near-infrared wavelengths. <i>Optics Express</i> , 2015, 23, 21097.	1.7	19
593	Graphene-carbon nanotube papers for energy conversion and storage under sunlight and heat. <i>Carbon</i> , 2015, 95, 150-156.	5.4	24
594	Broadband silicon optical modulator using a graphene-integrated hybrid plasmonic waveguide. <i>Nanotechnology</i> , 2015, 26, 365201.	1.3	40
595	Pt-nanoparticle functionalized carbon nano-onions for ultra-high energy supercapacitors and enhanced field emission behaviour. <i>RSC Advances</i> , 2015, 5, 80990-80997.	1.7	52
596	Sensitive photo-thermal response of graphene oxide for mid-infrared detection. <i>Nanoscale</i> , 2015, 7, 15695-15700.	2.8	57
597	Creating semiconductor metafilms with designer absorption spectra. <i>Nature Communications</i> , 2015, 6, 7591.	5.8	68
598	Red-Shift Effect and Sensitive Responsivity of MoS ₂ /ZnO Flexible Photodetectors. <i>Nanoscale Research Letters</i> , 2015, 10, 443.	3.1	29
599	Substrate-Induced Photofield Effect in Graphene Phototransistors. <i>IEEE Transactions on Electron Devices</i> , 2015, 62, 3734-3741.	1.6	6
600	Engineering heterojunctions with carbon nanostructures: towards high-performance optoelectronics. <i>Proceedings of SPIE</i> , 2015, , .	0.8	1
601	All-Optical Modulation of a Graphene-Cladded Silicon Photonic Crystal Cavity. <i>ACS Photonics</i> , 2015, 2, 1513-1518.	3.2	65
602	A novel self-assembled sandwich nanomedicine for NIR-responsive release of NO. <i>Nanoscale</i> , 2015, 7, 20055-20062.	2.8	142
603	Theory of photon-electron interaction in single-layer graphene sheet. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2015, 6, 045009.	0.7	0

#	ARTICLE	IF	CITATIONS
604	Wafer-Scale Integration of Graphene-based Electronic, Optoelectronic and Electroacoustic Devices. Scientific Reports, 2014, 4, 3598.	1.6	113
605	Additive Manufacturing of Graphene-Hydroxyapatite Nanocomposite Structures. International Journal of Applied Ceramic Technology, 2015, 12, 8-17.	1.1	45
606	Performance improvement of multilayer InSe transistors with optimized metal contacts. Physical Chemistry Chemical Physics, 2015, 17, 3653-3658.	1.3	110
607	A novel semiconductor compatible path for nano-graphene synthesis using CBr ₄ precursor and Ga catalyst. Scientific Reports, 2015, 4, 4653.	1.6	8
608	Large Area Growth and Electrical Properties of p-Type WSe ₂ Atomic Layers. Nano Letters, 2015, 15, 709-713.	4.5	372
609	Hybrid 2D-0D MoS ₂ -PbS Quantum Dot Photodetectors. Advanced Materials, 2015, 27, 176-180.	11.1	638
610	High-Performance Few-layer Mo-doped ReSe ₂ Nanosheet Photodetectors. Scientific Reports, 2014, 4, 5442.	1.6	82
611	Vertically Architected Stack of Multiple Graphene Field-Effect Transistors for Flexible Electronics. Small, 2015, 11, 1660-1664.	5.2	12
612	High-Responsivity Graphene/InAs Nanowire Heterojunction Near-Infrared Photodetectors with Distinct Photocurrent On/Off Ratios. Small, 2015, 11, 936-942.	5.2	166
613	Ultrahigh-Gain Photodetectors Based on Atomically Thin Graphene-MoS ₂ Heterostructures. Scientific Reports, 2014, 4, 3826.	1.6	771
614	All-optical control of ultrafast photocurrents in unbiased graphene. Scientific Reports, 2014, 4, 4007.	1.6	45
615	Laser Technology and the German Laser Industry. Economic Complexity and Evolution, 2015, , 71-87.	0.1	0
616	High-Performance Perovskite-Graphene Hybrid Photodetector. Advanced Materials, 2015, 27, 41-46.	11.1	753
617	High-performance graphene-quantum-dot photodetectors. Scientific Reports, 2014, 4, 5603.	1.6	123
618	Graphene-channel FETs for photonic frequency double-mixing conversion over the sub-THz band. Solid-State Electronics, 2015, 103, 216-221.	0.8	62
619	A 2-dimensional optical architecture for solving Hamiltonian path problem based on micro ring resonators. Optics and Laser Technology, 2015, 65, 56-65.	2.2	1
620	Graphene-Graphene Oxide Floating Gate Transistor Memory. Small, 2015, 11, 311-318.	5.2	44
621	Photoresponsive and Gas Sensing Field-Effect Transistors based on Multilayer WS ₂ Nanoflakes. Scientific Reports, 2014, 4, 5209.	1.6	377

#	ARTICLE	IF	CITATIONS
622	Transparent and flexible ultraviolet photodetectors based on colloidal ZnO quantum dot/graphene nanocomposites formed on poly(ethylene terephthalate) substrates. <i>Composites Part B: Engineering</i> , 2015, 69, 154-158.	5.9	42
623	Science and technology roadmap for graphene, related two-dimensional crystals, and hybrid systems. <i>Nanoscale</i> , 2015, 7, 4598-4810.	2.8	2,452
624	Photonic Structure-Integrated Two-Dimensional Material Optoelectronics. <i>Electronics (Switzerland)</i> , 2016, 5, 93.	1.8	19
625	Graphene via Molecule-Assisted Ultrasound-Induced Liquid-Phase Exfoliation: A Supramolecular Approach. <i>ChemistrySelect</i> , 2016, 1, .	0.7	0
626	Improving the absorption of a plasmonic absorber using a single layer of graphene at telecommunication wavelengths. <i>Applied Optics</i> , 2016, 55, 9764.	2.1	20
627	Graphene and Two-Dimensional Materials for Optoelectronic Applications. <i>Electronics (Switzerland)</i> , 2016, 5, 13.	1.8	72
628	Fabrication and Evaluation of a Graphene Oxide-Based Capacitive Humidity Sensor. <i>Sensors</i> , 2016, 16, 314.	2.1	21
629	Towards a Graphene-Based Low Intensity Photon Counting Photodetector. <i>Sensors</i> , 2016, 16, 1351.	2.1	3
630	Highly sensitive UVA and violet photodetector based on single-layer graphene-TiO ₂ heterojunction. <i>Optics Express</i> , 2016, 24, 25922.	1.7	22
631	Complex effective index in graphene-silicon waveguides. <i>Optics Express</i> , 2016, 24, 29984.	1.7	32
632	Application of 2D Materials to Ultrashort Laser Pulse Generation. , 2016, , .		3
633	Ultra-broadband and omnidirectional enhanced absorption of graphene in a simple nanocavity structure. <i>Carbon</i> , 2016, 108, 253-261.	5.4	31
634	Selective Functionalization of Graphene Peripheries by using Bipolar Electrochemistry. <i>ChemElectroChem</i> , 2016, 3, 372-377.	1.7	20
635	Supramolecular Approaches to Graphene: From Self-Assembly to Molecule-Assisted Liquid-Phase Exfoliation. <i>Advanced Materials</i> , 2016, 28, 6030-6051.	11.1	154
636	Selenium-Doped Black Phosphorus for High-Responsivity 2D Photodetectors. <i>Small</i> , 2016, 12, 5000-5007.	5.2	156
637	Highly Sensitive Detection of Polarized Light Using Anisotropic 2D ReS ₂ . <i>Advanced Functional Materials</i> , 2016, 26, 1169-1177.	7.8	376
638	Tuning Chemical Potential Difference across Alternately Doped Graphene p-n Junctions for High-Efficiency Photodetection. <i>Nano Letters</i> , 2016, 16, 4094-4101.	4.5	34
639	Study of the preparation and spectral response of stacked graphene nanoribbon-carbon nanotube-based phototransistors. <i>Carbon</i> , 2016, 107, 754-764.	5.4	8

#	ARTICLE	IF	CITATIONS
640	High-performance Phototransistor of Epitaxial PbS Nanoplate-Graphene Heterostructure with Edge Contact. <i>Advanced Materials</i> , 2016, 28, 6497-6503.	11.1	51
641	Graphene photoconductors fabricated on the substrates with different resistivity. , 2016, , .		1
642	Photocurrent enhancement of graphene phototransistors using p-n junction formed by conventional photolithography process. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 110307.	0.8	24
643	Nonlinear optical response of some Graphene oxide and Graphene fluoride derivatives. <i>Optofluidics, Microfluidics and Nanofluidics</i> , 2016, 3, .	0.5	8
644	Tunable photoresponse in graphene photodetector with novel split local back-gates based on heavily doped silicon. , 2016, , .		0
645	Hot-carrier assisted Photo-thermoelectric current using nano-plasmonic structures in GFET. , 2016, , .		0
646	Giant Dirac point shift of graphene phototransistors by doped silicon substrate current. <i>AIP Advances</i> , 2016, 6, .	0.6	38
647	Ultrafast terahertz response in photoexcited, vertically grown few-layer graphene. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	13
648	Resonant plasmonic terahertz detection in graphene split-gate field-effect transistors with lateral p-n junctions. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 315103.	1.3	27
649	Improved hybrid polymer/PbS quantum dot infrared phototransistors incorporating single-layer graphene. , 2016, , .		0
650	Localized surface plasmon resonance in graphene nanomesh with Au nanostructures. <i>Applied Physics Letters</i> , 2016, 109, 041106.	1.5	10
651	Graphene based plasmonic terahertz amplitude modulator operating above 100%MHz. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	83
652	Fluorescent Self-Assembled Molecular Monolayer on Graphene. <i>ACS Photonics</i> , 2016, 3, 2291-2296.	3.2	23
653	Graphene/GaSe-Nanosheet Hybrid: Towards High Gain and Fast Photoresponse. <i>Scientific Reports</i> , 2016, 6, 19161.	1.6	79
654	Ultra-sensitive graphene photodetector with plasmonic structure. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	22
655	Charge transport properties of graphene: Effects of Cu-based gate electrode. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	1
656	Enhanced photoresponsivity in graphene-silicon slow-light photonic crystal waveguides. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	38
658	Fundamental Scaling Laws in Nanophotonics. <i>Scientific Reports</i> , 2016, 6, 37419.	1.6	56

#	ARTICLE	IF	CITATIONS
659	Coupled optical and electrical study of thin-film InGaAs photodetector integrated with surface InP Mie resonators. Journal of Applied Physics, 2016, 119, 103103.	1.1	4
660	Photodetectors with zigzag and armchair graphene nanoribbon channels and asymmetric source and drain contacts: Detectors for visible and solar blind applications. Journal of Applied Physics, 2016, 120, .	1.1	17
661	Integration of 2D materials on a silicon photonics platform for optoelectronics applications. Nanophotonics, 2016, 6, 1205-1218.	2.9	87
662	Controllable growth and electrostatic properties of Bernal stacked bilayer MoS ₂ . Journal of Applied Physics, 2016, 120, .	1.1	13
663	A facile approach to the hydrothermal synthesis of graphene. , 2016, , .		2
664	Defect-based graphene nanoribbon photodetectors: A numerical study. Journal of Applied Physics, 2016, 119, .	1.1	5
665	Progress on mid-IR graphene photonics and biochemical applications. Frontiers of Optoelectronics, 2016, 9, 259-269.	1.9	15
666	Photoconductivities in MoS ₂ Nanoflake Photoconductors. Nanoscale Research Letters, 2016, 11, 124.	3.1	32
667	Thirty Gigahertz Optoelectronic Mixing in Chemical Vapor Deposited Graphene. Nano Letters, 2016, 16, 2988-2993.	4.5	26
668	Graphene-quantum dot hybrid materials on the road to optoelectronic applications. Synthetic Metals, 2016, 219, 33-43.	2.1	14
669	Graphene on plasmonic metamaterials for infrared detection. Proceedings of SPIE, 2016, , .	0.8	1
670	Dynamic tuning of mid-infrared plasmons in grapheneâ€“bufferâ€“SiO ₂ â€“Si nanostructures. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1303.	0.9	15
671	Single-pixel camera with one graphene photodetector. Optics Express, 2016, 24, 400.	1.7	22
672	Van der Waals stacked 2D layered materials for optoelectronics. 2D Materials, 2016, 3, 022001.	2.0	213
673	Direct Threat of UVâ€“Ozone-Treated Indium-Tin Oxide in Organic Optoelectronics and Stability Enhancement Using Graphene Oxide as Anode Buffer Layer. , 2016, , 365-380.		1
674	Fast switching response of Na-doped CZTS photodetector from visible to NIR range. Solar Energy Materials and Solar Cells, 2016, 157, 28-34.	3.0	57
675	Angle-selective perfect absorption with two-dimensional materials. Light: Science and Applications, 2016, 5, e16052-e16052.	7.7	94
676	On-Chip Integrated, Siliconâ€“Graphene Plasmonic Schottky Photodetector with High Responsivity and Avalanche Photogain. Nano Letters, 2016, 16, 3005-3013.	4.5	265

#	ARTICLE	IF	CITATIONS
677	Simscape® based ultra-fast design exploration: graphene-nanoelectronic circuit case studies. Analog Integrated Circuits and Signal Processing, 2016, 87, 407-420.	0.9	4
678	Magnetic properties of point defects in proton irradiated diamond. Journal of Magnetism and Magnetic Materials, 2016, 413, 76-80.	1.0	9
679	Magical Allotropes of Carbon: Prospects and Applications. Critical Reviews in Solid State and Materials Sciences, 2016, 41, 257-317.	6.8	167
680	Enhanced light absorption in graphene via a liquid-crystalline optical diode. Optics Communications, 2016, 374, 24-28.	1.0	2
681	Contacts between Two- and Three-Dimensional Materials: Ohmic, Schottky, and Heterojunctions. ACS Nano, 2016, 10, 4895-4919.	7.3	308
682	Engineering optical properties of semiconductor metafilm superabsorbers. , 2016, , .		1
683	Optoelectronic devices based on two-dimensional transition metal dichalcogenides. Nano Research, 2016, 9, 1543-1560.	5.8	186
684	MoS ₂ monolayers on nanocavities: enhancement in light-matter interaction. 2D Materials, 2016, 3, 025017.	2.0	72
685	Integrated high responsivity photodetectors based on graphene/glass hybrid waveguide. Optics Letters, 2016, 41, 4214.	1.7	3
686	Photodetectors based on two dimensional materials. Journal of Semiconductors, 2016, 37, 091001.	2.0	29
687	Silicon-plus photonics. Frontiers of Optoelectronics, 2016, 9, 436-449.	1.9	8
688	Substrate dependent photochemical oxidation of monolayer graphene. RSC Advances, 2016, 6, 8489-8494.	1.7	4
689	Microwave Photodetection in an Ultraclean Suspended Bilayer Graphene p-n Junction. Nano Letters, 2016, 16, 6988-6993.	4.5	26
690	Controllable growth and characterizations of hybrid spiral-like atomically thin molybdenum disulfide. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 84, 378-383.	1.3	6
691	On the Gaussian Pulse Propagation Through Multilayer Graphene Plasmonic Waveguides: Impact of Electrostatic Screening and Frequency Dispersion on Group Velocity and Pulse Distortion. IEEE Nanotechnology Magazine, 2016, 15, 936-946.	1.1	8
692	Controlled Generation of a p-n Junction in a Waveguide Integrated Graphene Photodetector. Nano Letters, 2016, 16, 7107-7112.	4.5	166
693	A Broadband Optical Modulator Based on a Graphene Hybrid Plasmonic Waveguide. Journal of Lightwave Technology, 2016, 34, 4948-4953.	2.7	60
694	Fast Room-Temperature Detection of Terahertz Quantum Cascade Lasers with Graphene-Loaded Bow-Tie Plasmonic Antenna Arrays. ACS Photonics, 2016, 3, 1747-1753.	3.2	42

#	ARTICLE	IF	CITATIONS
695	Visible to short wavelength infrared In ₂ Se ₃ -nanoflake photodetector gated by a ferroelectric polymer. <i>Nanotechnology</i> , 2016, 27, 364002.	1.3	63
696	High-quality infrared imaging with graphene photodetectors at room temperature. <i>Nanoscale</i> , 2016, 8, 16065-16072.	2.8	47
697	Human-Like Sensing and Reflexes of Graphene-Based Films. <i>Advanced Science</i> , 2016, 3, 1600130.	5.6	37
698	Graphene transverse electric surface plasmon detection using nonreciprocity modal discrimination. <i>Physical Review B</i> , 2016, 94, .	1.1	21
699	Stable, Fast UV-Vis-NIR Photodetector with Excellent Responsivity, Detectivity, and Sensitivity Based on In ₂ Te ₃ Films with a Direct Bandgap. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 20872-20879.	4.0	85
700	Chemically-doped graphene with improved surface plasmon characteristics: an optical near-field study. <i>Nanoscale</i> , 2016, 8, 16621-16630.	2.8	14
701	Open-Shell Character and Nonlinear Optical Properties of Nanographenes. , 2016, , 437-456.		3
702	Optical Coupling of Graphene Sheets. , 2016, , 457-468.		0
703	Experimental Demonstration of Total Absorption over 99% in the Near Infrared for Monolayer Graphene-Based Subwavelength Structures. <i>Advanced Optical Materials</i> , 2016, 4, 1955-1960.	3.6	99
704	Enhanced near-infrared absorption in graphene with multilayer metal-dielectric-metal nanostructure. <i>Optics Express</i> , 2016, 24, 20002.	1.7	49
705	High Responsivity, Large-Area Graphene/MoS ₂ Flexible Photodetectors. <i>ACS Nano</i> , 2016, 10, 8252-8262.	7.3	275
706	InGaAs Nanomembrane/Si van der Waals Heterojunction Photodiodes with Broadband and High Photoresponsivity. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26105-26111.	4.0	32
707	Scaling of excitons in graphene nanodots. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 28365-28369.	1.3	11
708	Surface Charge Transfer Doping of Low-Dimensional Nanostructures toward High-Performance Nanodevices. <i>Advanced Materials</i> , 2016, 28, 10409-10442.	11.1	144
709	Theoretical Study of Transition Metal Dichalcogenides. , 2016, , 157-178.		1
710	Tunable infrared plasmonic waveguides using graphene based hyperbolic metamaterials. <i>Optik</i> , 2016, 127, 9640-9646.	1.4	8
711	Terahertz ratchet effects in graphene with a lateral superlattice. <i>Physical Review B</i> , 2016, 93, .	1.1	77
712	Photovoltage Enhancement in Twisted-Bilayer Graphene Using Surface Plasmon Resonance. <i>Advanced Optical Materials</i> , 2016, 4, 1703-1710.	3.6	29

#	ARTICLE	IF	CITATIONS
713	Tuning the magnetic phase of a graphene nanodot using its dielectric environment. <i>Nanotechnology</i> , 2016, 27, 155201.	1.3	4
714	Superior dielectric breakdown strength of graphene and carbon nanotube infused nano-oils. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2016, 23, 943-956.	1.8	43
715	Photoinduced Schottky Barrier Lowering in 2D Monolayer WS ₂ Photodetectors. <i>Advanced Optical Materials</i> , 2016, 4, 1573-1581.	3.6	62
716	Single-layer graphene-TiO ₂ nanotubes array heterojunction for ultraviolet photodetector application. <i>Applied Surface Science</i> , 2016, 387, 1162-1168.	3.1	56
717	Photoresponse enhancement in graphene/silicon infrared detector by controlling photocarrier collection. <i>Materials Research Express</i> , 2016, 3, 076203.	0.8	11
718	Organic Dye Graphene Hybrid Structures with Spectral Color Selectivity. <i>Advanced Functional Materials</i> , 2016, 26, 6593-6600.	7.8	31
719	Silicon-plus photonics. , 2016, , .		0
720	ZnO quantum dot-doped graphene/h-BN/GaN-heterostructure ultraviolet photodetector with extremely high responsivity. <i>Nanotechnology</i> , 2016, 27, 48LT03.	1.3	43
721	Reprint of "Graphene-quantum dot hybrid materials on the road to optoelectronic applications" • <i>Synthetic Metals</i> , 2016, 222, 23-33.	2.1	5
722	Photonics and optoelectronics of two-dimensional materials beyond graphene. <i>Nanotechnology</i> , 2016, 27, 462001.	1.3	259
723	Multimodal Photodiode and Phototransistor Device Based on Two-Dimensional Materials. <i>ACS Nano</i> , 2016, 10, 10500-10506.	7.3	16
724	Bolometric effect in a waveguide-integrated graphene photodetector. <i>Chinese Physics B</i> , 2016, 25, 118103.	0.7	17
725	Selectively enhanced photocurrent generation in twisted bilayer graphene with van Hove singularity. <i>Nature Communications</i> , 2016, 7, 10699.	5.8	136
726	Probing electrical signals in the retina via graphene-integrated microfluidic platforms. <i>Nanoscale</i> , 2016, 8, 19043-19049.	2.8	14
727	Integration of conductive reduced graphene oxide into microstructured optical fibres for optoelectronics applications. <i>Scientific Reports</i> , 2016, 6, 21682.	1.6	10
728	Integrating an electrically active colloidal quantum dot photodiode with a graphene phototransistor. <i>Nature Communications</i> , 2016, 7, 11954.	5.8	217
729	Photo-FETs: Phototransistors Enabled by 2D and 0D Nanomaterials. <i>ACS Photonics</i> , 2016, 3, 2197-2210.	3.2	217
730	Graphene/nitrogen-functionalized graphene quantum dot hybrid broadband photodetectors with a buffer layer of boron nitride nanosheets. <i>Nanoscale</i> , 2016, 8, 19677-19683.	2.8	50

#	ARTICLE	IF	CITATIONS
731	Epitaxial Ultrathin Organic Crystals on Graphene for High Efficiency Phototransistors. <i>Advanced Materials</i> , 2016, 28, 5200-5205.	11.1	134
732	Mechanical Modulation of a Hybrid Graphene-Microfiber Structure. <i>Advanced Optical Materials</i> , 2016, 4, 853-857.	3.6	16
733	High Responsivity Phototransistors Based on Few-Layer ReS ₂ for Weak Signal Detection. <i>Advanced Functional Materials</i> , 2016, 26, 1938-1944.	7.8	270
734	Ultra-Thin Layered Ternary Single Crystals [Sn(S _x Se _{1-x}) ₂] with Bandgap Engineering for High Performance Phototransistors on Versatile Substrates. <i>Advanced Functional Materials</i> , 2016, 26, 3630-3638.	7.8	77
735	Nanoscale mapping of intrinsic defects in single-layer graphene using tip-enhanced Raman spectroscopy. <i>Chemical Communications</i> , 2016, 52, 8227-8230.	2.2	38
736	Overview of detector technologies for EO/IR sensing applications. , 2016, , .		2
737	Flexible graphene field effect transistor with ferroelectric polymer gate. <i>Optical and Quantum Electronics</i> , 2016, 48, 1.	1.5	21
738	Synthesis of PbI ₂ nanowires for high sensitivity photodetectors. <i>RSC Advances</i> , 2016, 6, 59445-59449.	1.7	20
739	Single Crossed Heterojunction Assembled with Quantum-Dot-Embedded Polyaniline Nanowires. <i>ACS Photonics</i> , 2016, 3, 1256-1264.	3.2	30
740	A self-powered sensitive ultraviolet photodetector based on epitaxial graphene on silicon carbide. <i>Chinese Physics B</i> , 2016, 25, 067205.	0.7	15
741	Advances in graphene-based optoelectronics, plasmonics and photonics. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2016, 7, 013002.	0.7	22
742	Electromagnetic spectrum transformation in space-time modulated and dispersion engineered graphene surface plasmons. , 2016, , .		2
743	Graphene-GaAs-graphene stacked layers for the improvement of the transmission at the wavelength of 1.55 μm. <i>Optical Materials</i> , 2016, 57, 120-124.	1.7	11
744	Anomalous photoresponse in the deep-ultraviolet due to resonant excitonic effects in oxygen plasma treated few-layer graphene. <i>Carbon</i> , 2016, 106, 330-335.	5.4	19
745	Effect of Substrate Surface Atom Constitution and The Migration Characteristics of Reactive Atoms on Crystal Structure of Mg _x Zn _{1-x} O Thin Films Deposited by PLD Method. <i>Journal of Physical Chemistry C</i> , 2016, 120, 12568-12577.	1.5	12
746	Creating Reversible p-n Junction on Graphene through Ferritin Adsorption. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 8192-8200.	4.0	12
747	High responsivity sensing of unfocused laser and white light using graphene photodetectors grown by chemical vapor deposition. <i>Optical Materials Express</i> , 2016, 6, 2158.	1.6	3
748	Superluminal light propagation in a monolayer graphene system under external magnetic field. <i>Optik</i> , 2016, 127, 8436-8442.	1.4	5

#	ARTICLE	IF	CITATIONS
749	Broadband Black-Phosphorus Photodetectors with High Responsivity. <i>Advanced Materials</i> , 2016, 28, 3481-3485.	11.1	364
750	Tunable functionalization of graphene nanosheets for graphene-organic hybrid photodetectors. <i>Nanotechnology</i> , 2016, 27, 075709.	1.3	16
751	Wireless Communication in Data Centers: A Survey. <i>IEEE Communications Surveys and Tutorials</i> , 2016, 18, 1572-1595.	24.8	89
752	Plasmonic photodetectors. , 2016, , 157-193.		8
753	Influence of nanoparticle-graphene separation on the localized surface plasmon resonances of metal nanoparticles. <i>Journal of Nanoparticle Research</i> , 2016, 18, 1.	0.8	3
754	Graphene-gated lateral N photodiode based on silicon-on-insulator process. <i>Applied Physics Express</i> , 2016, 9, 024301.	1.1	0
755	Surface Plasmon Polariton Graphene Photodetectors. <i>Nano Letters</i> , 2016, 16, 8-20.	4.5	161
756	Gate-Voltage Tunability of Plasmons in Single-Layer Graphene Structures Analytical Description, Impact of Interface States, and Concepts for Terahertz Devices. <i>IEEE Nanotechnology Magazine</i> , 2016, 15, 113-121.	1.1	19
757	Hybrid grapheme plasmonic waveguide modulators. , 2016, , .		0
758	Recombination Kinetics and Effects of Superacid Treatment in Sulfur- and Selenium-Based Transition Metal Dichalcogenides. <i>Nano Letters</i> , 2016, 16, 2786-2791.	4.5	233
759	Monolayer MoS ₂ /GaAs heterostructure self-driven photodetector with extremely high detectivity. <i>Nano Energy</i> , 2016, 23, 89-96.	8.2	138
760	Work function-tunable transparent electrodes based on all graphene-based materials for organic-graphene photodetectors. <i>RSC Advances</i> , 2016, 6, 19372-19376.	1.7	10
761	Broadband Photovoltaic Detectors Based on an Atomically Thin Heterostructure. <i>Nano Letters</i> , 2016, 16, 2254-2259.	4.5	322
762	Optoelectronic properties of atomically thin ReSSe with weak interlayer coupling. <i>Nanoscale</i> , 2016, 8, 5826-5834.	2.8	32
763	The tuning of light-matter coupling and dichroism in graphene for enhanced absorption: Implications for graphene-based optical absorption devices. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 115106.	1.3	12
764	Graphene/h-BN/GaAs sandwich diode as solar cell and photodetector. <i>Optics Express</i> , 2016, 24, 134.	1.7	110
765	Exceptional Terahertz Wave Modulation in Graphene Enhanced by Frequency Selective Surfaces. <i>ACS Photonics</i> , 2016, 3, 315-323.	3.2	67
766	Polystyrene nanoparticles enhance photo responsivity of graphene photodetector. <i>Optical Materials Express</i> , 2016, 6, 296.	1.6	3

#	ARTICLE	IF	CITATIONS
767	Tuning infrared guided-mode resonances with graphene. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 426.	0.9	24
768	<i>In situ</i> Raman spectroscopy of the graphene/water interface of a solution-gated field-effect transistor: electron-phonon coupling and spectroelectrochemistry. Nanotechnology, 2016, 27, 045704.	1.3	9
769	Plasmonic-enhanced perovskite-graphene hybrid photodetectors. Nanoscale, 2016, 8, 7377-7383.	2.8	144
770	Present perspectives of broadband photodetectors based on nanobelts, nanoribbons, nanosheets and the emerging 2D materials. Nanoscale, 2016, 8, 6410-6434.	2.8	233
771	Spatially dispersive dynamical response of hot carriers in doped graphene. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 79, 26-37.	1.3	4
772	Preparation of graphene-TiO ₂ nanocomposite and photocatalytic degradation of Rhodamine-B under solar light irradiation. Journal of Experimental Nanoscience, 2016, 11, 722-736.	1.3	45
773	Near-Infrared Photodetector Based on MoS ₂ /Black Phosphorus Heterojunction. ACS Photonics, 2016, 3, 692-699.	3.2	446
774	Thermally induced vibration of circular monolayer graphene considering quantum effects. Acta Mechanica, 2016, 227, 1067-1074.	1.1	3
775	Coupling of Graphene Plasmonics Modes Induced by Near-Field Perturbation at Terahertz Frequencies. Plasmonics, 2016, 11, 1109-1118.	1.8	9
776	Fast and large-area growth of uniform MoS ₂ monolayers on molybdenum foils. Nanoscale, 2016, 8, 2234-2241.	2.8	104
777	Triboelectricity-assisted transfer of graphene for flexible optoelectronic applications. Nano Research, 2016, 9, 899-907.	5.8	6
778	Direct growth of graphene on gallium nitride using C ₂ H ₂ as carbon source. Frontiers of Physics, 2016, 11, 1.	2.4	10
779	Graphene Schottky diodes: An experimental review of the rectifying graphene/semiconductor heterojunction. Physics Reports, 2016, 606, 1-58.	10.3	449
780	A high performance, visible to mid-infrared photodetector based on graphene nanoribbons passivated with HfO ₂ . Nanoscale, 2016, 8, 327-332.	2.8	74
781	Photocurrent generation at ABA/ABC lateral junction in tri-layer graphene photodetector. Carbon, 2016, 96, 454-458.	5.4	12
782	Spectral sensitivity of graphene/silicon heterojunction photodetectors. Solid-State Electronics, 2016, 115, 207-212.	0.8	65
783	Preparing molybdenum disulphide by vapour deposition. Surface Engineering, 2016, 32, 245-251.	1.1	7
784	Graphene Modulators and Switches Integrated on Silicon and Silicon Nitride Waveguide. IEEE Journal of Selected Topics in Quantum Electronics, 2017, 23, 94-100.	1.9	52

#	ARTICLE	IF	CITATIONS
785	Highly conductive free-standing reduced graphene oxide thin films for fast photoelectric devices. Carbon, 2017, 115, 561-570.	5.4	56
786	Detecting Electric Dipoles Interaction at the Interface of Ferroelectric and Electrolyte Using Graphene Field Effect Transistors. ACS Applied Materials & Interfaces, 2017, 9, 4244-4252.	4.0	16
787	Enhanced universal absorption of graphene in a Salisbury screen. Journal of Applied Physics, 2017, 121, .	1.1	13
788	Investigation of the electron-surface phonon interaction effects in graphene on a substrate made of polar materials. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 87, 192-198.	1.3	4
789	Ultrafast Broadband Photodetectors Based on Three-Dimensional Dirac Semimetal Cd ₃ As ₂ . Nano Letters, 2017, 17, 834-841.	4.5	162
790	Fast growth of large single-crystalline graphene assisted by sequential double oxygen passivation. Carbon, 2017, 116, 133-138.	5.4	24
791	Graphene-based mid-infrared room-temperature pyroelectric bolometers with ultrahigh temperature coefficient of resistance. Nature Communications, 2017, 8, 14311.	5.8	151
792	Highly responsive and broadband photodetectors based on WS ₂ –graphene van der Waals epitaxial heterostructures. Journal of Materials Chemistry C, 2017, 5, 1494-1500.	2.7	103
793	High-performance Bi-stage process in reduction of graphene oxide for transparent conductive electrodes. Optical Materials, 2017, 64, 366-375.	1.7	15
794	Ultrabroadband MoS ₂ Photodetector with Spectral Response from 445 to 2717 nm. Advanced Materials, 2017, 29, 1605972.	11.1	256
795	Plasmonics of 2D Nanomaterials: Properties and Applications. Advanced Science, 2017, 4, 1600430.	5.6	162
796	Highly Sensitive, Gate-Tunable, Room-Temperature Mid-Infrared Photodetection Based on Graphene–Bi ₂ Se ₃ Heterostructure. ACS Photonics, 2017, 4, 482-488.	3.2	70
797	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
798	Photoconductive multi-layer graphene photodetectors fabricated on etched silicon-on-insulator substrates. Chinese Physics B, 2017, 26, 028101.	0.7	0
799	Strong tunable absorption enhancement in graphene using dielectric-metal core-shell resonators. Scientific Reports, 2017, 7, 32.	1.6	25
800	Loading the Antenna Gap with Two-Dimensional Electron Gas Transistors: A Versatile Approach for the Rectification of Free-Space Radiation. ACS Photonics, 2017, 4, 837-845.	3.2	2
801	PbS-Decorated WS ₂ Phototransistors with Fast Response. ACS Photonics, 2017, 4, 950-956.	3.2	111
802	Excitonic absorption spectra in graphene nanoflakes: Tuning of exciton binding energy by dielectric environments. Journal of Chemical Physics, 2017, 146, 084705.	1.2	4

#	ARTICLE	IF	CITATIONS
803	Recent progress on integrating two-dimensional materials with ferroelectrics for memory devices and photodetectors. Chinese Physics B, 2017, 26, 037106.	0.7	27
804	Direct Observation of High Photoresponsivity in Pure Graphene Photodetectors. Nanoscale Research Letters, 2017, 12, 93.	3.1	29
805	Rhenium dichalcogenides (ReX ₂ , X = S or Se): an emerging class of TMDs family. Materials Chemistry Frontiers, 2017, 1, 1917-1932.	3.2	51
806	Improving the sensitive property of graphene-based gas sensor by illumination and heating. Sensor Review, 2017, 37, 142-146.	1.0	6
807	Emerging Trends in Phosphorene Fabrication towards Next Generation Devices. Advanced Science, 2017, 4, 1600305.	5.6	285
808	Ultrafast photocurrent measurements of a black phosphorus photodetector. Applied Physics Letters, 2017, 110, .	1.5	44
809	Switching of Photonic Crystal Lasers by Graphene. Nano Letters, 2017, 17, 1892-1898.	4.5	23
810	Slow-light-enhanced energy efficiency for graphene microheaters on silicon photonic crystal waveguides. Nature Communications, 2017, 8, 14411.	5.8	153
811	Ambipolar Barristors for Reconfigurable Logic Circuits. Nano Letters, 2017, 17, 1448-1454.	4.5	29
812	Ion beam modification of two-dimensional materials: Characterization, properties, and applications. Applied Physics Reviews, 2017, 4, 011103.	5.5	168
813	Graphene and PbS quantum dot hybrid vertical phototransistor. Nanotechnology, 2017, 28, 145201.	1.3	25
814	Fabrication and characterization of organic semiconductor based photodetector for optical communication. CSI Transactions on ICT, 2017, 5, 149-160.	0.7	11
815	Position-dependent and millimetre-range photodetection in phototransistors with micrometre-scale graphene on SiC. Nature Nanotechnology, 2017, 12, 668-674.	15.6	55
816	Near-Infrared Photodetectors Based on MoTe ₂ /Graphene Heterostructure with High Responsivity and Flexibility. Small, 2017, 13, 1700268.	5.2	200
817	Topological Crystalline Insulator SnTe/Si Vertical Heterostructure Photodetectors for High-Performance Near-Infrared Detection. ACS Applied Materials & Interfaces, 2017, 9, 14067-14077.	4.0	61
818	Supercapacitor and Photocurrent Performance of Tunable Reduced Graphene Oxide. ChemistrySelect, 2017, 2, 3163-3171.	0.7	14
819	Black phosphorus mid-infrared photodetectors. Applied Physics B: Lasers and Optics, 2017, 123, 1.	1.1	36
820	High Photoresponsivity in Graphene Nanoribbon Field-Effect Transistor Devices Contacted with Graphene Electrodes. Journal of Physical Chemistry C, 2017, 121, 10620-10625.	1.5	45

#	ARTICLE	IF	CITATIONS
821	Active 2D materials for on-chip nanophotonics and quantum optics. <i>Nanophotonics</i> , 2017, 6, 1329-1342.	2.9	38
822	Fast and Highly Sensitive Ionic-Polymer-Gated WS ₂ Graphene Photodetectors. <i>Advanced Materials</i> , 2017, 29, 1700222.	11.1	103
823	Preparation of porous graphene oxide by chemically intercalating a rigid molecule for enhanced removal of typical pharmaceuticals. <i>Carbon</i> , 2017, 119, 101-109.	5.4	42
824	Optoelectronics based on 2D TMDs and heterostructures. <i>Journal of Semiconductors</i> , 2017, 38, 031002.	2.0	69
825	Dynamically Tunable Electromagnetically Induced Transparency in Graphene-Based Coupled Micro-ring Resonators. <i>IEEE Photonics Journal</i> , 2017, 9, 1-9.	1.0	21
826	Graphene for flexible and wearable device applications. <i>Carbon</i> , 2017, 120, 244-257.	5.4	137
827	Large Lateral Photovoltage Observed in MoS ₂ Thickness-Modulated ITO/MoS ₂ /p-Si Heterojunctions. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 18377-18387.	4.0	68
828	Self-driven, broadband and ultrafast photovoltaic detectors based on topological crystalline insulator SnTe/Si heterostructures. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11171-11178.	5.2	40
829	Two-dimensional large-scale bandgap-tunable monolayer MoS ₂ (1 $\bar{1}$ x)/Se ₂ /graphene heterostructures for phototransistors. <i>Journal of Materials Chemistry C</i> , 2017, 5, 5887-5896.	2.7	38
830	Graphene/porous silicon Schottky-junction solar cells. <i>Journal of Alloys and Compounds</i> , 2017, 715, 291-296.	2.8	53
831	Effect of insulator layer in graphene plasmonic metamaterials for infrared detection. , 2017, , .		0
832	Functionalization of graphene by size and doping control and its optoelectronic applications. <i>Proceedings of SPIE</i> , 2017, , .	0.8	5
833	Ultrahigh Responsivity and Detectivity Graphene-Perovskite Hybrid Phototransistors by Sequential Vapor Deposition. <i>Scientific Reports</i> , 2017, 7, 46281.	1.6	61
834	Nonlinear optical response and applications of tin disulfide in the near- and mid-infrared. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	47
835	Graphene-pyramid textured silicon heterojunction for sensitive near-infrared light photodiode. <i>Materials Research Express</i> , 2017, 4, 045022.	0.8	5
836	Transfer-free and printable graphene/ZnO-nanoparticle nanohybrid photodetectors with high performance. <i>Journal of Materials Chemistry C</i> , 2017, 5, 6427-6432.	2.7	21
837	Black Phosphorus/TiO ₂ Composite Photoanode with Enhanced Photoelectrical Performance. <i>ChemElectroChem</i> , 2017, 4, 2373-2377.	1.7	24
838	A two-dimensional semiconductor transistor with boosted gate control and sensing ability. <i>Science Advances</i> , 2017, 3, e1602246.	4.7	65

#	ARTICLE	IF	CITATIONS
839	Ultrafast nonlinear optical response in solution dispersions of black phosphorus. <i>Scientific Reports</i> , 2017, 7, 3352.	1.6	24
840	A parity-time symmetry single-mode laser based on graphene. <i>Journal of Modern Optics</i> , 2017, 64, 2133-2140.	0.6	0
841	Recent Progress on Localized Field Enhanced Two-dimensional Material Photodetectors from Ultraviolet to Visible to Infrared. <i>Small</i> , 2017, 13, 1700894.	5.2	234
842	Extraordinary linear dynamic range in laser-defined functionalized graphene photodetectors. <i>Science Advances</i> , 2017, 3, e1602617.	4.7	67
843	Dimensionality and Interface Engineering of 2D Homologous Perovskites for Boosted Charge-Carrier Transport and Photodetection Performances. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2565-2572.	2.1	77
844	High Photocurrent in Gated Graphene-Silicon Hybrid Photodiodes. <i>ACS Photonics</i> , 2017, 4, 1506-1514.	3.2	78
845	Organics filled one-dimensional TiO ₂ nanowires array ultraviolet detector with enhanced photo-conductivity and dark-resistivity. <i>Nanoscale</i> , 2017, 9, 9095-9103.	2.8	22
846	High performance of graphene photodetector using double-cavity structure. <i>Optical Engineering</i> , 2017, 56, 067108.	0.5	0
847	Development of theoretical approach for describing electronic properties of hetero-interface systems under applied bias voltage. <i>Journal of Chemical Physics</i> , 2017, 146, 084706.	1.2	6
848	Functionalised hexagonal-domain graphene for position-sensitive photodetectors. <i>Nanotechnology</i> , 2017, 28, 124004.	1.3	9
849	Photon-trapping microstructures enable high-speed high-efficiency silicon photodiodes. <i>Nature Photonics</i> , 2017, 11, 301-308.	15.6	167
850	Diketopyrrolopyrrole derivative functionalized graphene for high performance visible-light photodetectors. <i>New Journal of Chemistry</i> , 2017, 41, 4302-4307.	1.4	10
851	Photoresponse of Physically Oxidized Graphene Sensitized by an Organic Dye. <i>Journal of Physical Chemistry C</i> , 2017, 121, 8188-8195.	1.5	1
852	Photodetecting and light-emitting devices based on two-dimensional materials. <i>Chinese Physics B</i> , 2017, 26, 036801.	0.7	30
853	Free-Standing Atomically Thin ZnO Layers via Oxidation of Zinc Chalcogenide Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 13537-13543.	4.0	21
854	Bolometric detection of terahertz quantum cascade laser radiation with graphene-plasmonic antenna arrays. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 174001.	1.3	22
855	Printable Transfer-Free and Wafer-Size MoS ₂ /Graphene van der Waals Heterostructures for High-Performance Photodetection. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 12728-12733.	4.0	82
856	Extremely high-performance visible light photodetector in the Sb ₂ SeTe ₂ nanoflake. <i>Scientific Reports</i> , 2017, 7, 45413.	1.6	31

#	ARTICLE	IF	CITATIONS
857	An Origami Perovskite Photodetector with Spatial Recognition Ability. ACS Applied Materials & Interfaces, 2017, 9, 10921-10928.	4.0	49
858	Photodetectors based on junctions of two-dimensional transition metal dichalcogenides. Chinese Physics B, 2017, 26, 038504.	0.7	56
859	Solid-State Electrolyte-Gated Graphene in Optical Modulators. Advanced Materials, 2017, 29, 1606372.	11.1	19
860	Novel Transfer Behaviors in 2D MoS ₂ /WSe ₂ Heterotransistor and Its Applications in Visible-Near Infrared Photodetection. Advanced Electronic Materials, 2017, 3, 1600502.	2.6	51
861	Graphene integrated photodetectors and opto-electronic devices – a review. Chinese Physics B, 2017, 26, 034203.	0.7	27
862	Absorption behavior in graphene-based one-dimensional photonic crystals containing a x-cut lithium niobate layer. Superlattices and Microstructures, 2017, 105, 74-80.	1.4	15
863	All rGO-on-PVDF-nanofibers based self-powered electronic skins. Nano Energy, 2017, 35, 121-127.	8.2	132
864	Mid-Infrared Pyroresistive Graphene Detector on LiNbO ₃ . Advanced Optical Materials, 2017, 5, 1600723.	3.6	30
865	Graphene Based Terahertz Light Modulator in Total Internal Reflection Geometry. Advanced Optical Materials, 2017, 5, 1600697.	3.6	41
866	Broadband High-Responsivity Photodetectors Based on Large-Scale Topological Crystalline Insulator SnTe Ultrathin Film Grown by Molecular Beam Epitaxy. Advanced Optical Materials, 2017, 5, 1600727.	3.6	48
867	UV-Visible optical photo-detection from porous silicon (PS) MSM device. Superlattices and Microstructures, 2017, 101, 228-235.	1.4	13
868	Numerical Study on Plasmonic Absorption Enhancement by a Rippled Graphene Sheet. Journal of Lightwave Technology, 2017, 35, 320-324.	2.7	47
869	Frequency conversion with nonlinear graphene photodetectors. Nanoscale, 2017, 9, 4082-4089.	2.8	15
870	Broadband Phototransistor Based on CH ₃ NH ₃ PbI ₃ Perovskite and PbSe Quantum Dot Heterojunction. Journal of Physical Chemistry Letters, 2017, 8, 445-451.	2.1	99
871	Atomically Thin-Layered Molybdenum Disulfide (MoS ₂) for Bulk-Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 3223-3245.	4.0	207
872	Electric Field Effect in Two-Dimensional Transition Metal Dichalcogenides. Advanced Functional Materials, 2017, 27, 1602404.	7.8	57
873	Broadband photovoltaic effect of n-type topological insulator Bi ₂ Te ₃ films on p-type Si substrates. Nano Research, 2017, 10, 1872-1879.	5.8	31
874	Dynamical centrosymmetry breaking – A novel mechanism for second harmonic generation in graphene. Annals of Physics, 2017, 378, 24-32.	1.0	6

#	ARTICLE	IF	CITATIONS
875	Enhanced Graphene Photodetector with Fractal Metasurface. Nano Letters, 2017, 17, 57-62.	4.5	106
876	High-responsivity reduced graphene oxide gel photodetectors for visible-light detection with a large detection area and an end-contact interface. Journal of Materials Chemistry C, 2017, 5, 882-888.	2.7	14
877	Fully Suspended Reduced Graphene Oxide Photodetector with Annealing Temperature-Dependent Broad Spectral Binary Photoresponses. ACS Photonics, 2017, 4, 2797-2806.	3.2	36
878	Photodetectors based on sensitized two-dimensional transition metal dichalcogenides—A review. Journal of Materials Research, 2017, 32, 4115-4131.	1.2	46
879	Transient Carrier Cooling Enhanced by Grain Boundaries in Graphene Monolayer. ACS Applied Materials & Interfaces, 2017, 9, 41026-41033.	4.0	6
880	Ultracompact graphene-assisted ring resonator optical router. Optics Communications, 2017, 405, 73-79.	1.0	13
881	Midinfrared Electro-optic Modulation in Few-Layer Black Phosphorus. Nano Letters, 2017, 17, 6315-6320.	4.5	96
883	Photocurrent enhancement of graphene photodetectors by photon tunneling of light into surface plasmons. Journal of Optics (United Kingdom), 2017, 19, 105001.	1.0	3
884	Photogating in Low Dimensional Photodetectors. Advanced Science, 2017, 4, 1700323.	5.6	622
885	Tailoring of electromagnetic field localizations by two-dimensional graphene nanostructures. Light: Science and Applications, 2017, 6, e17057-e17057.	7.7	56
886	Enhanced photoelectric performance of composite nanostructures combining monolayer graphene and a RbAg4I5 film. Applied Physics Letters, 2017, 110, .	1.5	8
887	Highly Efficient and Air-Stable Infrared Photodetector Based on 2D Layered Graphene—Black Phosphorus Heterostructure. ACS Applied Materials & Interfaces, 2017, 9, 36137-36145.	4.0	185
888	Sensitized monolayer MoS ₂ phototransistors with ultrahigh responsivity. Journal of Materials Chemistry C, 2017, 5, 11614-11619.	2.7	21
889	Excitonic effects and optical spectra of graphene nanoflakes. Journal of Applied Physics, 2017, 122, 084301.	1.1	2
890	Microscopic understanding of the photoconduction effect in graphene. Physical Review B, 2017, 96, .	1.1	5
891	Carbon—Nanotube—Confined Vertical Heterostructures with Asymmetric Contacts. Advanced Materials, 2017, 29, 1702942.	11.1	21
892	High-performance photo detector based on hydrothermally grown SnO ₂ nanowire/reduced graphene oxide (rGO) hybrid material. Organic Electronics, 2017, 50, 359-366.	1.4	37
893	Ultrafast electron dynamics in twisted graphene by femtosecond photoemission electron microscopy. Carbon, 2017, 124, 49-56.	5.4	12

#	ARTICLE	IF	CITATIONS
894	Dispersion characteristics of THz surface plasmons in nonlinear graphene-based parallel-plate waveguide with Kerr-type core dielectric. <i>Journal of Applied Physics</i> , 2017, 122, 083101.	1.1	7
895	Efficient electro-optic modulation in low-loss graphene-plasmonic slot waveguides. <i>Nanoscale</i> , 2017, 9, 15576-15581.	2.8	94
896	Efficient absorption by monolayer graphene in microring resonator. <i>Journal of Physics: Conference Series</i> , 2017, 844, 012020.	0.3	1
897	Holographic diode. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2017, 381, 3536-3541.	0.9	2
898	Monolithic optoelectronic integrated broadband optical receiver with graphene photodetectors. <i>Nanophotonics</i> , 2017, 6, 1343-1352.	2.9	11
899	Impact of short duration, high-flow H ₂ annealing on graphene synthesis and surface morphology with high spatial resolution assessment of coverage. <i>Carbon</i> , 2017, 125, 318-326.	5.4	12
900	Ultrasensitive all-2D MoS ₂ phototransistors enabled by an out-of-plane MoS ₂ PN homojunction. <i>Nature Communications</i> , 2017, 8, 572.	5.8	181
901	Flexible film broadband absorber based on diamond-graphite mixture and polyethylene. <i>Optical Materials</i> , 2017, 73, 388-392.	1.7	5
902	Characterization of the CVD Graphene Monolayer as an Active Element of a One-Port Microwave Device. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 4340-4345.	1.6	1
903	Hybrid WSe ₂ /In ₂ O ₃ Phototransistor with Ultrahigh Detectivity by Efficient Suppression of Dark Currents. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 34489-34496.	4.0	47
904	Enhancing light absorption in graphene with plasmonic lattices. <i>Europhysics Letters</i> , 2017, 119, 17006.	0.7	7
905	Flexible Broadband Graphene Photodetectors Enhanced by Plasmonic Cu ₃ P Colloidal Nanocrystals. <i>Small</i> , 2017, 13, 1701881.	5.2	63
906	Li-intercalated graphene on SiC(0001): An STM study. <i>Physical Review B</i> , 2017, 96, .	1.1	37
907	Ultrafast Processes in Graphene: From Fundamental Manybody Interactions to Device Applications. <i>Annalen Der Physik</i> , 2017, 529, 1700022.	0.9	10
908	Carrier Dynamics in Graphene: Ultrafast Many-Particle Phenomena. <i>Annalen Der Physik</i> , 2017, 529, 1700038.	0.9	26
909	Numerical analysis of nonlinear multimode interference waveguide as a refractive index sensor. <i>Proceedings of SPIE</i> , 2017, , .	0.8	0
910	Graphene-mediated wafer bonding to prepare monolayer-cored double heterostructures for high-performance nanooptoelectronics. , 2017, , .		1
911	Highly stable and flexible photodetector arrays based on low dimensional CsPbBr ₃ microcrystals and on-paper pencil-drawn electrodes. <i>Journal of Materials Chemistry C</i> , 2017, 5, 7441-7445.	2.7	51

#	ARTICLE	IF	CITATIONS
912	Terahertz Electric Field Driven Electric Currents and Ratchet Effects in Graphene. <i>Annalen Der Physik</i> , 2017, 529, 1600406.	0.9	22
913	A proposal of a perfect graphene absorber with enhanced design and fabrication tolerance. <i>Scientific Reports</i> , 2017, 7, 4760.	1.6	20
914	Wafer-Scale Statistical Analysis of Graphene FETsâ€”Part I: Wafer-Scale Fabrication and Yield Analysis. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 3919-3926.	1.6	9
915	Rectified photocurrent in a planar ITO/graphene/ITO photodetector on SiC by local irradiation of ultraviolet light. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 405102.	1.3	3
916	Ultrathin ternary semiconductor TlGaSe ₂ phototransistors with broad-spectral response. <i>2D Materials</i> , 2017, 4, 035021.	2.0	22
917	A light-stimulated synaptic device based on graphene hybrid phototransistor. <i>2D Materials</i> , 2017, 4, 035022.	2.0	186
918	Ultrafast momentum imaging of pseudospin-flip excitations in graphene. <i>Physical Review B</i> , 2017, 96, .	1.1	20
919	Wafer-Scale Statistical Analysis of Graphene Field-Effect Transistorsâ€”Part II: Analysis of Device Properties. <i>IEEE Transactions on Electron Devices</i> , 2017, 64, 3927-3933.	1.6	14
920	Graphene: Optoelectronic Devices. , 0, , 180-196.		0
921	Reduced graphene oxide film based highly responsive infrared detector. <i>Materials Research Express</i> , 2017, 4, 085603.	0.8	8
922	Ultra-broadband graphene-InSb heterojunction photodetector. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	30
923	Enhanced Photoresponsivity From Hybrid-ZnO Nanowires With White LED 400â€”700-nm Illumination. <i>IEEE Journal of Quantum Electronics</i> , 2017, 53, 1-6.	1.0	2
924	A layer-by-layer sensing architecture based on dendrimer and ionic liquid supported reduced graphene oxide for simultaneous hollow-fiber solid phase microextraction and electrochemical determination of anti-cancer drug imatinib in biological samples. <i>Journal of Electroanalytical Chemistry</i> , 2017, 801, 439-449.	1.9	52
925	Dark excitons and tunable optical gap in graphene nanodots. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 23131-23137.	1.3	13
926	Suppression of supercollision carrier cooling in high mobility graphene on SiC(T_j ETQq0 0 0 rgBT /Overlock 10 Tf 50 187 Tc	1.1	27
927	Highly responsive photoconductance in a Sb ₂ SeTe ₂ topological insulator nanosheet at room temperature. <i>RSC Advances</i> , 2017, 7, 39057-39062.	1.7	32
928	Effect of doping on the characteristics of infrared photodetectors based on van der Waals heterostructures with multiple graphene layers. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	12
929	Optical Properties and Optoelectronic Applications of Black Phosphorus. , 0, , 435-457.		0

#	ARTICLE	IF	CITATIONS
930	Monolayer Graphene Can Emit SHG Waves. Optical Data Processing and Storage, 2017, 3, .	3.3	3
931	An electrically tunable metasurface integrated with graphene for mid-infrared light modulation. Chinese Physics B, 2017, 26, 114101.	0.7	4
932	Stable Graphene-Two-Dimensional Multiphase Perovskite Heterostructure Phototransistors with High Gain. Nano Letters, 2017, 17, 7330-7338.	4.5	88
933	Problems and challenges of emerging technology networksâˆ™onâˆ™ chip: A review. Microprocessors and Microsystems, 2017, 53, 1-20.	1.8	30
934	Mechanistic view on efficient photodetection by solvothermally reduced graphene oxide. Journal of Materials Science: Materials in Electronics, 2017, 28, 14818-14826.	1.1	9
935	Nanostructured-NiO/Si heterojunction photodetector. Materials Science in Semiconductor Processing, 2017, 71, 29-34.	1.9	61
936	Ultra-high sensitivity infra-red detection and temperature effects in a grapheneâ€“tellurium nanowire binary hybrid. Nanoscale, 2017, 9, 9284-9290.	2.8	31
937	Optical, photonic and optoelectronic properties of graphene, h-BN and their hybrid materials. Nanophotonics, 2017, 6, 943-976.	2.9	78
938	Carbon Photodetectors: The Versatility of Carbon Allotropes. Advanced Energy Materials, 2017, 7, 1601574.	10.2	44
939	Photoelectric polarization-sensitive broadband photoresponse from interface junction states in graphene. 2D Materials, 2017, 4, 015002.	2.0	3
940	First-principles study of nanotubes within the tetragonal, hexagonal and dodecagonal cycle structures. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 86, 129-135.	1.3	3
941	Highly efficient, high speed vertical photodiodes based on few-layer MoS ₂ . 2D Materials, 2017, 4, 015004.	2.0	22
942	Enhanced photoresponse of Cu ₂ ZnSn(S, Se) ₄ based photodetector in visible range. Journal of Alloys and Compounds, 2017, 694, 119-123.	2.8	46
943	Triaxial compressive strain in bilayer graphene enabled by nitride stressor layer. Extreme Mechanics Letters, 2017, 11, 77-83.	2.0	6
944	Graphene based heterostructures used for high performance broadband photodetectors. , 2017, , .		0
945	Ultraviolet light induced photocurrent response of graphene based field effect transistors. , 2017, , .		0
946	Robust broad spectral photodetection (UV-NIR) and ultra high responsivity investigated in nanosheets and nanowires of Bi ₂ Te ₃ under harsh nano-milling conditions. Scientific Reports, 2017, 7, 17911.	1.6	67
947	Cavity nonlinear optics with layered materials. Nanophotonics, 2017, 7, 355-370.	2.9	43

#	ARTICLE	IF	CITATIONS
948	Quantum Hall Dual-Band Infrared Photodetector. Physical Review Applied, 2017, 8, .	1.5	5
949	Electrochemical half-reaction-assisted sub-bandgap photon sensing in a graphene hybrid photodetector. NPC Asia Materials, 2017, 9, e436-e436.	3.8	6
950	Spectral photovoltaic response of graphene-silicon heterojunction. Applied Physics Letters, 2017, 111, .	1.5	9
951	Detection and up-conversion of infrared radiation using van der Waals heterostructures with graphene layers. , 2017, , .		0
952	Graphene photo-detector enhanced by plasmonic coupling. , 2017, , .		0
953	Graphene Oxide Doped SU-8 Waveguide and Its Application as Saturable Absorber. IEEE Photonics Journal, 2017, 9, 1-7.	1.0	2
954	Practical Perfect Absorption in Monolayer Graphene by Prism Coupling. IEEE Photonics Journal, 2017, 9, 1-10.	1.0	4
955	6. Graphene via Molecule-Assisted Ultrasound- Induced Liquid-Phase Exfoliation: A Supramolecular Approach. , 2017, , .		0
956	Monolayer-graphene-based perfect absorption structures in the near infrared. Optics Express, 2017, 25, 13079.	1.7	58
957	Nonlinear response of infrared photodetectors based on van der Waals heterostructures with graphene layers. Optics Express, 2017, 25, 5536.	1.7	18
958	High extinction ratio D-shaped fiber polarizers coated by a double graphene/PMMA stack. Optics Express, 2017, 25, 13278.	1.7	28
959	All-optical phase shifter and switch near 1550nm using tungsten disulfide (WS ₂) deposited tapered fiber. Optics Express, 2017, 25, 17639.	1.7	107
960	Ultra-multiband absorption enhancement of graphene in a metal-dielectric-graphene sandwich structure covering terahertz to mid-infrared regime. Optics Express, 2017, 25, 19185.	1.7	37
961	Tunable unidirectional surface plasmon polariton launcher utilizing a graphene-based single asymmetric nanoantenna. Optical Materials Express, 2017, 7, 569.	1.6	12
962	Hybrid metasurface for broadband enhancing optical absorption and Raman spectroscopy of graphene. Optical Materials Express, 2017, 7, 3591.	1.6	8
963	Graphene plasmonics for surface enhancement near-infrared absorptivity. Optics Express, 2017, 25, 16400.	1.7	33
964	The Property, Preparation and Application of Topological Insulators: A Review. Materials, 2017, 10, 814.	1.3	119
965	An Al ₂ O ₃ Gating Substrate for the Greater Performance of Field Effect Transistors Based on Two-Dimensional Materials. Nanomaterials, 2017, 7, 286.	1.9	16

#	ARTICLE	IF	CITATIONS
966	Tailoring total absorption in a graphene monolayer covered subwavelength multilayer dielectric grating structure at near-infrared frequencies. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2017, 34, 861.	0.9	26
967	Pronounced Photovoltaic Response from Multi-layered MoTe ₂ Phototransistor with Asymmetric Contact Form. <i>Nanoscale Research Letters</i> , 2017, 12, 603.	3.1	7
968	Highly polarization sensitive photodetectors based on quasi-1D titanium trisulfide (TiS ₃). <i>Nanotechnology</i> , 2018, 29, 184002.	1.3	67
969	Interfacial engineering in graphene bandgap. <i>Chemical Society Reviews</i> , 2018, 47, 3059-3099.	18.7	153
970	Reduced graphene oxide (rGO) based wideband optical sensor and the role of Temperature, Defect States and Quantum Efficiency. <i>Scientific Reports</i> , 2018, 8, 3537.	1.6	209
971	Light and Matter Interaction in Two-Dimensional Atomically Thin Films. <i>Bulletin of the Chemical Society of Japan</i> , 2018, 91, 761-771.	2.0	22
972	Graphene devices based on laser scribing technology. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 04FA01.	0.8	19
973	High performance of visible-NIR broad spectral photocurrent application of monodisperse PbSe nanocubes decorated on rGO sheets. <i>Journal of Applied Physics</i> , 2018, 123, .	1.1	25
974	Layer-controlled synthesis of wafer-scale MoSe ₂ nanosheets for photodetector arrays. <i>Journal of Materials Science</i> , 2018, 53, 8436-8444.	1.7	38
975	Recent advances in phosphorene as a sensing material. <i>Nano Today</i> , 2018, 20, 13-32.	6.2	134
976	Infrared photodetectors based on reduced graphene oxide nanoparticles and graphene oxide. <i>Laser Physics</i> , 2018, 28, 066204.	0.6	12
977	Anisotropic Broadband Photoresponse of Layered Type-II Weyl Semimetal MoTe ₂ . <i>Advanced Materials</i> , 2018, 30, e1707152.	11.1	139
978	Atomically thin noble metal dichalcogenide: a broadband mid-infrared semiconductor. <i>Nature Communications</i> , 2018, 9, 1545.	5.8	367
979	Graphene-silver hybrid devices for sensitive photodetection in the ultraviolet. <i>Nanoscale</i> , 2018, 10, 7685-7693.	2.8	32
980	Effect of layer number and metal-chloride dopant on multiple layers of graphene/porous Si solar cells. <i>Journal of Applied Physics</i> , 2018, 123, 123101.	1.1	22
981	Sensor Embodiment and Flexible Electronics. , 2018, , 197-279.		5
982	Broadband Anisotropic Photoresponse of the Hydrogen Atom-Version Type-II Weyl Semimetal Candidate TaIrTe ₄ . <i>ACS Nano</i> , 2018, 12, 4055-4061.	7.3	94
983	Graphene-based plasmonic waveguide devices for electronic-photonic integrated circuit. <i>Optics and Laser Technology</i> , 2018, 106, 76-86.	2.2	20

#	ARTICLE	IF	CITATIONS
984	Chemical Principles of Topological Semimetals. <i>Chemistry of Materials</i> , 2018, 30, 3155-3176.	3.2	166
985	Planar hybrid carbon-decorated zinc oxide nanowires for infrared photodetection. <i>Journal of Nanoparticle Research</i> , 2018, 20, 1.	0.8	1
986	Photocurrent Polarity Controlled by Light Wavelength in Self-Powered ZnO Nanowires/SnS Photodetector System. <i>IScience</i> , 2018, 1, 16-23.	1.9	87
987	Two-Dimensional Materials for Thermal Management Applications. <i>Joule</i> , 2018, 2, 442-463.	11.7	353
988	A highly polarization sensitive antimonene photodetector with a broadband photoresponse and strong anisotropy. <i>Journal of Materials Chemistry C</i> , 2018, 6, 2509-2514.	2.7	66
989	Monte Carlo studies of thermalization of electron-hole pairs in spin-polarized degenerate electron gas in monolayer graphene. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	1.1	1
990	Visualizing Photothermal Anisotropy in Black Phosphorus by Total Internal Reflection Pump-Probe Technique. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701605.	1.9	9
991	Low-Dimensional Plasmonic Photodetectors: Recent Progress and Future Opportunities. <i>Advanced Optical Materials</i> , 2018, 6, 1701282.	3.6	75
992	Graphene-based nonvolatile terahertz switch with asymmetric electrodes. <i>Scientific Reports</i> , 2018, 8, 1562.	1.6	13
993	Photo-thermoelectric Current Enhancement in Graphene-Based Photodetectors Using Plasmonic Nanostructures. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2018, 24, 1-7.	1.9	7
994	Graphene-Silicon-Based High-Sensitivity and Broadband Phototransistor. <i>IEEE Electron Device Letters</i> , 2018, 39, 216-219.	2.2	22
995	Waveguide Engineering of Graphene Optoelectronics Modulators and Polarizers. <i>IEEE Photonics Journal</i> , 2018, 10, 1-17.	1.0	40
996	Exploring Two-Dimensional Materials toward the Next-Generation Circuits: From Monomer Design to Assembly Control. <i>Chemical Reviews</i> , 2018, 118, 6236-6296.	23.0	410
997	Large-area synthesis and photoelectric properties of few-layer MoSe ₂ on molybdenum foils. <i>Nanotechnology</i> , 2018, 29, 125605.	1.3	20
998	Novel Transparent and Self-Powered UV Photodetector Based on Crossed ZnO Nanofiber Array Homojunction. <i>Small</i> , 2018, 14, e1703754.	5.2	332
999	Carrier Transport Dynamics in High Speed Black Phosphorus Photodetectors. <i>ACS Photonics</i> , 2018, 5, 1412-1417.	3.2	15
1000	Towards substrate engineering of graphene-silicon Schottky diode photodetectors. <i>Nanoscale</i> , 2018, 10, 3399-3409.	2.8	43
1001	Giant Photoresponse in Quantized SrRuO ₃ Monolayer at Oxide Interfaces. <i>ACS Photonics</i> , 2018, 5, 1041-1049.	3.2	23

#	ARTICLE	IF	CITATIONS
1002	Hybrid Organic/PbS Quantum Dot Bilayer Photodetector with Low Dark Current and High Detectivity. <i>Advanced Functional Materials</i> , 2018, 28, 1706690.	7.8	143
1003	Graphene nanoribbon photodetectors based on an asymmetric potential barrier: a new concept and a new structure. <i>Journal of Computational Electronics</i> , 2018, 17, 531-539.	1.3	5
1004	Facile one-pot liquid exfoliation preparation of molybdenum sulfide and graphene heterojunction for photoelectrochemical performance. <i>Journal of Materials Science</i> , 2018, 53, 7744-7754.	1.7	18
1005	Accurate modeling of defects in graphene transport calculations. <i>Physical Review B</i> , 2018, 97, .	1.1	18
1006	Raman spectroscopy of graphene-based materials and its applications in related devices. <i>Chemical Society Reviews</i> , 2018, 47, 1822-1873.	18.7	1,274
1007	Micromachining of graphene based micro-capacitor using picosecond laser ablation. <i>Microelectronic Engineering</i> , 2018, 189, 69-73.	1.1	12
1008	Graphene and its sensor-based applications: A review. <i>Sensors and Actuators A: Physical</i> , 2018, 270, 177-194.	2.0	475
1009	Assembly and Self-Assembly of Nanomembrane Materials—From 2D to 3D. <i>Small</i> , 2018, 14, e1703665.	5.2	56
1010	High-Performance Photoelectrochemical Photodetector Based on Liquid-Exfoliated Few-Layered InSe Nanosheets with Enhanced Stability. <i>Advanced Functional Materials</i> , 2018, 28, 1705237.	7.8	258
1011	High-Responsivity Photodetectors Based on Formamidinium Lead Halide Perovskite Quantum Dot-Graphene Hybrid. <i>Particle and Particle Systems Characterization</i> , 2018, 35, 1700304.	1.2	46
1012	High-Performance Near-Infrared Photodetector Based on Ultrathin Bi ₂ O ₂ Se Nanosheets. <i>Advanced Functional Materials</i> , 2018, 28, 1706437.	7.8	201
1013	A Self-Powered and Flexible Organometallic Halide Perovskite Photodetector with Very High Detectivity. <i>Advanced Materials</i> , 2018, 30, 1704611.	11.1	339
1014	Enhanced Photoresponse in Metasurface-Integrated Organic Photodetectors. <i>Nano Letters</i> , 2018, 18, 3362-3367.	4.5	25
1015	Bias-switchable negative and positive photoconductivity in 2D FePS ₃ ultraviolet photodetectors. <i>Nanotechnology</i> , 2018, 29, 244001.	1.3	67
1016	Toward High-Performance Photodetectors Based on 2D Materials: Strategy on Methods. <i>Small Methods</i> , 2018, 2, 1700349.	4.6	118
1017	Fast MoTe ₂ Waveguide Photodetector with High Sensitivity at Telecommunication Wavelengths. <i>ACS Photonics</i> , 2018, 5, 1846-1852.	3.2	83
1018	Photonic surface waves enabled perfect infrared absorption by monolayer graphene. <i>Nano Energy</i> , 2018, 48, 161-169.	8.2	33
1019	Enhanced performance of a graphene/GaAs self-driven near-infrared photodetector with upconversion nanoparticles. <i>Nanoscale</i> , 2018, 10, 8023-8030.	2.8	84

#	ARTICLE	IF	CITATIONS
1020	Microwave Photonics for Featured Applications in High-Speed Railways: Communications, Detection, and Sensing. <i>Journal of Lightwave Technology</i> , 2018, 36, 4337-4346.	2.7	78
1021	Hybrid graphene/cadmium-free ZnSe/ZnS quantum dots phototransistors for UV detection. <i>Scientific Reports</i> , 2018, 8, 5107.	1.6	21
1022	Manifestation of plasmonic response in the detection of sub-terahertz radiation by graphene-based devices. <i>Nanotechnology</i> , 2018, 29, 245204.	1.3	18
1023	Epitaxial graphene/SiC Schottky ultraviolet photodiode with orders of magnitude adjustability in responsivity and response speed. <i>Applied Physics Letters</i> , 2018, 112, .	1.5	28
1024	Recent progress in organometal halide perovskite photodetectors. <i>Organic Electronics</i> , 2018, 52, 172-183.	1.4	83
1025	Low cost and solution processible sandwiched CH ₃ NH ₃ PbI ₃ -xCl _x based photodetector. <i>Materials Research Bulletin</i> , 2018, 99, 79-85.	2.7	17
1026	Transparent and flexible photodetectors based on CH ₃ NH ₃ PbI ₃ perovskite nanoparticles. <i>Applied Surface Science</i> , 2018, 434, 375-381.	3.1	27
1027	Graphene Electronic Devices. , 2018, , 103-155.		10
1028	Emerging technologies for high performance infrared detectors. <i>Nanophotonics</i> , 2018, 7, 169-197.	2.9	203
1029	Ultraviolet-light-driven enhanced photoresponse of chemical-vapor-deposition grown graphene-WS ₂ heterojunction based FETs. <i>Sensors and Actuators B: Chemical</i> , 2018, 257, 263-269.	4.0	16
1030	THz applications of 2D materials: Graphene and beyond. <i>Nano Structures Nano Objects</i> , 2018, 15, 107-113.	1.9	51
1031	Uncooled EuSbTe ₃ photodetector highly sensitive from ultraviolet to terahertz frequencies. <i>2D Materials</i> , 2018, 5, 011008.	2.0	16
1032	High-performing flexible and transparent photodetector by using silver nanowire-networks. <i>Materials Research Bulletin</i> , 2018, 97, 244-250.	2.7	26
1033	Graphene. , 2018, , 197-228.		4
1034	A novel graphene coated surface plasmon resonance biosensor with tungsten disulfide (WS ₂) for sensing DNA hybridization. <i>Optical Materials</i> , 2018, 75, 567-573.	1.7	108
1035	Ultra-broadband and highly responsive photodetectors based on a novel EuBiTe ₃ flake material at room temperature. <i>Journal of Materials Chemistry C</i> , 2018, 6, 713-716.	2.7	19
1036	Low cost and facile fabrication of broadband laser power meter based on reduced graphene oxide film. <i>Materials Research Bulletin</i> , 2018, 100, 42-48.	2.7	6
1037	Crumpled graphene prepared by a simple ultrasonic pyrolysis method for fast photodetection. <i>Carbon</i> , 2018, 128, 117-124.	5.4	19

#	ARTICLE	IF	CITATIONS
1038	Visualized UV Photodetectors Based on Prussian Blue/TiO ₂ for Smart Irradiation Monitoring Application. <i>Advanced Materials Technologies</i> , 2018, 3, 1700288.	3.0	63
1039	Enhanced Performance of MoS ₂ Photodetectors by Inserting an ALD-Processed TiO ₂ Interlayer. <i>Small</i> , 2018, 14, 1703176.	5.2	51
1040	Zero-Bias Operation of CVD Graphene Photodetector with Asymmetric Metal Contacts. <i>ACS Photonics</i> , 2018, 5, 365-370.	3.2	28
1041	Group 6 transition metal dichalcogenide nanomaterials: synthesis, applications and future perspectives. <i>Nanoscale Horizons</i> , 2018, 3, 90-204.	4.1	309
1042	Heterojunction photodetector based on graphene oxide sandwiched between ITO and p-Si. <i>Journal of Modern Optics</i> , 2018, 65, 353-360.	0.6	7
1043	Heterostructured graphene quantum dot/WSe ₂ /Si photodetector with suppressed dark current and improved detectivity. <i>Nano Research</i> , 2018, 11, 3233-3243.	5.8	67
1044	In-situ examination of graphene and graphene oxide impact on the depuration of phenanthrene and fluoranthene adsorbed onto spinach (<i>Spinacia oleracea</i> L.) leaf surfaces. <i>Environmental Pollution</i> , 2018, 237, 968-976.	3.7	7
1045	Number-Resolved Single-Photon Detection with Ultralow Noise van der Waals Hybrid. <i>Advanced Materials</i> , 2018, 30, 1704412.	11.1	32
1046	Single Pixel Black Phosphorus Photodetector for Near-Infrared Imaging. <i>Small</i> , 2018, 14, 1702082.	5.2	56
1047	Rhenium diselenide (ReSe ₂) infrared photodetector enhanced by (3-aminopropyl)trimethoxysilane (APTMS) treatment. <i>Organic Electronics</i> , 2018, 53, 14-19.	1.4	20
1048	Two dimensional materials based photodetectors. <i>Infrared Physics and Technology</i> , 2018, 88, 149-173.	1.3	79
1049	Ultra-sensitive and plasmon-tunable graphene photodetectors for micro-spectrometry. <i>Nanoscale</i> , 2018, 10, 20013-20019.	2.8	34
1050	Extended spectral range CMOS-compatible Graphene/Silicon-Hybrid-Photodetectors: Free-space light detection from the visible to short-wave infrared. , 2018, , .		1
1051	Fabrication of Si/graphene/Si Double Heterostructures by Semiconductor Wafer Bonding towards Future Applications in Optoelectronics. <i>Nanomaterials</i> , 2018, 8, 1048.	1.9	10
1052	Photosensitivity of Monolayer Graphene-Base Field Effect Transistor. , 2018, , .		1
1053	A silicon nitride waveguide-integrated chemical vapor deposited graphene photodetector with 38 GHz bandwidth. <i>Nanoscale</i> , 2018, 10, 21851-21856.	2.8	20
1054	Graphene-silicon-on-insulator (GSOI) Schottky diode photodetectors. <i>Nanoscale</i> , 2018, 10, 18926-18935.	2.8	36
1055	Bilayer graphene/HgCdTe based very long infrared photodetector with superior external quantum efficiency, responsivity, and detectivity. <i>RSC Advances</i> , 2018, 8, 39579-39592.	1.7	34

#	ARTICLE	IF	CITATIONS
1056	Facile synthesis of AgBiS ₂ nanocrystals for high responsivity infrared detectors. RSC Advances, 2018, 8, 39203-39207.	1.7	16
1057	Photonic Devices. , 2018, , 216-250.		0
1058	Graphene Based Waveguides. , 0, , .		3
1059	The Extremely Enhanced Photocurrent Response in Topological Insulator Nanosheets with High Conductance. Nanoscale Research Letters, 2018, 13, 371.	3.1	5
1061	Perpendicular Optical Reversal of the Linear Dichroism and Polarized Photodetection in 2D GeAs. ACS Nano, 2018, 12, 12416-12423.	7.3	157
1062	The preparation and the photoelectric characteristics of graphene/MoSe ₂ heterojunction. IOP Conference Series: Materials Science and Engineering, 2018, 397, 012055.	0.3	0
1063	Single Zn ₂ GeO ₄ nanowire high-performance broadband photodetector. Journal of Applied Physics, 2018, 124, .	1.1	8
1064	Surface potential and thin film quality of low work function metals on epitaxial graphene. Scientific Reports, 2018, 8, 16487.	1.6	13
1065	Spatially controlled electrostatic doping in graphene p-i-n junction for hybrid silicon photodiode. Npj 2D Materials and Applications, 2018, 2, .	3.9	31
1066	High responsivity graphene photodetectors from visible to near-infrared by photogating effect. AIP Advances, 2018, 8, 115106.	0.6	46
1068	Visualization of Zero-Dimensional Plasmons in Graphene Quantum Dots with Near-Field Infrared Microscopy. , 2018, , .		0
1069	Layer-number-dependent Optical and Electrical Properties of Graphene on ZnO. Microscopy and Microanalysis, 2018, 24, 492-493.	0.2	2
1070	A Novel PbS/n-IGZO Thin-Film Nano-Photodetector with High Responsivity and High Photo-to-Dark Current Ratio. , 2018, , .		2
1071	Enhanced absorption of graphene with variable bandwidth in quarter-wavelength cavities. AIP Advances, 2018, 8, 125301.	0.6	4
1072	Graphene-Based Perfect Absorption Structures in the Visible to Terahertz Band and Their Optoelectronics Applications. Nanomaterials, 2018, 8, 1033.	1.9	57
1073	Self-Powered MoS ₂ "PDPP3T Heterotransistor" Based Broadband Photodetectors. Advanced Electronic Materials, 2019, 5, 1800580.	2.6	35
1074	Plasmon induced thermoelectric effect in graphene. Nature Communications, 2018, 9, 5190.	5.8	67
1075	Seamless lateral graphene "n junctions formed by selective in situ doping for high-performance photodetectors. Nature Communications, 2018, 9, 5168.	5.8	71

#	ARTICLE	IF	CITATIONS
1076	Study of anharmonicity in pure and doped InSe by Raman scattering. International Journal of Modern Physics B, 2018, 32, 1850340.	1.0	2
1077	Current status and technological prospect of photodetectors based on two-dimensional materials. Nature Communications, 2018, 9, 5266.	5.8	177
1078	Charge Transfer and Photocurrent in Interfacial Junctions between Bismuth and Graphene. Physical Review Applied, 2018, 10, .	1.5	3
1079	Graphene Nanoribbon Spin-Photodetector. Physical Review Applied, 2018, 10, .	1.5	35
1080	Characterization of Electronic, Electrical, Optical, and Mechanical Properties of Graphene. , 2018, , 805-822.		1
1081	A curious observation of Pauli-Blocking in MoS ₂ -quantum dots/graphene hybrid system. Journal of Applied Physics, 2018, 124, .	1.1	8
1082	Zn-doped PbO nanoparticles (NPs)/fluorine-doped tin oxide (FTO) as photoanode for enhancement of visible-near-infrared (NIR) broad spectral photocurrent application of narrow bandgap nanostructures: SnSe NPs as a case study. Journal of Applied Physics, 2018, 124, .	1.1	13
1083	Self-Driven Metal-Semiconductor-Metal WSe ₂ Photodetector with Asymmetric Contact Geometries. Advanced Functional Materials, 2018, 28, 1802954.	7.8	131
1084	The Interaction between Quantum Dots and Graphene: The Applications in Graphene-Based Solar Cells and Photodetectors. Advanced Functional Materials, 2018, 28, 1804712.	7.8	69
1085	Enhanced performance of hybrid self-biased heterojunction photodetector on soft-lithographically patterned organic platform. Nanotechnology, 2018, 29, 505301.	1.3	9
1086	Illumination impact on monolayer MoS ₂ chemical sensor arrays. Sensors and Actuators A: Physical, 2018, 283, 34-41.	2.0	9
1087	Hybrid WSe ₂ -In ₂ O ₃ Phototransistors with Ultrahigh Detectivity. Springer Theses, 2018, , 35-51.	0.0	0
1088	Graphene-based integrated photonics for next-generation datacom and telecom. Nature Reviews Materials, 2018, 3, 392-414.	23.3	286
1089	Graphene-Based Light Sensing: Fabrication, Characterisation, Physical Properties and Performance. Materials, 2018, 11, 1762.	1.3	43
1090	A MoSe ₂ /WSe ₂ Heterojunction-Based Photodetector at Telecommunication Wavelengths. Advanced Functional Materials, 2018, 28, 1804388.	7.8	95
1091	Improving the Responsivity of Hybrid Graphene-Conductive Polymer Photodetectors via Nanowire Self-Assembly. ACS Photonics, 2018, 5, 4296-4302.	3.2	10
1092	Charge transfer induced tunable bandgap and enhanced saturable absorption behavior in rGO/WO ₃ composites. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	24
1093	Synthesis of few-layer 2H-MoSe ₂ thin films with wafer-level homogeneity for high-performance photodetector. Nanophotonics, 2018, 7, 1959-1969.	2.9	41

#	ARTICLE	IF	CITATIONS
1094	Realization of mid-infrared broadband absorption in monolayer graphene based on strong coupling between graphene nanoribbons and metal tapered grooves. <i>Optics Express</i> , 2018, 26, 29192.	1.7	33
1095	Wafer-Scale Fabrication of Two-Dimensional PtS ₂ /PtSe ₂ Heterojunctions for Efficient and Broad band Photodetection. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 40614-40622.	4.0	110
1096	Unipolar optical doping and extended photocarrier lifetime in graphene by band-alignment engineering. <i>Nano Futures</i> , 2018, 2, 035003.	1.0	9
1097	Infrared Imaging with Graphene Photodetectors. <i>Springer Theses</i> , 2018, , 7-19.	0.0	1
1098	Near-absolute polarization insensitivity in graphene based ultra-narrowband perfect visible light absorber. <i>Scientific Reports</i> , 2018, 8, 15210.	1.6	21
1099	Trapped Photons Induced Ultrahigh External Quantum Efficiency and Photoresponsivity in Hybrid Graphene/Metal-Organic Framework Broadband Wearable Photodetectors. <i>Advanced Functional Materials</i> , 2018, 28, 1804802.	7.8	59
1100	Fabrication of a p-n Heterojunction Using Topological Insulator Bi ₂ Te ₃ -Si and Its Annealing Response. <i>Journal of Electronic Materials</i> , 2018, 47, 6972-6983.	1.0	15
1101	Ultrahigh Photoresponsive Device Based on ReS ₂ /Graphene Heterostructure. <i>Small</i> , 2018, 14, e1802593.	5.2	75
1102	Practical Optimization of Highly Sensitive AZO Photoconductor With Circular Electrode Scheme. <i>Journal of Lightwave Technology</i> , 2018, 36, 5800-5806.	2.7	7
1103	Giant and controllable Goos-Hänchen shifts based on surface plasmon resonance with graphene-MoS ₂ heterostructure. <i>Optical Materials Express</i> , 2018, 8, 3036.	1.6	47
1104	Terahertz rectifier exploiting electric field-induced hot-carrier effect in asymmetric nano-electrode. <i>Nanotechnology</i> , 2018, 29, 47LT01.	1.3	4
1105	Double D-shaped hole optical fiber coated with graphene as a polarizer. <i>Applied Optics</i> , 2018, 57, 7659.	0.9	7
1106	Graphene-on-silicon nitride waveguide photodetector with interdigital contacts. <i>Applied Physics Letters</i> , 2018, 112, 211107.	1.5	37
1107	Plasmonic Photodetectors. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2018, 24, 1-13.	1.9	88
1108	Asymmetric Two-Terminal Graphene Detector for Broadband Radiofrequency Heterodyne- and Self-Mixing. <i>Nano Letters</i> , 2018, 18, 3516-3522.	4.5	12
1109	Competing Mechanisms for Photocurrent Induced at the Monolayer-Multilayer Graphene Junction. <i>Small</i> , 2018, 14, e1800691.	5.2	13
1110	Infrared photodetectors based on graphene metal nano clusters. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2018, 31, 173-179.	1.0	3
1111	Contact resistance reduction of ZnO thin film transistors (TFTs) with saw-shaped electrode. <i>Nanotechnology</i> , 2018, 29, 325202.	1.3	7

#	ARTICLE	IF	CITATIONS
1112	Optical and electrical properties of P3HT:graphene composite based devices. AIP Conference Proceedings, 2018, , .	0.3	0
1113	Plasmonic absorption characteristics based on dumbbell-shaped graphene metamaterial arrays. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 103, 93-98.	1.3	56
1114	Stretchable and Hydrophobic Electrochromic Devices Using Wrinkled Graphene and PEDOT:PSS. Journal of Nanomaterials, 2018, 2018, 1-10.	1.5	5
1115	Impact of Graphene on the Efficacy of Neuron Culture Substrates. Advanced Healthcare Materials, 2018, 7, e1701290.	3.9	20
1116	Gold-patched graphene nano-strips for high-responsivity and ultrafast photodetection from the visible to infrared regime. Light: Science and Applications, 2018, 7, 20.	7.7	142
1117	Asymmetric lateral graphene/h-BCN heterojunctions: A new method for separation of carriers in graphene nanoribbon photodetectors. Superlattices and Microstructures, 2018, 122, 522-529.	1.4	3
1118	Ultra-broadband and compact graphene-on-silicon integrated waveguide mode filters. Scientific Reports, 2018, 8, 9874.	1.6	18
1119	Submillimeter 2D Bi ₂ Se ₃ Flakes toward High-Performance Infrared Photodetection at Optical Communication Wavelength. Advanced Functional Materials, 2018, 28, 1802707.	7.8	149
1120	Optical response of graphene/1D double-periodic quasi-crystals in the terahertz region under magnetic and electric biases. Optical and Quantum Electronics, 2018, 50, 1.	1.5	4
1121	Terahertz Nanoimaging of Graphene. ACS Photonics, 2018, 5, 2645-2651.	3.2	78
1122	Graphene, Transition Metal Dichalcogenides, and Perovskite Photodetectors. , 0, , .		5
1123	Recent Progress and Future Prospects of 2D-Based Photodetectors. Advanced Materials, 2018, 30, e1801164.	11.1	408
1124	Low-Bandgap Terpolymers for High-Gain Photodiodes with High Detectivity and Responsivity from 300 nm to 1600 nm. ChemistrySelect, 2018, 3, 7385-7393.	0.7	6
1125	Graphene on metal-insulator-metal-based plasmonic metamaterials at infrared wavelengths. Optics Express, 2018, 26, 5665.	1.7	38
1126	Tunable terahertz wave difference frequency generation in a graphene/AlGaAs surface plasmon waveguide. Photonics Research, 2018, 6, 186.	3.4	11
1127	Long-term stability of photodetectors based on graphene field-effect transistors encapsulated with Si ₃ N ₄ layers. Applied Surface Science, 2018, 459, 164-170.	3.1	22
1128	Ultraviolet-light-driven photoresponse of chemical vapor deposition grown molybdenum disulfide/graphene heterostructured FET. Applied Surface Science, 2018, 459, 853-859.	3.1	12
1129	Low-bias visible photodetection realized by graphite nanostructures grown on silicon nanoporous pillar array. Journal of Nanoparticle Research, 2018, 20, 1.	0.8	0

#	ARTICLE	IF	CITATIONS
1130	Preparation and characterization of Mn doped copper nitride films with high photocurrent response. Current Applied Physics, 2018, 18, 1306-1312.	1.1	19
1131	On the Fabrication of Graphene p-n Junctions and Their Application for Detecting Terahertz Radiation. Semiconductors, 2018, 52, 1077-1081.	0.2	2
1132	Progress on Black Phosphorus Photonics. Advanced Optical Materials, 2018, 6, 1800365.	3.6	44
1133	DFT study on the electronic structure and optical properties of N, Al, and N-Al doped graphene. Applied Surface Science, 2018, 459, 354-362.	3.1	73
1134	In-Plane Optical Anisotropy and Linear Dichroism in Low-Symmetry Layered TlSe. ACS Nano, 2018, 12, 8798-8807.	7.3	64
1135	A broadband, self-biased photodiode based on antimony telluride (Sb ₂ Te ₃) nanocrystals/silicon heterostructures. Nanoscale, 2018, 10, 15003-15009.	2.8	27
1136	Quantum transport in graphene p-n junctions with moiré superlattice modulation. Physical Review B, 2018, 98, .	1.2	12
1137	Van der Waals Heterostructure Based Field Effect Transistor Application. Crystals, 2018, 8, 8.	1.0	24
1138	Optoelectronics Based Dynamic Advancement of Graphene: Characteristics and Applications. Crystals, 2018, 8, 171.	1.0	10
1139	Progress on Crystal Growth of Two-Dimensional Semiconductors for Optoelectronic Applications. Crystals, 2018, 8, 252.	1.0	7
1140	Design of Optical and Radiative Properties of Surfaces. , 2018, , 1023-1068.		3
1141	High-yield production of 2D crystals by wet-jet milling. Materials Horizons, 2018, 5, 890-904.	6.4	139
1142	Layer-by-layer hybrid chemical doping for high transmittance uniformity in graphene-polymer flexible transparent conductive nanocomposite. Scientific Reports, 2018, 8, 10259.	1.6	18
1143	Tunable Optical Response of Au-LiNbO ₃ Hybrid Metamaterial Thin Films for Optical Waveguide Applications. Advanced Optical Materials, 2018, 6, 1800510.	3.6	32
1144	Optical Graphene Gas Sensors Based on Microfibers: A Review. Sensors, 2018, 18, 941.	2.1	39
1145	Pinhole evolution of few-layer graphene during electron tunneling and electron transport. Carbon, 2018, 139, 688-694.	5.4	5
1146	Abnormal blueshift of the absorption edge in graphene nanodots. Journal of Chemical Physics, 2018, 148, 214301.	1.2	2
1147	A tunable dual-band graphene-based perfect absorber in the optical communication band. Optics and Laser Technology, 2018, 108, 404-408.	2.2	12

#	ARTICLE	IF	CITATIONS
1148	Ultrafast and highly sensitive infrared photodetectors based on two-dimensional oxyselenide crystals. <i>Nature Communications</i> , 2018, 9, 3311.	5.8	213
1149	Double-layer heterostructure of graphene/carbon nanotube films for highly efficient broadband photodetector. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	21
1150	Ultrafast photocarrier dynamics in single-layer graphene driven by strong terahertz pulses. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2018, 35, 1255.	0.9	9
1151	Absorption-free superluminal light propagation in a Landau-quantized graphene. <i>AIP Advances</i> , 2018, 8, 075023.	0.6	9
1152	Hybrid graphene metasurfaces for high-speed mid-infrared light modulation and single-pixel imaging. <i>Light: Science and Applications</i> , 2018, 7, 51.	7.7	226
1153	Ultracompact Optical Hybrid Based on Standing Wave Integrated With Graphene-Based Photodetector for Coherent Detection. <i>IEEE Photonics Journal</i> , 2018, 10, 1-12.	1.0	1
1154	Oxidation limited thermal boundary conductance at metal-graphene interface. <i>Carbon</i> , 2018, 139, 913-921.	5.4	13
1155	Extending the Spectral Responsivity of MoS ₂ Phototransistors by Incorporating Upâ€Conversion Microcrystals. <i>Advanced Optical Materials</i> , 2018, 6, 1800660.	3.6	25
1156	Photoresponsivity of an all-semimetal heterostructure based on graphene and WTe ₂ . <i>Scientific Reports</i> , 2018, 8, 12840.	1.6	14
1157	Enhanced Raman scattering of graphene using double resonance in silicon photonic crystal nanocavities. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	2
1158	Visible-infrared dual-mode MoS ₂ -graphene-MoS ₂ phototransistor with high ratio of the I_{ph}/I_{dark} . <i>2D Materials</i> , 2018, 5, 045027.	2.0	28
1159	Terahertz optical bistability of graphene-coated cylindrical coreâ€shell nanoparticles. <i>Journal of Theoretical and Applied Physics</i> , 2018, 12, 257-263.	1.4	13
1161	High performance, self-powered photodetectors based on a graphene/silicon Schottky junction diode. <i>Journal of Materials Chemistry C</i> , 2018, 6, 9545-9551.	2.7	126
1162	High responsivity middle-wavelength infrared graphene photodetectors using photo-gating. <i>Applied Physics Letters</i> , 2018, 113, .	1.5	43
1163	Feasibility of Room-Temperature GHz-THz Direct Detection in Graphene Through Hot-Carrier Effect. <i>IEEE Transactions on Device and Materials Reliability</i> , 2018, 18, 429-437.	1.5	22
1164	Ultraâ€Broadband Flexible Photodetector Based on Topological Crystalline Insulator SnTe with High Responsivity. <i>Small</i> , 2018, 14, e1802598.	5.2	65
1165	High Responsivity and Detectivity Graphene-Silicon Majority Carrier Tunneling Photodiodes with a Thin Native Oxide Layer. <i>ACS Photonics</i> , 2018, 5, 2895-2903.	3.2	14
1166	Heterogeneous Integration of 2D Materials and Devices on a Si Platform. , 2019, , 43-84.		5

#	ARTICLE	IF	CITATIONS
1167	Graphene Schottky Varactor Diodes for High-Performance Photodetection. ACS Photonics, 2019, 6, 1910-1915.	3.2	11
1168	The charge carrier dynamics, efficiency and stability of two-dimensional material-based perovskite solar cells. Chemical Society Reviews, 2019, 48, 4854-4891.	18.7	139
1169	Van der Waals heterostructures for optoelectronics: Progress and prospects. Applied Materials Today, 2019, 16, 435-455.	2.3	117
1170	Two-Dimensional Hybrid Composites of SnS ₂ Nanosheets Array Film with Graphene for Enhanced Photoelectric Performance. Nanomaterials, 2019, 9, 1122.	1.9	12
1171	PbSe Quantum Dots Sensitized High-Mobility Bi ₂ O ₂ Se Nanosheets for High-Performance and Broadband Photodetection Beyond 2 μm. ACS Nano, 2019, 13, 9028-9037.	7.3	149
1172	Synthesis of Graphene-based Materials for Surface-Enhanced Raman Scattering Applications. E-Journal of Surface Science and Nanotechnology, 2019, 17, 71-82.	0.1	2
1173	Dirac plasmon-assisted asymmetric hot carrier generation for room-temperature infrared detection. Nature Communications, 2019, 10, 3498.	5.8	44
1174	Light-Induced Interfacial Phenomena in Atomically Thin 2D van der Waals Material Hybrids and Heterojunctions. ACS Energy Letters, 2019, 4, 2323-2335.	8.8	31
1175	Laser-induced photoresistance effect in Si-based vertical standing MoS ₂ nanoplate heterojunctions for self-powered high performance broadband photodetection. Journal of Materials Chemistry C, 2019, 7, 10642-10651.	2.7	24
1176	Unconventional electromagnetic properties of the graphene quantum dots. Physical Review B, 2019, 100, .	1.1	7
1177	Broadband Nonlinear Optical Response of Single-Crystalline Bismuth Thin Film. ACS Applied Materials & Interfaces, 2019, 11, 35863-35870.	4.0	19
1178	Role of substrate interface energy in the synthesis of high quality uniform layered ReS ₂ . Applied Surface Science, 2019, 493, 1215-1223.	3.1	14
1179	High-Performance Hybrid InP QDs/Black Phosphorus Photodetector. ACS Applied Materials & Interfaces, 2019, 11, 29041-29046.	4.0	55
1180	High sensitivity ultraviolet detection based on three-dimensional graphene field effect transistors decorated with TiO ₂ NPs. Nanoscale, 2019, 11, 14912-14920.	2.8	27
1181	Hybrid Graphene/Cu ₂ O Quantum Dot Photodetectors with Ultrahigh Responsivity. Advanced Optical Materials, 2019, 7, 1900455.	3.6	30
1182	Tweaking the properties of aluminum oxide shielded graphene-based transistors. Applied Surface Science, 2019, 491, 742-749.	3.1	0
1183	Graphene Hybrid Structures for Integrated and Flexible Optoelectronics. Advanced Materials, 2020, 32, e1902039.	11.1	127
1184	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

#	ARTICLE	IF	CITATIONS
1185	Two-dimensional layered materials: from mechanical and coupling properties towards applications in electronics. <i>Nanoscale</i> , 2019, 11, 13181-13212.	2.8	67
1186	Graphene-Based Mixed-Dimensional van der Waals Heterostructures for Advanced Optoelectronics. <i>Advanced Materials</i> , 2019, 31, e1806411.	11.1	115
1187	A graphene P-N junction induced by single-gate control of dielectric structures. <i>Journal of Materials Chemistry C</i> , 2019, 7, 8796-8802.	2.7	6
1188	Deep-subwavelength light transmission in hybrid graphene-dielectric slot waveguide. <i>Journal of Optics (United Kingdom)</i> , 2019, 21, 095001.	1.0	5
1189	Light Trapping in Conformal Graphene/Silicon Nanoholes for High-Performance Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 30421-30429.	4.0	25
1190	Highly Sensitive, Fast Graphene Photodetector with Responsivity $>10^6$ A/W Using a Floating Quantum Well Gate. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 30010-30018.	4.0	23
1191	Broadband absorption enhancement of monolayer graphene by prism coupling in the visible range. <i>Carbon</i> , 2019, 154, 42-47.	5.4	20
1192	Engineering Optical Absorption in Graphene and Other 2D Materials: Advances and Applications. <i>Advanced Optical Materials</i> , 2019, 7, 1900595.	3.6	123
1193	Seamless MoTe ₂ Homojunction PIN Diode toward 1300 nm Short-Wave Infrared Detection. <i>Advanced Optical Materials</i> , 2019, 7, 1900768.	3.6	20
1194	Highly Efficient and Broadband Hybrid Photodetector Based on 2-D Layered Graphene/CTS Quantum Dots. <i>IEEE Transactions on Electron Devices</i> , 2019, 66, 3417-3424.	1.6	12
1195	Paper-Cut Flexible Multifunctional Electronics Using MoS ₂ Nanosheet. <i>Nanomaterials</i> , 2019, 9, 922.	1.9	19
1196	3D Printing of Ultralight Biomimetic Hierarchical Graphene Materials with Exceptional Stiffness and Resilience. <i>Advanced Materials</i> , 2019, 31, e1902930.	11.1	130
1197	Reduced Graphene Oxide/Silicon Nanowire Heterojunction for High Sensitivity and Broadband Photodetector. , 2019, 3, 1-4.		6
1198	Graphene Sandwich Stable Perovskite Quantum-Dot Light-Emissive Ultrasensitive and Ultrafast Broadband Vertical Phototransistors. <i>ACS Nano</i> , 2019, 13, 12540-12552.	7.3	69
1199	Implementation of Metallic Vertical Interconnect Access in Hybrid Intercalated Graphene/Quantum Dot Photodetector for Improved Charge Collection. <i>Frontiers in Materials</i> , 2019, 6, .	1.2	5
1200	Design, optimization and critical analysis of graphene based surface plasmon resonance sensor for DNA hybridization. <i>Optical and Quantum Electronics</i> , 2019, 51, 1.	1.5	6
1201	Heat current method for analysis and optimization of heat recovery-based power generation systems. <i>Energy</i> , 2019, 189, 116209.	4.5	20
1202	Graphene/HgTe Quantum-Dot Photodetectors with Gate-Tunable Infrared Response. <i>ACS Applied Nano Materials</i> , 2019, 2, 6701-6706.	2.4	22

#	ARTICLE	IF	CITATIONS
1203	InGaAs/graphene infrared photodetectors with enhanced responsivity. <i>Materials Research Express</i> , 2019, 6, 116208.	0.8	29
1204	Light Confinement Effect Induced Highly Sensitive, Self-Driven Near-Infrared Photodetector and Image Sensor Based on Multilayer PdSe ₂ /Pyramid Si Heterojunction. <i>Small</i> , 2019, 15, e1903831.	5.2	51
1205	Au@PbS core-shell nanorods for plasmon-enhanced near-infrared photodetection. <i>Journal of Materials Science</i> , 2019, 54, 14720-14727.	1.7	8
1206	A Tunable Dual-Band and Polarization-Insensitive Coherent Perfect Absorber Based on Double-Layers Graphene Hybrid Waveguide. <i>Nanoscale Research Letters</i> , 2019, 14, 337.	3.1	42
1208	Plasmon-induced light absorption in mid-infrared based on hexagonal-shape graphene. <i>Materials Research Express</i> , 2019, 6, 125602.	0.8	1
1209	Graphene(s): Tuning their Nonlinear Optical Response. , 2019, , .		1
1211	Reversible MoS ₂ Origami with Spatially Resolved and Reconfigurable Photosensitivity. <i>Nano Letters</i> , 2019, 19, 7941-7949.	4.5	41
1212	Dependence of channel thickness on MoTe ₂ transistor performance with Pt contact on a HfO ₂ dielectric. <i>Applied Physics Express</i> , 2019, 12, 124001.	1.1	1
1213	Beyond Gold: Spin-Coated Ti ₃ C ₂ -Based MXene Photodetectors. <i>Advanced Materials</i> , 2019, 31, e1903271.	11.1	114
1214	Anomalous Broadband Spectrum Photodetection in 2D Rhenium Disulfide Transistor. <i>Advanced Optical Materials</i> , 2019, 7, 1901115.	3.6	37
1215	Hybrid 2D-Material Photonics with Bound States in the Continuum. <i>Advanced Optical Materials</i> , 2019, 7, 1901306.	3.6	43
1216	Organic LED based light sensor for detection of ovarian cancer. <i>Microelectronic Engineering</i> , 2019, 218, 111154.	1.1	26
1217	UV Rewritable Hybrid Graphene/Phosphor p-n Junction Photodiode. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 43351-43358.	4.0	5
1218	Charge Transport Behavior and Ultrasensitive Photoresponse Performance of Exfoliated F 16 CuPc Nanoflakes. <i>Advanced Optical Materials</i> , 2019, 7, 1901097.	3.6	3
1219	Two-Dimensional Covalent Organic Framework@Graphene Photodetectors: Insight into the Relationship between the Microscopic Interfacial Structure and Performance. <i>ACS Omega</i> , 2019, 4, 18780-18786.	1.6	18
1220	High performance broadband bismuth telluride tetradymite topological insulator photodiode. <i>Nanotechnology</i> , 2019, 30, 165201.	1.3	20
1221	Dynamical and steady-state properties of absorption-dispersion curves in a monolayer graphene system. <i>Laser Physics</i> , 2019, 29, 105204.	0.6	0
1222	Vertically Stacked CVD-Grown 2D Heterostructure for Wafer-Scale Electronics. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 35444-35450.	4.0	27

#	ARTICLE	IF	CITATIONS
1223	An in situ characterization technique for electron emission behavior under a photo-electric-common-excitation field: study on the vertical few-layer graphene individuals. Nanotechnology, 2019, 30, 445202.	1.3	3
1224	Hybrid plasmonic gold-nanorodâ€“platinum short-wave infrared photodetectors with fast response. Nanoscale, 2019, 11, 18124-18131.	2.8	7
1225	Thermoelectric Graphene Nano-Constrictions as Detectors of Microwave Signals. IEEE Nanotechnology Magazine, 2019, 18, 879-884.	1.1	3
1226	Plasmonic WS ₂ Nanodiscs/Graphene van der Waals Heterostructure Photodetectors. ACS Applied Materials & Interfaces, 2019, 11, 33390-33398.	4.0	41
1227	Graphene perfect absorber of ultra-wide bandwidth based on wavelength-insensitive phase matching in prism coupling. Scientific Reports, 2019, 9, 11967.	1.6	12
1228	Stretchable photodetector utilizing the change in capacitance formed in a composite film containing semiconductor particles. Composites Science and Technology, 2019, 182, 107773.	3.8	10
1229	Waveguide-Integrated, Plasmonic Enhanced Graphene Photodetectors. Nano Letters, 2019, 19, 7632-7644.	4.5	113
1230	Antiferromagnetic excitons in graphene nanodots. Journal of Applied Physics, 2019, 126, 084307.	1.1	4
1231	Hexagonal Boron Nitride for Surface Passivation of Two-Dimensional van der Waals Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 39765-39771.	4.0	42
1232	Two-Dimensional Alloying Molybdenum Tin Disulfide Monolayers with Fast Photoresponse. ACS Applied Materials & Interfaces, 2019, 11, 39077-39087.	4.0	28
1233	Electrical-Field-Driven Tunable Spectral Responses in a Broadband-Absorbing Perovskite Photodiode. ACS Applied Materials & Interfaces, 2019, 11, 39018-39025.	4.0	8
1234	SnSe ₂ Quantum Dots: Facile Fabrication and Application in Highly Responsive UV-Detectors. Nanomaterials, 2019, 9, 1324.	1.9	14
1235	High performance photodetectors constructed on atomically thin few-layer MoSe ₂ synthesized using atomic layer deposition and a chemical vapor deposition chamber. Journal of Alloys and Compounds, 2019, 785, 951-957.	2.8	21
1236	Peculiar optical properties of bilayer silicene under the influence of external electric and magnetic fields. Scientific Reports, 2019, 9, 624.	1.6	18
1237	Modulation of waveguide behaviour of an ICT 2H-Benzo[d][1,2,3]Triazole derivative with graphene. Organic Electronics, 2019, 68, 1-8.	1.4	5
1238	Three-Dimensional Graphene Field-Effect Transistors as High-Performance Photodetectors. Nano Letters, 2019, 19, 1494-1503.	4.5	113
1239	A substrate-enhanced MoS ₂ photodetector through a dual-photogating effect. Materials Horizons, 2019, 6, 826-833.	6.4	56
1240	Efficient Photodoping of Graphene in Perovskiteâ€“Graphene Heterostructure. Advanced Electronic Materials, 2019, 5, 1800940.	2.6	8

#	ARTICLE	IF	CITATIONS
1241	Photothermally powered conductive films for absorber-free solar thermoelectric harvesting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2066-2074.	5.2	27
1242	A tunable positive and negative photoconductive photodetector based on a gold/graphene/p-type silicon heterojunction. <i>Journal of Materials Chemistry C</i> , 2019, 7, 887-896.	2.7	32
1243	Temperature- and light-sensitive mechanism in metal/organic/n-GaN bio-hybrid temperature photodiode based on salmon DNA biomolecule. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 11771-11777.	1.1	3
1244	Opening the Band Gap of Graphene via Fluorination for High-Performance Dual-Mode Photodetector Application. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 21702-21710.	4.0	28
1245	Enhanced photoresponsivity in carbon quantum dots-coupled graphene/silicon Schottky-junction photodetector. <i>Laser Physics Letters</i> , 2019, 16, 076201.	0.6	18
1246	Vertically Aligned Few-Layered Graphene-Based Non-Cryogenic Bolometer. <i>Journal of Carbon Research</i> , 2019, 5, 23.	1.4	7
1247	Graphene Optical Biosensors. <i>International Journal of Molecular Sciences</i> , 2019, 20, 2461.	1.8	67
1248	Femtosecond light pulse response of photodetectors based on Graphene/n-Si heterojunctions. <i>Carbon</i> , 2019, 152, 643-651.	5.4	9
1249	Electric field induced enhancement of photovoltaic effects in graphene nanoribbons. <i>Physical Review B</i> , 2019, 99, .	1.1	9
1250	Enhancements of absorption and photothermal conversion of solar energy enabled by surface plasmon resonances in nanoparticles and metamaterials. <i>International Journal of Heat and Mass Transfer</i> , 2019, 140, 453-482.	2.5	32
1251	On-chip integrated photonic circuits based on two-dimensional materials and hexagonal boron nitride as the optical confinement layer. <i>Journal of Applied Physics</i> , 2019, 125, 230901.	1.1	13
1252	Strong light confinement and gradient force in parallel infinite-width monolayer graphene pairs. <i>Applied Physics Express</i> , 2019, 12, 075007.	1.1	0
1253	Optical and electrical properties of two-dimensional anisotropic materials. <i>Journal of Semiconductors</i> , 2019, 40, 061001.	2.0	65
1254	Silicon carbide and graphene based UV-IR dual-color detector. <i>Optoelectronics Letters</i> , 2019, 15, 170-173.	0.4	3
1255	Dramatic Enhancement of Optoelectronic Properties of Electrophoretically Deposited C ₆₀ -Graphene Hybrids. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 24349-24359.	4.0	27
1256	Photogating in the Graphene-Dye-Graphene Sandwich Heterostructure. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 23474-23481.	4.0	21
1257	Production of large-area 2D materials for high-performance photodetectors by pulsed-laser deposition. <i>Progress in Materials Science</i> , 2019, 106, 100573.	16.0	160
1258	WS ₂ Quantum Dot Graphene Nanocomposite Film for UV Photodetection. <i>ACS Applied Nano Materials</i> , 2019, 2, 3934-3942.	2.4	45

#	ARTICLE	IF	CITATIONS
1259	High-detectivity and -stability multilayer-graphene/Si-quantum-dot photodetectors with TiO _x back-surface passivation layer. <i>Dyes and Pigments</i> , 2019, 170, 107587.	2.0	7
1260	Coherent Detection of Terahertz Radiation with Graphene. <i>ACS Photonics</i> , 2019, 6, 1780-1788.	3.2	13
1261	UV-SWIR broad range photodetectors made from few-layer In ₂ Se ₃ nanosheets. <i>Nanoscale</i> , 2019, 11, 12817-12828.	2.8	47
1262	A review on morphological evolution of thin metal films on weakly-interacting substrates. <i>Thin Solid Films</i> , 2019, 688, 137312.	0.8	22
1263	Schottky Barrier-Controlled Black Phosphorus/Perovskite Phototransistors with Ultrahigh Sensitivity and Fast Response. <i>Small</i> , 2019, 15, 1901004.	5.2	46
1264	Efficient Exciton Dissociation in Heterojunction Interfaces Realizing Enhanced Photoresponsive Performance. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 2904-2910.	2.1	26
1266	Structural stability and electron density analysis of doped germanene: a first-principles study. <i>Materials Research Express</i> , 2019, 6, 1050c2.	0.8	12
1267	Zero-Bias Visible to Near-Infrared Horizontal p-n-p TiO ₂ Nanotubes Doped Monolayer Graphene Photodetector. <i>Molecules</i> , 2019, 24, 1870.	1.7	12
1268	Graphene quantum dot arrays: Pros and cons of photodetection in the Coulomb blockade regime. <i>Carbon</i> , 2019, 149, 499-511.	5.4	12
1269	Optically coupled engineered upconversion nanoparticles and graphene for a high responsivity broadband photodetector. <i>Nanoscale</i> , 2019, 11, 9716-9725.	2.8	39
1270	Effect of Laser Irradiation on Graphene Oxide Integrated TE-Pass Waveguide Polarizer. <i>Journal of Lightwave Technology</i> , 2019, 37, 2380-2385.	2.7	13
1271	Graphene Aerogel Based Bolometer for Ultrasensitive Sensing from Ultraviolet to Far-Infrared. <i>ACS Nano</i> , 2019, 13, 5385-5396.	7.3	42
1272	Self-powered and fast photodetector based on graphene/MoSe ₂ /Au heterojunction. <i>Superlattices and Microstructures</i> , 2019, 130, 87-92.	1.4	34
1273	High responsivity and high-speed 1.55 μm infrared photodetector from self-powered graphene/Si heterojunction. <i>Sensors and Actuators A: Physical</i> , 2019, 291, 87-92.	2.0	28
1274	Semimetallic Graphene for Infrared Sensing. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 19565-19571.	4.0	12
1275	Highly Sensitive SnO ₂ -Reduced Graphene Oxide Hybrid Composites for Room Temperature Acetone Sensor. , 2019, , .		5
1276	Enhanced Photoresponse in MoTe ₂ Photodetectors with Asymmetric Graphene Contacts. <i>Advanced Optical Materials</i> , 2019, 7, 1900190.	3.6	65
1277	High-Performance, Room Temperature, Ultra-Broadband Photodetectors Based on Air-Stable PdSe ₂ . <i>Advanced Materials</i> , 2019, 31, e1807609.	11.1	223

#	ARTICLE	IF	CITATIONS
1278	Highly ordered arrays and characterization of WS ₂ flakes grown by low pressure chemical vapour deposition. <i>Chemical Physics</i> , 2019, 523, 106-109.	0.9	9
1279	Streamer evolution arrest governed amplified AC breakdown strength of graphene and CNT colloids. <i>EPJ Applied Physics</i> , 2019, 85, 30402.	0.3	5
1280	Photodetectors based on two-dimensional materials and organic thin-film heterojunctions. <i>Chinese Physics B</i> , 2019, 28, 017103.	0.7	18
1281	Room-temperature infrared photodetectors with hybrid structure based on two-dimensional materials. <i>Chinese Physics B</i> , 2019, 28, 017302.	0.7	24
1283	Characteristics of vertically stacked graphene-layer infrared photodetectors. <i>Solid-State Electronics</i> , 2019, 155, 123-128.	0.8	1
1284	Bias-Modulated High Photoelectric Response of Graphene-Nanocrystallite Embedded Carbon Film Coated on n-Silicon. <i>Nanomaterials</i> , 2019, 9, 327.	1.9	10
1285	Graphene and its derivatives for Analytical Lab on Chip platforms. <i>TrAC - Trends in Analytical Chemistry</i> , 2019, 114, 326-337.	5.8	90
1286	Saturable absorption in graphene-on-waveguide devices. <i>Applied Physics Express</i> , 2019, 12, 032003.	1.1	23
1287	PdSe ₂ Multilayer on Germanium Nanocones Array with Light Trapping Effect for Sensitive Infrared Photodetector and Image Sensing Application. <i>Advanced Functional Materials</i> , 2019, 29, 1900849.	7.8	90
1288	Fabrication and characterization of tungsten disulphide/silicon heterojunction photodetector for near infrared illumination. <i>Optik</i> , 2019, 185, 819-826.	1.4	10
1289	Composite graphene-metal microstructures for enhanced multiband absorption covering the entire terahertz range. <i>Carbon</i> , 2019, 148, 317-325.	5.4	69
1290	High fabrication-tolerant narrowband perfect graphene absorber based on guided-mode resonance in distributed Bragg reflector. <i>Scientific Reports</i> , 2019, 9, 4294.	1.6	19
1292	Design strategies for two-dimensional material photodetectors to enhance device performance. <i>Informa-Materially</i> , 2019, 1, 33-53.	8.5	158
1293	Adjusting Fermi Level of Graphene by Controlling the Linker Lengths of Dipolar Molecules. <i>Langmuir</i> , 2019, 35, 5448-5454.	1.6	6
1294	Enhanced photogating via pyroelectric effect induced by insulator layer for high-responsivity long-wavelength infrared graphene-based photodetectors operating at room temperature. <i>Applied Physics Express</i> , 2019, 12, 025001.	1.1	26
1295	Toward Ultrahigh Sensitivity and UV-Vis-NIR Broadband Response of Organolead Halide Perovskite/Phthalocyanine Heterostructured Photodetectors. <i>Journal of Physical Chemistry C</i> , 2019, 123, 11073-11080.	1.5	18
1296	Deep Electrical Modulation of Terahertz Wave Based on Hybrid Metamaterial-Dielectric-Graphene Structure. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 507.	1.3	2
1297	Solution-Based Fast Fabrication of a High-Performance Unlimited Area Au Nanostructure/Si Heterojunction Photodetector. <i>ACS Applied Electronic Materials</i> , 2019, 1, 577-584.	2.0	10

#	ARTICLE	IF	CITATIONS
1298	Spin-photovoltaic effects induced by the edge magnetism in a graphene nanoribbon junction. Journal Physics D: Applied Physics, 2019, 52, 235502.	1.3	4
1299	Recent Progress of Graphene-Based Photoelectrode Materials for Dye-Sensitized Solar Cells. International Journal of Photoenergy, 2019, 2019, 1-16.	1.4	31
1300	Poly-(3-hexylthiophene)/graphene composite based organic photodetectors: The influence of graphene insertion. Thin Solid Films, 2019, 675, 128-135.	0.8	30
1301	Organic charge transfer complexes on graphene with ultrahigh near infrared photogain. Nanotechnology, 2019, 30, 254003.	1.3	17
1302	Development of a Cloud-Based Epidermal MoSe ₂ Device for Hazardous Gas Sensing. Advanced Functional Materials, 2019, 29, 1900138.	7.8	102
1303	Improved Charge Extraction Beyond Diffusion Length by Layer-by-Layer Multistacking Intercalation of Graphene Layers inside Quantum Dots Films. Advanced Materials, 2019, 31, e1807894.	11.1	21
1304	Towards Infrared Electronic Eyes: Flexible Colloidal Quantum Dot Photovoltaic Detectors Enhanced by Resonant Cavity. Small, 2019, 15, e1804920.	5.2	73
1305	High Performance Visible-Range Photodetector for Wide-Bandwidth Applications. , 2019, , .		0
1306	High-responsivity turbostratic stacked graphene photodetectors using enhanced photogating. Applied Physics Express, 2019, 12, 122010.	1.1	18
1307	All-Perovskite Photodetector with Fast Response. Nanoscale Research Letters, 2019, 14, 291.	3.1	48
1308	Dual-band tunable mid-infrared polarization converter based on U-shaped graphene metamaterial. , 2019, , .		0
1309	Reconfigurable and Optically Transparent Graphene-Based Devices. , 2019, , .		0
1310	Near-Infrared Photoelectric Properties of Multilayer Bi ₂ O ₂ Se Nanofilms. Nanoscale Research Letters, 2019, 14, 371.	3.1	31
1311	Analysis of Thermal Treatment Influence on Graphene Oxide Thin Film Deposited by Modified Coating Process. , 2019, , .		0
1312	Recent advances in flexible photodetectors based on 1D nanostructures. Journal of Semiconductors, 2019, 40, 111602.	2.0	15
1313	Highly efficient broadband photodetectors based on lithography-free Au/Bi ₂ O ₂ Se/Au heterostructures. Nanoscale, 2019, 11, 20707-20714.	2.8	32
1314	Physicochemical exfoliation of graphene sheets using graphitic carbon nitride. New Journal of Chemistry, 2019, 43, 16200-16206.	1.4	8
1315	Tunable mid-infrared dual-band and broadband cross-polarization converters based on U-shaped graphene metamaterials. Optics Express, 2019, 27, 33826.	1.7	45

#	ARTICLE	IF	CITATIONS
1316	Heterogeneous Integration of 2D Materials: Recent Advances in Fabrication and Functional Device Applications. <i>Nano</i> , 2019, 14, 1930009.	0.5	10
1317	Improvement of Graphene FET Characteristics by Eliminating Aromatic Rings in Fabrication Resist. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , 2019, 32, 685-691.	0.1	0
1318	Tunable Photoresponse by Gate Modulation in Bilayer Graphene Nanoribbon Devices. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 7719-7724.	2.1	13
1319	Highly Responsive Ultraviolet Sensor Based on ZnS Quantum Dot Solid with Enhanced Photocurrent. <i>Scientific Reports</i> , 2019, 9, 18704.	1.6	41
1320	Fiber all-optical light control with low-dimensional materials (LDMs): thermo-optic effect and saturable absorption. <i>Nanoscale Advances</i> , 2019, 1, 4190-4206.	2.2	5
1321	An approach to high-throughput growth of submillimeter transition metal dichalcogenide single crystals. <i>Nanoscale</i> , 2019, 11, 22440-22445.	2.8	4
1322	Graphene based nonlinear multimode interference waveguide for refractive index sensing. <i>AIP Conference Proceedings</i> , 2019, . .	0.3	0
1323	Recent Advances in Optoelectronic Devices Based on 2D Materials and Their Heterostructures. <i>Advanced Optical Materials</i> , 2019, 7, 1800441.	3.6	229
1324	Progress, Challenges, and Opportunities for 2D Material Based Photodetectors. <i>Advanced Functional Materials</i> , 2019, 29, 1803807.	7.8	884
1325	A strong controllable absorber using graphene-metal nanostructure. <i>Journal of Modern Optics</i> , 2019, 66, 7-16.	0.6	18
1326	Sb ₂ Te ₃ /graphene heterostructure for broadband photodetector: A first-principles calculation at the level of Cooper's exchange functionals. <i>Optik</i> , 2019, 177, 83-92.	1.4	7
1327	Bulk and few-layer MnPS ₃ : a new candidate for field effect transistors and UV photodetectors. <i>Journal of Materials Chemistry C</i> , 2019, 7, 324-329.	2.7	82
1328	Enhanced absorption of monolayer molybdenum disulfide (MoS ₂) using nanostructures with symmetrical cross resonator in the visible ranges. <i>Optical and Quantum Electronics</i> , 2019, 51, 1.	1.5	6
1329	Enhanced UV photoresponse employing 3D graphene nanowalls/SnO ₂ nanocomposite film. <i>Surface and Coatings Technology</i> , 2019, 359, 90-96.	2.2	14
1330	A high speed optical modulator based on graphene-on-graphene hybrid nanophotonic waveguide. <i>Optik</i> , 2019, 179, 216-221.	1.4	10
1331	Asymmetric finger-shape metallization in Graphene-on-Si solar cells for enhanced carrier trapping. <i>Materials Science in Semiconductor Processing</i> , 2019, 91, 13-21.	1.9	9
1332	Structural Quantification for Graphene and Related Two-Dimensional Materials by Raman Spectroscopy. <i>Analytical Chemistry</i> , 2019, 91, 468-481.	3.2	20
1333	Broadband light-trapping enhancement of graphene absorptivity. <i>Physical Review B</i> , 2019, 99, .	1.1	9

#	ARTICLE	IF	CITATIONS
1334	Microscopic origin of the bolometric effect in graphene. <i>Physical Review B</i> , 2019, 99, .	1.1	15
1335	Reduced Graphene Oxide-Nanostructured Silicon Photosensors with High Photoresponsivity at Room Temperature. <i>ACS Applied Nano Materials</i> , 2019, 2, 2086-2098.	2.4	5
1336	Two-dimensional heterostructures based on graphene and transition metal dichalcogenides: Synthesis, transfer and applications. <i>Carbon</i> , 2019, 145, 240-250.	5.4	53
1337	Enhancing performance of graphene-based bolometers at 1 THz. <i>Physica C: Superconductivity and Its Applications</i> , 2019, 557, 44-48.	0.6	2
1338	Wafer-Scale Fabrication of Nitrogen-Doped Reduced Graphene Oxide with Enhanced Quaternary-N for High-Performance Photodetection. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4625-4636.	4.0	16
1339	Fabrication and Characterization of a Capacitive Photodetector Comprising a ZnS/Cu Particle/Poly(vinyl butyral) Composite. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4416-4424.	4.0	13
1340	Ultrathin GeSe Nanosheets: From Systematic Synthesis to Studies of Carrier Dynamics and Applications for a High-Performance UV-Vis Photodetector. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4278-4287.	4.0	105
1341	Ultraviolet response of reduced graphene oxide/natural cellulose yarns with high flexibility. <i>Composites Part B: Engineering</i> , 2019, 163, 710-715.	5.9	16
1342	Single-step growth of graphene and graphene-based nanostructures by plasma-enhanced chemical vapor deposition. <i>Nanotechnology</i> , 2019, 30, 162001.	1.3	37
1343	P-type MoO_2 nanostructures on n-Si by hydrogenation process: synthesis and application towards self-biased UV-visible photodetection. <i>Nanotechnology</i> , 2019, 30, 035204.	1.3	18
1344	Grinded nano-graphite inkjet inks for application in organic solar cells. <i>Nanotechnology</i> , 2019, 30, 045601.	1.3	9
1345	Graphene Based Optical Interconnects. , 2019, , 271-285.		1
1346	Performance Enhancement of Graphene Photodetectors via In Situ Preparation of TiO_2 on Graphene Channels. <i>Advanced Materials Technologies</i> , 2019, 4, 1800548.	3.0	11
1347	Wide Angle Dynamically Tunable Enhanced Infrared Absorption on Large-Area Nanopatterned Graphene. <i>ACS Nano</i> , 2019, 13, 421-428.	7.3	49
1348	Hybrid graphene heterojunction photodetector with high infrared responsivity through barrier tailoring. <i>Nanotechnology</i> , 2019, 30, 195202.	1.3	8
1349	Plasmonically Enhanced Graphene Photodetector Featuring 100 Gbit/s Data Reception, High Responsivity, and Compact Size. <i>ACS Photonics</i> , 2019, 6, 154-161.	3.2	169
1350	Atomic Properties and Electronic Structure. <i>Interface Science and Technology</i> , 2019, , 23-66.	1.6	3
1351	A Perspective on Recent Advances in Phosphorene Functionalization and Its Applications in Devices. <i>European Journal of Inorganic Chemistry</i> , 2019, 2019, 1476-1494.	1.0	49

#	ARTICLE	IF	CITATIONS
1352	Goos-Hänchen shifts due to graphene when intraband conductivity dominates. Optics Communications, 2019, 433, 25-29.	1.0	10
1353	Hydrothermal synthesis and fast photoresponsive characterization of SnS ₂ hexagonal nanoflakes. Journal of Materials Science, 2019, 54, 2059-2065.	1.7	26
1354	Synthesis of Multilayer InSe _{0.82} Te _{0.18} alloy for high performance near-infrared photodetector. Journal of Alloys and Compounds, 2020, 815, 152375.	2.8	5
1355	A new twist in graphene research: Twisted graphene. Carbon, 2020, 156, 470-487.	5.4	67
1356	The Optical Properties and Plasmonics of Anisotropic 2D Materials. Advanced Optical Materials, 2020, 8, 1900996.	3.6	70
1357	2D Materials for Terahertz Modulation. Advanced Optical Materials, 2020, 8, 1900550.	3.6	59
1358	Perovskite-Based Phototransistors and Hybrid Photodetectors. Advanced Functional Materials, 2020, 30, 1903907.	7.8	225
1359	QuantumATK: an integrated platform of electronic and atomic-scale modelling tools. Journal of Physics Condensed Matter, 2020, 32, 015901.	0.7	771
1360	Photocurrent generation under forward bias with interfacial tunneling of carrier at pentacene/F16CuPc heterojunction photodetector. Journal of Alloys and Compounds, 2020, 815, 152401.	2.8	20
1361	Multi-channels electrode parallel structure graphene photodetector with high performance. Materials Letters, 2020, 260, 126948.	1.3	8
1362	Light-Driven WSe ₂ /ZnO Junction Field-Effect Transistors for High-Performance Photodetection. Advanced Science, 2020, 7, 1901637.	5.6	66
1363	Ultra-compact integrated graphene plasmonic photodetector with bandwidth above 110 GHz. Nanophotonics, 2020, 9, 317-325.	2.9	113
1364	Investigation of multi-resonant and anisotropic plasmonic resonances in the stacked graphene-black phosphorus bilayers. Journal Physics D: Applied Physics, 2020, 53, 025107.	1.3	9
1365	Terahertz Nonlinear Optics of Graphene: From Saturable Absorption to High-Harmonics Generation. Advanced Optical Materials, 2020, 8, 1900771.	3.6	97
1366	High mobility ReSe ₂ field effect transistors: Schottky-barrier-height-dependent photoresponsivity and broadband light detection with Co decoration. 2D Materials, 2020, 7, 015010.	2.0	36
1367	Self-Powered Photodetectors Based on 2D Materials. Advanced Optical Materials, 2020, 8, 1900765.	3.6	245
1368	Fast response and high responsivity realization of microcavity enhanced graphene photodetector using subwavelength grating electrodes. Optics Communications, 2020, 457, 124684.	1.0	2
1369	Highly Conductive Graphene Electronics by Inkjet Printing. Journal of Electronic Materials, 2020, 49, 1765-1776.	1.0	18

#	ARTICLE	IF	CITATIONS
1370	Enhanced adsorption of hydrophobic organic contaminants by high surface area porous graphene. <i>Environmental Science and Pollution Research</i> , 2020, 27, 7309-7317.	2.7	8
1371	Ultrasensitive negative capacitance phototransistors. <i>Nature Communications</i> , 2020, 11, 101.	5.8	124
1372	The Promise of Graphene: A Survey of Microwave Devices Based on Graphene. <i>IEEE Microwave Magazine</i> , 2020, 21, 48-65.	0.7	22
1373	Synthesis of bismuth sulfide nanobelts for high performance broadband photodetectors. <i>Journal of Materials Chemistry C</i> , 2020, 8, 2102-2108.	2.7	43
1374	Recent advances in solution-processed photodetectors based on inorganic and hybrid photo-active materials. <i>Nanoscale</i> , 2020, 12, 2201-2227.	2.8	71
1375	2D material broadband photodetectors. <i>Nanoscale</i> , 2020, 12, 454-476.	2.8	167
1376	A Narrow Dual-Band Monolayer Unpatterned Graphene-Based Perfect Absorber with Critical Coupling in the Near Infrared. <i>Micromachines</i> , 2020, 11, 58.	1.4	52
1377	Solution-processed MoS ₂ quantum dot/GaAs vertical heterostructure based self-powered photodetectors with superior detectivity. <i>Nanotechnology</i> , 2020, 31, 135203.	1.3	22
1378	CVD growth of perovskite/graphene films for high-performance flexible image sensor. <i>Science Bulletin</i> , 2020, 65, 343-349.	4.3	72
1379	Tailoring electronic and transport properties of edge-terminated armchair graphene by defect formation and N/B doping. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126194.	0.9	3
1380	A 3D multilayer curved plasmonic coupling array with abundant and uniform hot spots for surface-enhanced Raman scattering. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 055101.	1.3	7
1381	Excellent photoresponse performances of graphene/metallic WSe ₂ nanosheet heterostructure films. <i>Materials Science in Semiconductor Processing</i> , 2020, 107, 104851.	1.9	14
1382	Analytical determination of atypical quantized resistances in graphene p-n junctions. <i>Physica B: Condensed Matter</i> , 2020, 582, 411971.	1.3	15
1383	Recent advances of low-dimensional materials in Mid- and Far-infrared photonics. <i>Applied Materials Today</i> , 2020, 21, 100800.	2.3	27
1384	Enhanced infrared photoresponse induced by symmetry breaking in a hybrid structure of graphene and plasmonic nanocavities. <i>Carbon</i> , 2020, 170, 49-58.	5.4	15
1385	High performance complementary WS ₂ devices with hybrid Gr/Ni contacts. <i>Nanoscale</i> , 2020, 12, 21280-21290.	2.8	27
1386	Dependable Contact Related Parameter Extraction in Graphene-Metal Junctions. <i>Advanced Electronic Materials</i> , 2020, 6, 2000386.	2.6	14
1387	Ultraviolet photodetector based on the hybrid graphene/phosphor field-effect transistor. <i>Optical Materials</i> , 2020, 109, 110439.	1.7	9

#	ARTICLE	IF	CITATIONS
1388	Phase change vanadium dioxide light sensors. Applied Materials Today, 2020, 21, 100833.	2.3	16
1389	Rippled Metallic Nanowire/Graphene/Semiconductor Nanostack for a Gate-Tunable Ultrahigh-Performance Stretchable Phototransistor. Advanced Optical Materials, 2020, 8, 2000859.	3.6	5
1390	Ultrafast Plasmonic Graphene Photodetector Based on the Channel Photothermoelectric Effect. ACS Photonics, 2020, 7, 488-498.	3.2	37
1391	High Response Photodetection by Applying the Optimized Photoreceptor Protein Modification on Graphene Based Field Effect Transistors. Frontiers in Materials, 2020, 7, .	1.2	3
1392	Photodetection Using Atomically Precise Graphene Nanoribbons. ACS Applied Nano Materials, 2020, 3, 8343-8351.	2.4	15
1393	Lateral Photodetectors Based on Double-Cable Polymer/Two-Dimensional Perovskite Heterojunction. ACS Applied Materials & Interfaces, 2020, 12, 8826-8834.	4.0	27
1394	Borophene: New Sensation in Flatland. Advanced Materials, 2020, 32, e2000531.	11.1	118
1395	Performance of integrated optical switches based on 2D materials and beyond. Frontiers of Optoelectronics, 2020, 13, 129-138.	1.9	36
1396	Graphene Capacitor-Based Electrical Switching of Mode-Locking in All-Fiberized Femtosecond Lasers. ACS Applied Materials & Interfaces, 2020, 12, 54005-54011.	4.0	14
1397	High-Performance Broadband Photodetector Based on Monolayer MoS ₂ Hybridized with Environment-Friendly CuInSe ₂ Quantum Dots. ACS Applied Materials & Interfaces, 2020, 12, 54927-54935.	4.0	50
1398	In-situ characterisation of the defect density in reduced graphene oxide under electrical stress using fluorescence microscopy. International Journal of Nanotechnology, 2020, 17, 57.	0.1	0
1399	An Effort Towards Full Graphene Photodetectors. Photonic Sensors, 2022, 12, 31-67.	2.5	16
1400	In Situ and Real-Time Nanoscale Monitoring of Ultra-Thin Metal Film Growth Using Optical and Electrical Diagnostic Tools. Nanomaterials, 2020, 10, 2225.	1.9	17
1401	Nanolasers Based on 2D Materials. Laser and Photonics Reviews, 2020, 14, 2000271.	4.4	47
1402	Graphene plasmonic nanoresonators/graphene heterostructures for efficient room-temperature infrared photodetection. Journal of Semiconductors, 2020, 41, 072907.	2.0	9
1403	Solution processed Cu ₂ S/TiO ₂ heterojunction for visible-near infrared photodetector. Thin Solid Films, 2020, 710, 138275.	0.8	11
1404	Surface coordination chemistry of graphene: Understanding the coordination of single transition metal atoms. Coordination Chemistry Reviews, 2020, 422, 213469.	9.5	33
1405	A graphene-silicon Schottky photodetector with graphene oxide interlayer. Sensors and Actuators A: Physical, 2020, 314, 112232.	2.0	34

#	ARTICLE	IF	CITATIONS
1406	A new photodetector structure based on graphene nanomeshes: an ab initio study. Beilstein Journal of Nanotechnology, 2020, 11, 1036-1044.	1.5	0
1407	Tale of Two Layered Semiconductor Catalysts toward Artificial Photosynthesis. ACS Applied Materials & Interfaces, 2020, 12, 37811-37833.	4.0	17
1408	Device Architecture for Visible and Near-Infrared Photodetectors Based on Two-Dimensional SnSe ₂ and MoS ₂ : A Review. Micromachines, 2020, 11, 750.	1.4	19
1409	MMA-enabled ultraclean graphene transfer for fast-response graphene/GaN ultraviolet photodetectors. Carbon, 2020, 169, 92-98.	5.4	16
1410	Ultrabroadband, Fast, and Flexible Photodetector Based on HfTe ₅ Crystal. Advanced Optical Materials, 2020, 8, 2000833.	3.6	25
1411	Large-area growth of high-quality graphene/MoS ₂ vertical heterostructures by chemical vapor deposition with nucleation control. Carbon, 2020, 168, 580-587.	5.4	20
1412	The optical properties of few-layer InSe. Journal of Applied Physics, 2020, 128, .	1.1	23
1413	Photodetectors based on 2D material/Si heterostructure. Journal of Semiconductors, 2020, 41, 080401.	2.0	11
1414	Self-driven photodetector based on a GaSe/MoSe ₂ selenide van der Waals heterojunction with the hybrid contact. Applied Physics Letters, 2020, 117, .	1.5	25
1415	Assessment of reusable graphene wool adsorbent for the simultaneous removal of selected 2-6 ringed polycyclic aromatic hydrocarbons from aqueous solution. Environmental Technology (United Kingdom), 2020, 41, 1078-1084.	1.7	14
1416	Large-area reduced graphene oxide photodetectors for low-light intensity and low-driving voltage operation. , 2020, , .		0
1417	Effect of Graphene Doping Level near the Metal Contact Region on Electrical and Photoresponse Characteristics of Graphene Photodetector. Sensors, 2020, 20, 4661.	2.1	3
1418	Ultrasensitive UV Photodetector Based on Interfacial Charge-Controlled Inorganic Perovskite-Polymer Hybrid Structure. ACS Applied Materials & Interfaces, 2020, 12, 43106-43114.	4.0	23
1419	Visible to near-infrared photodetector with novel optoelectronic performance based on graphene/S-doped InSe heterostructure on h-BN substrate. Nanoscale, 2020, 12, 19259-19266.	2.8	17
1420	Graphene Nanoribbons: On-Surface Synthesis and Integration into Electronic Devices. Advanced Materials, 2020, 32, e2001893.	11.1	156
1421	High-performance light trajectory tracking and image sensing devices based on a In ₂ Se ₃ /GaAs heterostructure. Journal of Materials Chemistry C, 2020, 8, 13762-13769.	2.7	11
1422	A review of molybdenum disulfide (MoS ₂) based photodetectors: from ultra-broadband, self-powered to flexible devices. RSC Advances, 2020, 10, 30529-30602.	1.7	211
1423	Ferroelectric-Gated InSe Photodetectors with High On/Off Ratios and Photoresponsivity. Nano Letters, 2020, 20, 6666-6673.	4.5	53

#	ARTICLE	IF	CITATIONS
1424	Zero-bias mid-infrared graphene photodetectors with bulk photoresponse and calibration-free polarization detection. <i>Nature Communications</i> , 2020, 11, 6404.	5.8	111
1425	Room temperature operation and low dark current of In _{0.15} Ga _{0.85} As/InAs/In _{0.15} Ga _{0.85} As dot-in-well short-wave infrared photodetector: Experimental and theoretical correlation. <i>Superlattices and Microstructures</i> , 2020, 148, 106715.	1.4	2
1426	High-performance graphene/InSb heterojunction photodetectors for high-resolution mid-infrared image sensors. <i>Applied Physics Letters</i> , 2020, 117, .	1.5	29
1427	Development of gateless quantum Hall checkerboard p-n junction devices. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 345302.	1.3	0
1428	Photogating-controlled ZnO photodetector response for visible to near-infrared light. <i>Nanotechnology</i> , 2020, 31, 335204.	1.3	11
1429	Extraction of intrinsic field-effect mobility of graphene considering effects of gate-bias-induced contact modulation. <i>Journal of Applied Physics</i> , 2020, 127, .	1.1	5
1430	Silicon-Waveguide-Integrated Carbon Nanotube Optoelectronic System on a Single Chip. <i>ACS Nano</i> , 2020, 14, 7191-7199.	7.3	30
1431	Bismuth Oxychalcogenide Nanosheet: Facile Synthesis, Characterization, and Photodetector Application. <i>Advanced Materials Technologies</i> , 2020, 5, 2000180.	3.0	37
1432	Enhanced Charge Transfer and Responsivity in Hybrid Quantum Dot/Graphene Photodetectors Using ZnO as Intermediate Electron-Collecting Layer. <i>Advanced Electronic Materials</i> , 2020, 6, 2000014.	2.6	16
1433	Ti ₃ C ₂ MXene Photoexciting Nanoflakes for Localization of Supercontinuum Lasing of Aqueous-Phase Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2020, 124, 13385-13392.	1.5	2
1434	Analysing quantized resistance behaviour in graphene Corbino p-n junction devices. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 275301.	1.3	5
1435	Hydrogen Terminated Germanene for a Robust Self-Powered Flexible Photoelectrochemical Photodetector. <i>Small</i> , 2020, 16, e2000283.	5.2	58
1436	Enhancement of MoTe ₂ near-infrared absorption with gold hollow nanorods for photodetection. <i>Nano Research</i> , 2020, 13, 1636-1643.	5.8	21
1438	Enhanced absorption of monolayer graphene using a metal-dielectric elliptical cavity array. <i>Optics Communications</i> , 2020, 474, 126075.	1.0	3
1439	Near-Infrared Photodetectors Based on Hybrid Graphene-Colloidal PbSe Quantum Dots. <i>MRS Advances</i> , 2020, 5, 2273-2280.	0.5	5
1440	Gradient 2D/3D Perovskite Films Prepared by Hot-Casting for Sensitive Photodetectors. <i>Advanced Science</i> , 2020, 7, 2000776.	5.6	56
1441	High-speed infrared two-dimensional platinum diselenide photodetectors. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	33
1442	Band gap engineering of monolayer ZrGeTe ₄ via strain: A first-principles study. <i>Materials Chemistry and Physics</i> , 2020, 253, 123308.	2.0	10

#	ARTICLE	IF	CITATIONS
1443	Towards low-loss on-chip nanophotonics with coupled graphene and silicon carbide: a review. <i>JPhys Materials</i> , 2020, 3, 032005.	1.8	15
1444	Optically Rewritable Memory in a Graphene-Ferroelectric-Photovoltaic Heterostructure. <i>Physical Review Applied</i> , 2020, 13, .	1.5	21
1445	Betavoltaic battery based on reduced-Graphene-Oxide/Si heterojunction. <i>Superlattices and Microstructures</i> , 2020, 145, 106602.	1.4	5
1446	State of the art two-dimensional materials-based photodetectors: Prospects, challenges and future outlook. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 89, 28-46.	2.9	11
1447	Silicon Photonic Platform for Passive Waveguide Devices: Materials, Fabrication, and Applications. <i>Advanced Materials Technologies</i> , 2020, 5, .	3.0	106
1448	2D layered noble metal dichalcogenides (Pt, Pd, Se, S) for electronics and energy applications. <i>Materials Today Advances</i> , 2020, 7, 100076.	2.5	55
1449	Graphene: Fabrication Methods, Properties, and Applications in Modern Industries. , 0, , .		10
1450	A highly efficient bilayer graphene/ZnO/silicon nanowire based heterojunction photodetector with broadband spectral response. <i>Nanotechnology</i> , 2020, 31, 405205.	1.3	56
1451	Manipulation of thin silver film growth on weakly interacting silicon dioxide substrates using oxygen as a surfactant. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, .	0.9	24
1452	Electrically focus-tuneable ultrathin lens for high-resolution square subpixels. <i>Light: Science and Applications</i> , 2020, 9, 98.	7.7	29
1453	Pattern Stimulated CVD Growth of 2D MoS ₂ . <i>ChemistrySelect</i> , 2020, 5, 6709-6714.	0.7	2
1454	Dark-current reduction accompanied photocurrent enhancement in p-type MnO quantum-dot decorated n-type 2D-MoS ₂ -based photodetector. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	46
1455	Wafer-size growth of 2D layered SnSe films for UV-Visible-NIR photodetector arrays with high responsivity. <i>Nanoscale</i> , 2020, 12, 7358-7365.	2.8	53
1456	Breaking symmetry in device design for self-driven 2D material based photodetectors. <i>Nanoscale</i> , 2020, 12, 8109-8118.	2.8	29
1457	A Tunable Terahertz Metamaterial Absorber Composed of Hourglass-Shaped Graphene Arrays. <i>Nanomaterials</i> , 2020, 10, 533.	1.9	36
1458	Present advances and perspectives of broadband photo-detectors based on emerging 2D-Xenes beyond graphene. <i>Nano Research</i> , 2020, 13, 891-918.	5.8	36
1459	Microscopic Theory of Plasmons in Substrate-Supported Borophene. <i>Nano Letters</i> , 2020, 20, 2986-2992.	4.5	11
1460	Room Temperature Graphene Mid-Infrared Bolometer with a Broad Operational Wavelength Range. <i>ACS Photonics</i> , 2020, 7, 1206-1215.	3.2	41

#	ARTICLE	IF	CITATIONS
1461	Electrical transport properties of gate tunable graphene lateral tunnel diodes. Japanese Journal of Applied Physics, 2020, 59, SIID03.	0.8	3
1462	Recent Progress in Waveguide-Integrated Graphene Photonic Devices for Sensing and Communication Applications. Frontiers in Physics, 2020, 8, .	1.0	14
1463	Explicit Gain Equations for Single Crystalline Photoconductors. ACS Nano, 2020, 14, 3405-3413.	7.3	21
1464	Substrate effects in graphene field-effect transistor photodetectors. Journal of Physics: Conference Series, 2020, 1461, 012188.	0.3	1
1465	First-principles study of magnetism and electric field effects in 2D systems. AVS Quantum Science, 2020, 2, .	1.8	7
1466	A Graphene/Polycrystalline Silicon Photodiode and Its Integration in a Photodiodeâ€“Oxideâ€“Semiconductor Field Effect Transistor. Micromachines, 2020, 11, 596.	1.4	3
1467	Ultrathin Bi₂O₂S nanosheet near-infrared photodetectors. Nanoscale, 2020, 12, 16285-16291.	2.8	40
1468	Graphene Plasmonics in Sensor Applications: A Review. Sensors, 2020, 20, 3563.	2.1	35
1469	Two-dimensional materials and hybrid systems for photodetection. , 2020, , 325-349.		3
1470	Highâ€“Responsivity Graphene/4Hâ€“SiC Ultraviolet Photodetector Based on a Planar Junction Formed by the Dual Modulation of Electric and Light Fields. Advanced Optical Materials, 2020, 8, 2000559.	3.6	19
1471	Semimetals for high-performance photodetection. Nature Materials, 2020, 19, 830-837.	13.3	181
1472	Unveiling the Hot Carrier Distribution in Vertical Graphene/h-BN/Au van der Waals Heterostructures for High-Performance Photodetector. ACS Applied Materials & Interfaces, 2020, 12, 10772-10780.	4.0	44
1473	Self-Powered, Self-Healed, and Shape-Adaptive Ultraviolet Photodetectors. ACS Applied Materials & Interfaces, 2020, 12, 9755-9765.	4.0	34
1474	Recent advances in black phosphorus/carbon hybrid composites: from improved stability to applications. Journal of Materials Chemistry A, 2020, 8, 4647-4676.	5.2	39
1475	Solar-blind deep-ultraviolet photodetectors based on solution-synthesized quasi-2D Te nanosheets. Nanophotonics, 2020, 9, 2459-2466.	2.9	24
1476	Plasmonically enabled two-dimensional material-based optoelectronic devices. Nanoscale, 2020, 12, 8095-8108.	2.8	38
1477	Manipulating Optical Absorption of Indium Selenide Using Plasmonic Nanoparticles. ACS Omega, 2020, 5, 3000-3005.	1.6	5
1478	Enhanced Photoresponse of WS₂ Photodetectors through Interfacial Defect Engineering Using a TiO₂ Interlayer. ACS Applied Electronic Materials, 2020, 2, 838-845.	2.0	17

#	ARTICLE	IF	CITATIONS
1479	Review of Polarization Optical Devices Based on Graphene Materials. International Journal of Molecular Sciences, 2020, 21, 1608.	1.8	42
1480	Out-of-Plane Homo Junction Enabled High Performance SnS ₂ Lateral Phototransistor. Advanced Optical Materials, 2020, 8, 1901971.	3.6	27
1481	Optically-Thin Broadband Graphene-Membrane Photodetector. Nanomaterials, 2020, 10, 407.	1.9	7
1482	Construction of a $\text{In}^{2+}\text{-Ga}_2\text{O}_3$ -based metal-oxide semiconductor-structured photodiode for high-performance dual-mode solar-blind detector applications. Journal of Materials Chemistry C, 2020, 8, 5071-5081.	2.7	58
1483	Quantum Hall resistance standards using graphene p-n junction devices with Corbino geometries. AIP Advances, 2020, 10, 035205.	0.6	4
1484	Pump-probe micro-spectroscopy and 2D materials. Journal Physics D: Applied Physics, 2020, 53, 473001.	1.3	8
1485	Compact Graphene Plasmonic Slot Photodetector on Silicon-on-Insulator with High Responsivity. ACS Photonics, 2020, 7, 932-940.	3.2	63
1486	Near full light absorption and full charge collection in 1-micron thick quantum dot photodetector using intercalated graphene monolayer electrodes. Nanoscale, 2020, 12, 4909-4915.	2.8	11
1487	Accessing ratios of quantized resistances in graphene p-n junction devices using multiple terminals. AIP Advances, 2020, 10, 025112.	0.6	6
1488	Mobility improvement in CVD graphene by using local metal side-gate. Semiconductor Science and Technology, 2020, 35, 045027.	1.0	1
1489	In-situ one pot synthesis of graphene-ZnO nanohybrid and its application to UV light detection. Materials Research Express, 2020, 7, 015058.	0.8	10
1490	Ultrasensitive and high gain solution-processed perovskite photodetectors by $\text{CH}_3\text{NH}_3\text{PbI}_2.55\text{Br}_0.45:\text{Zn}_2\text{SnO}_4$ bulk heterojunction composite. Emergent Materials, 2020, 3, 1-7.	3.2	10
1491	Low dimensional freestanding semiconductors for flexible optoelectronics: materials, synthesis, process, and applications. Materials Research Letters, 2020, 8, 123-144.	4.1	32
1492	High figure of merit of monolayer Sb ₂ Te ₂ Se of ultra low lattice thermal conductivity. Computational Materials Science, 2020, 177, 109588.	1.4	9
1493	Liquid Phase Exfoliated Indium Selenide Based Highly Sensitive Photodetectors. Advanced Functional Materials, 2020, 30, 1908427.	7.8	42
1494	Sr-doped yttrium nickel oxide-based photodetectors. Journal of Materials Science: Materials in Electronics, 2020, 31, 3441-3455.	1.1	6
1496	High performance near infrared photodetector based on in-plane black phosphorus p-n homojunction. Nano Energy, 2020, 70, 104518.	8.2	58
1497	Enhancing Quantum Yield in Strained MoS ₂ Bilayers by Morphology-Controlled Plasmonic Nanostructures toward Superior Photodetectors. Chemistry of Materials, 2020, 32, 2242-2252.	3.2	24

#	ARTICLE	IF	CITATIONS
1498	Demonstration of a Broadband Photodetector Based on a Two-Dimensional Metal-Organic Framework. <i>Advanced Materials</i> , 2020, 32, e1907063.	11.1	103
1499	Strong Light-Matter Interactions Enabled by Polaritons in Atomically Thin Materials. <i>Advanced Optical Materials</i> , 2020, 8, 1901473.	3.6	56
1500	A novel airgap formation scheme by GO nanosheet gap sealing process with extreme low effective dielectric constant. <i>Microelectronic Engineering</i> , 2020, 223, 111218.	1.1	0
1501	Self-powered, superior high gain silicon-based near-infrared photosensing for low-power light communication. <i>Nano Energy</i> , 2020, 70, 104544.	8.2	35
1502	Metal-graphene interfaces in epitaxial and bulk systems: A review. <i>Progress in Materials Science</i> , 2020, 110, 100652.	16.0	114
1503	Waveguide-integrated van der Waals heterostructure photodetector at telecom wavelengths with high speed and high responsivity. <i>Nature Nanotechnology</i> , 2020, 15, 118-124.	15.6	208
1504	Enhancing the stability of perovskites by constructing heterojunctions of graphene/MASn ₃ . <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 3724-3733.	1.3	6
1505	PbE (E = S, Se) Colloidal Quantum Dot-Layered 2D Material Hybrid Photodetectors. <i>Nanomaterials</i> , 2020, 10, 172.	1.9	29
1506	Graphene Fabrication by Using Femtosecond Pulsed Laser and Its Application on Passively Q-Switched Solid-State Laser as Saturable Absorber. <i>IEEE Photonics Journal</i> , 2020, 12, 1-9.	1.0	2
1507	Percolation-Limited Dual Charge Transport in Vertical p-n Heterojunction Schottky Barrier Transistors. <i>Nano Letters</i> , 2020, 20, 3585-3592.	4.5	13
1508	One-step synthesis of Zn-doped MoS ₂ nanosheets with tunable doping concentration using dopants-loaded seeding promoters for visible-light flexible photodetectors. <i>Journal of Alloys and Compounds</i> , 2020, 835, 155383.	2.8	15
1509	Photocurrent response of type-II Dirac semimetal PtTe ₂ . <i>2D Materials</i> , 2020, 7, 034003.	2.0	24
1510	Broadband and Ultrasensitive Graphene-Based Mechanical Wave Detector with Nanosecond Response Used for Biological Photoacoustic Imaging. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 17268-17275.	4.0	6
1511	The co-reactant role during plasma enhanced atomic layer deposition of palladium. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 9124-9136.	1.3	6
1512	Non-layered ZnSb nanoplates for room temperature infrared polarized photodetectors. <i>Journal of Materials Chemistry C</i> , 2020, 8, 6388-6395.	2.7	24
1513	Graphene Plasmonic Fractal Metamaterials for Broadband Photodetectors. <i>Scientific Reports</i> , 2020, 10, 6882.	1.6	22
1514	3D-to-2D Morphology Manipulation of Sputter-Deposited Nanoscale Silver Films on Weakly Interacting Substrates via Selective Nitrogen Deployment for Multifunctional Metal Contacts. <i>ACS Applied Nano Materials</i> , 2020, 3, 4728-4738.	2.4	38
1515	Two-Dimensional Tellurium: Progress, Challenges, and Prospects. <i>Nano-Micro Letters</i> , 2020, 12, 99.	14.4	139

#	ARTICLE	IF	CITATIONS
1516	Improved photovoltaic performance of graphene-based solar cells on textured silicon substrate. Journal of Alloys and Compounds, 2020, 834, 155123.	2.8	23
1517	Polarization driven self-biased and enhanced UV-visible photodetector characteristics of ferroelectric thin film. Journal Physics D: Applied Physics, 2020, 53, 275302.	1.3	30
1518	Efficient photovoltaic effect in graphene/h-BN/silicon heterostructure self-powered photodetector. Nano Research, 2021, 14, 1967-1972.	5.8	39
1519	Graphene quantum dots synthesis and energy application: a review. Carbon Letters, 2021, 31, 1-12.	3.3	59
1520	Position-sensitive detectors based on two-dimensional materials. Nano Research, 2021, 14, 1889-1900.	5.8	14
1521	Metallo-graphene enhanced upconversion luminescence for broadband photodetection under polychromatic illumination. Chemical Engineering Journal, 2021, 420, 127608.	6.6	15
1522	A novel graphene based tunable semiconductor metamaterial: A mathematical analysis. Materials Today Communications, 2021, 26, 101840.	0.9	0
1523	Large-size Ultrathin Ga_2S_3 Nanosheets toward High-performance Photodetection. Advanced Functional Materials, 2021, 31, 2008307.	7.8	43
1524	Avalanche photodetectors based on two-dimensional layered materials. Nano Research, 2021, 14, 1878-1888.	5.8	44
1525	Magnetization effect of Mn-embedded in C_2N on hydrogen adsorption and gas-sensing properties: Ab-initio analysis. Applied Surface Science, 2021, 537, 147970.	3.1	15
1526	Inside out-growth method for high-quality nitrogen-doped graphene. Carbon, 2021, 171, 704-710.	5.4	20
1527	Significant improvement of infrared graphene nanoribbon phototransistor performance: A quantum simulation study. Sensors and Actuators A: Physical, 2021, 317, 112446.	2.0	8
1528	Graphene Oxide for Integrated Photonics and Flat Optics. Advanced Materials, 2021, 33, e2006415.	11.1	72
1529	Recent Progress in Short-to Long-Wave Infrared Photodetection Using 2D Materials and Heterostructures. Advanced Optical Materials, 2021, 9, 2001708.	3.6	118
1530	An optical slot-antenna-coupled cavity (SAC) framework towards tunable free-space graphene photonic surfaces. Nano Research, 2021, 14, 1364-1373.	5.8	2
1531	Tunable Electronic and Optical Properties of 2D Monoelemental Materials Beyond Graphene for Promising Applications. Energy and Environmental Materials, 2021, 4, 522-543.	7.3	48
1532	Self-Driven $\text{WSe}_2/\text{Bi}_2\text{O}_3/\text{Se}$ Van der Waals Heterostructure Photodetectors with High Light On/Off Ratio and Fast Response. Advanced Functional Materials, 2021, 31, 2008351.	7.8	129
1533	An ultrafast multi-layer Graphene/InGaAs/InAlAs/InAs P-I-N photodetector with 100 GHz bandwidth. Optik, 2021, 227, 165429.	1.4	6

#	ARTICLE	IF	CITATIONS
1534	Low-Dimensional Metal Halide Perovskite Photodetectors. <i>Advanced Materials</i> , 2021, 33, e2003309.	11.1	319
1535	Two-Dimensional Materials for Integrated Photonics: Recent Advances and Future Challenges. <i>Small Science</i> , 2021, 1, 2000053.	5.8	56
1536	Emerging low-dimensional materials for mid-infrared detection. <i>Nano Research</i> , 2021, 14, 1863-1877.	5.8	22
1537	CVD growth of layered Cr ₂ O ₃ hexagonal flakes for optoelectronic applications. <i>Applied Surface Science</i> , 2021, 536, 147713.	3.1	10
1538	Polarization-State Modulation in Fano Resonant Graphene Metasurface Reflector. <i>Journal of Lightwave Technology</i> , 2021, 39, 7869-7875.	2.7	10
1539	PbS QD-based photodetectors: future-oriented near-infrared detection technology. <i>Journal of Materials Chemistry C</i> , 2021, 9, 417-438.	2.7	64
1540	Carbon Nanomaterials for Emerging Electronic Devices and Sensors. <i>Advances in Sustainability Science and Technology</i> , 2021, , 215-258.	0.4	0
1541	MoS ₂ and CdMoS ₄ nanostructure-based UV light photodetectors. <i>Nanoscale Advances</i> , 2021, 3, 4799-4803.	2.2	3
1542	Perovskite photodetectors and their application in artificial photonic synapses. <i>Chemical Communications</i> , 2021, 57, 11429-11442.	2.2	27
1543	Electronic properties of bilayer g-SiC ₃ system. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 1888-1896.	1.1	0
1544	Cold-Trap-Mediated Broad Dynamic Photodetection in Graphene-Organic Hybrid Photonic Barristors. <i>Journal of the American Chemical Society</i> , 2021, 143, 879-890.	6.6	9
1545	A Polarization-Sensitive Photodetector Based on 3d Microtubular Graphene Field-Effect Transistor. , 2021, , .		0
1546	Heterostructures of titanium-based MXenes in energy conversion and storage devices. <i>Journal of Materials Chemistry C</i> , 2021, 9, 8395-8465.	2.7	30
1547	Solution-Processable Carbon and Graphene Quantum Dots Photodetectors. <i>Lecture Notes in Nanoscale Science and Technology</i> , 2021, , 157-214.	0.4	1
1548	Recent progress and challenges based on two-dimensional material photodetectors. <i>Nano Express</i> , 2021, 2, 012001.	1.2	31
1549	Electrochemical epitaxial (200) PbSe submicron-plates on single-layer graphene for an ultrafast infrared response. <i>Journal of Materials Chemistry C</i> , 2021, 9, 6536-6543.	2.7	8
1550	Mid-Wave Infrared Polarization-Independent Graphene Photoconductor with Integrated Plasmonic Nanoantennas Operating at Room Temperature. <i>Advanced Optical Materials</i> , 2021, 9, 2001854.	3.6	11
1551	A graphene-MoS ₂ C heterostructure for a highly responsive broadband photodetector. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 23024-23031.	1.3	1

#	ARTICLE	IF	CITATIONS
1552	Hybrid Optoelectronic Materials for Photodetection Applications. <i>Advances in Material Research and Technology</i> , 2021, , 45-64.	0.3	1
1553	Emerging field of few-layered intercalated 2D materials. <i>Nanoscale Advances</i> , 2021, 3, 963-982.	2.2	15
1554	A mechanism for the variation in the photoelectric performance of a photodetector based on CVD-grown 2D MoS ₂ . <i>RSC Advances</i> , 2021, 11, 5204-5217.	1.7	7
1555	Silicene/MoS ₂ Heterojunction for High-Performance Photodetector. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 138-143.	1.6	20
1556	A silicon-based PbSe quantum dot near-infrared photodetector with spectral selectivity. <i>Nanoscale</i> , 2021, 13, 12306-12313.	2.8	19
1557	Oxidized eutectic gallium–indium (EGaIn) nanoparticles for broadband light response in a graphene-based photodetector. <i>Materials Advances</i> , 2021, 2, 4414-4422.	2.6	3
1558	Efficient FAPbI ₃ –PbS quantum dot graphene-based phototransistors. <i>New Journal of Chemistry</i> , 2021, 45, 15285-15293.	1.4	6
1559	Graphene: A two dimensional super material for sensor applications. <i>Materials Today: Proceedings</i> , 2021, 43, 203-208.	0.9	12
1560	Graphdiyne Visible–Light Photodetector with Ultrafast Detectivity. <i>Advanced Optical Materials</i> , 2021, 9, 2001916.	3.6	25
1561	Short-wavelength ultraviolet dosimeters based on DNA nanostructure-modified graphene field-effect transistors. <i>Chemical Communications</i> , 2021, 57, 5071-5074.	2.2	6
1562	Improving the stability of perovskite by covering graphene on <sc>FAPbI ₃ </sc> surface. <i>International Journal of Energy Research</i> , 2021, 45, 10808-10820.	2.2	7
1563	Electrochemically Exfoliated Platinum Dichalcogenide Atomic Layers for High-Performance Air-Stable Infrared Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 8518-8527.	4.0	23
1564	Progress in Epitaxial Thin–Film Na ₃ Bi as a Topological Electronic Material. <i>Advanced Materials</i> , 2021, 33, e2005897.	11.1	18
1565	The Opto-Electronic Functional Devices Based on Three-Dimensional Lead Halide Perovskites. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 1453.	1.3	11
1566	Nonvolatile silicon photonic switch with graphene based flash-memory cell. <i>Optical Materials Express</i> , 2021, 11, 766.	1.6	1
1567	The Highly Uniform Photoresponsivity from Visible to Near IR Light in Sb ₂ Te ₃ Flakes. <i>Sensors</i> , 2021, 21, 1535.	2.1	6
1568	Investigation of the mechanical properties and fracture mechanisms of graphene/WSe ₂ vertical heterostructure: A molecular dynamics study. <i>Computational Materials Science</i> , 2021, 188, 110231.	1.4	28
1569	Self-powered graphene phototransistor with high and tunable responsivity and detectivity. <i>Engineering Research Express</i> , 2021, 3, 015018.	0.8	0

#	ARTICLE	IF	CITATIONS
1570	Self-powered and temperature-tunable infrared-visible photodetector based on a VO ₂ /Si heterojunction. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 165109.	1.3	7
1571	Recent progress in two-dimensional Ruddlesden-Popper perovskite based heterostructures. <i>2D Materials</i> , 2021, 8, 022006.	2.0	19
1572	Perspectivas y aplicaciones reales del grafeno después de 16 años de su descubrimiento. <i>Revista Colombiana De Quimica</i> , 2021, 50, 51-85.	0.2	0
1573	Efficient graphene in-plane homogeneous p-n-p junction based infrared photodetectors with low dark current. <i>Science China Information Sciences</i> , 2021, 64, 1.	2.7	6
1574	Multifunctional two-dimensional glassy graphene devices for vis-NIR photodetection and volatile organic compound sensing. <i>Science China Materials</i> , 2021, 64, 1964-1976.	3.5	5
1575	Integrated contact lens sensor system based on multifunctional ultrathin MoS ₂ transistors. <i>Matter</i> , 2021, 4, 969-985.	5.0	80
1576	Gate-Tunable Plasmon-Enhanced Photodetection in a Monolayer MoS ₂ Phototransistor with Ultrahigh Photoresponsivity. <i>Nano Letters</i> , 2021, 21, 3083-3091.	4.5	68
1577	Long-Wave Infrared Photodetectors Based on 2D Platinum Diselenide atop Optical Cavity Substrates. <i>ACS Nano</i> , 2021, 15, 6573-6581.	7.3	29
1578	Dual-gate MoS ₂ phototransistor with atomic-layer-deposited HfO ₂ as top-gate dielectric for ultrahigh photoresponsivity. <i>Nanotechnology</i> , 2021, 32, 215203.	1.3	9
1579	Structural Defects, Mechanical Behaviors, and Properties of Two-Dimensional Materials. <i>Materials</i> , 2021, 14, 1192.	1.3	48
1580	Modification of graphene photodetector by TiO ₂ prepared by oxygen plasma. <i>Journal of Materials Science</i> , 2021, 56, 10938-10946.	1.7	4
1582	High performance mid-wave infrared photodetector based on graphene/black phosphorus heterojunction. <i>Materials Research Express</i> , 2021, 8, 035602.	0.8	10
1583	Two-step colloidal synthesis of micron-scale Bi ₂ O ₂ Se nanosheets and their electrostatic assembly for thin-film photodetectors with fast response. <i>Chinese Chemical Letters</i> , 2021, 32, 3099-3104.	4.8	10
1584	Liquid-Exfoliated 2D Materials for Optoelectronic Applications. <i>Advanced Science</i> , 2021, 8, e2003864.	5.6	77
1585	Directly Synthesized Graphene-Based Photonics and Optoelectronics Devices. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 2768.	1.3	4
1586	2D Materials Enabled Next-Generation Integrated Optoelectronics: from Fabrication to Applications. <i>Advanced Science</i> , 2021, 8, e2003834.	5.6	70
1587	Low-Loss Integrated Nanophotonic Circuits with Layered Semiconductor Materials. <i>Nano Letters</i> , 2021, 21, 2709-2718.	4.5	24
1588	Using Bottom-Up Lithography and Optical Nonlocality to Create Short-Wave Infrared Plasmonic Resonances in Graphene. <i>ACS Photonics</i> , 2021, 8, 1277-1285.	3.2	3

#	ARTICLE	IF	CITATIONS
1589	Superflexible, Self-Biased, High-Voltage-Stable, and Seal-Packed Office-Paper Based Gallium-Oxide Photodetector. <i>ACS Applied Electronic Materials</i> , 2021, 3, 1852-1863.	2.0	19
1590	Short-wave infrared organic phototransistors with strong infrared-absorbing polytriarylamine by electron-transfer doping. <i>Npj Flexible Electronics</i> , 2021, 5, .	5.1	19
1591	Anomalous Floquet tunneling in uniaxially strained graphene. <i>Physical Review B</i> , 2021, 103, .	1.1	10
1592	MoS2 Based Photodetectors: A Review. <i>Sensors</i> , 2021, 21, 2758.	2.1	77
1593	Practical Route for the Low-Temperature Growth of Large-Area Bilayer Graphene on Polycrystalline Nickel by Cold-Wall Chemical Vapor Deposition. <i>ACS Omega</i> , 2021, 6, 12143-12154.	1.6	8
1594	Enhancing the QOS of far field networking and communication using the optical properties of graphene. <i>Materials Today: Proceedings</i> , 2021, , .	0.9	1
1595	FePS ₃ Nanosheet-Based Photoelectrochemical-Type Photodetector with Superior Flexibility. <i>Journal of Physical Chemistry C</i> , 2021, 125, 9526-9533.	1.5	12
1596	Experimental perspective on three-dimensional topological semimetals. <i>Reviews of Modern Physics</i> , 2021, 93, .	16.4	265
1597	Critical Strain-Induced Photoresponse in Folded Graphene Superlattices. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 21573-21581.	4.0	5
1598	Controlled Growth of Large-Sized and Phase-Selectivity 2D GaTe Crystals. <i>Small</i> , 2021, 17, e2007909.	5.2	9
1599	Oriented Growth of In ₂ O ₃ Chain Based Metal-Porphyrin Framework Thin Film for High-Sensitive Photodetector. <i>Advanced Science</i> , 2021, 8, 2100548.	5.6	23
1600	Photomultiplication-Type Organic Photodetectors with Fast Response Enabled by the Controlled Charge Trapping Dynamics of Quantum Dot Interlayer. <i>Advanced Functional Materials</i> , 2021, 31, 2102087.	7.8	29
1601	Engineered tunneling layer with enhanced impact ionization for detection improvement in graphene/silicon heterojunction photodetectors. <i>Light: Science and Applications</i> , 2021, 10, 113.	7.7	39
1602	Van der Waals Integration Based on Two-Dimensional Materials for High-Performance Infrared Photodetectors. <i>Advanced Functional Materials</i> , 2021, 31, 2103106.	7.8	112
1603	Interfacial Gated Graphene Photodetector with Broadband Response. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 22796-22805.	4.0	16
1604	Multi-band enhanced graphene photodetector based on localized surface plasmon. <i>Sensors and Actuators A: Physical</i> , 2021, 322, 112627.	2.0	5
1605	Photo-Detectors Based on Two Dimensional Materials. , 0, , .		0
1606	Mid-infrared semimetal polarization detectors with configurable polarity transition. <i>Nature Photonics</i> , 2021, 15, 614-621.	15.6	97

#	ARTICLE	IF	CITATIONS
1607	Low-Noise Dual-Band Polarimetric Image Sensor Based on 1D Bi ₂ S ₃ Nanowire. <i>Advanced Science</i> , 2021, 8, e2100075.	5.6	48
1608	Optoelectronic mixing with high-frequency graphene transistors. <i>Nature Communications</i> , 2021, 12, 2728.	5.8	18
1609	Nanohybrid Photodetectors. <i>Advanced Photonics Research</i> , 2021, 2, 2100015.	1.7	9
1610	The large photoresponse and high polarization sensitivity of Te-based optoelectronic devices with the adsorbed hydroxide ions. <i>Applied Physics Letters</i> , 2021, 118, 221109.	1.5	5
1611	Ternary 2D Layered Material FePSe ₃ and Near-Infrared Photodetector. <i>Advanced Electronic Materials</i> , 2021, 7, 2100207.	2.6	19
1612	Tunable broadband light emission from graphene. <i>2D Materials</i> , 2021, 8, 035026.	2.0	5
1613	Recent advances in perovskite/2D materials based hybrid photodetectors. <i>JPhys Materials</i> , 2021, 4, 032008.	1.8	31
1614	Improved Performances of CVD-Grown MoS ₂ Based Phototransistors Enabled by Encapsulation. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100164.	1.9	8
1615	Zero-Bias Long-Wave Infrared Waveguide Photodetector via Graphene/Silicon/Halide Heterogeneous Integration. , 2021, , .		0
1616	Heterogeneously Integrated Graphene/Silicon/Halide Waveguide Photodetectors toward Chip-Scale Zero-Bias Long-Wave Infrared Spectroscopic Sensing. <i>ACS Nano</i> , 2021, 15, 10084-10094.	7.3	40
1617	Self-Powered Broadband Photodetector and Sensor Based on Novel Few-Layered Pd ₃ (PS ₄) ₂ Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 30806-30817.	4.0	13
1618	Silicon/2D-material photodetectors: from near-infrared to mid-infrared. <i>Light: Science and Applications</i> , 2021, 10, 123.	7.7	177
1619	Tunable wide-angle multi-band mid-infrared linear-to-linear polarization converter based on a graphene metasurface. <i>Chinese Physics B</i> , 0, , .	0.7	4
1620	Monolayer MoS ₂ photodetectors with a buried-gate field-effect transistor structure. <i>Nanotechnology</i> , 2022, 33, 075206.	1.3	3
1621	Visualization of Plasmonic Couplings Using Ultrafast Electron Microscopy. <i>Nano Letters</i> , 2021, 21, 5842-5849.	4.5	18
1622	Lead-free halide perovskites, beyond solar cells and LEDs. <i>JPhys Energy</i> , 2021, 3, 032014.	2.3	11
1623	Large scale self-assembly of plasmonic nanoparticles on deformed graphene templates. <i>Scientific Reports</i> , 2021, 11, 12232.	1.6	10
1624	Hybrid System Combining Two-Dimensional Materials and Ferroelectrics and Its Application in Photodetection. <i>ACS Nano</i> , 2021, 15, 10982-11013.	7.3	52

#	ARTICLE	IF	CITATIONS
1625	Wettability of graphene and interfacial water structure. <i>CheM</i> , 2021, 7, 1602-1614.	5.8	33
1626	TaSe ₂ -based mode-locked fiber laser with four switchable operating states. <i>Optics and Laser Technology</i> , 2021, 138, 106924.	2.2	11
1627	Reduced graphene oxide on silicon-based structure as novel broadband photodetector. <i>Scientific Reports</i> , 2021, 11, 13015.	1.6	29
1628	Progress in light-to-frequency conversion circuits based on low dimensional semiconductors. <i>Nano Research</i> , 2021, 14, 2938-2964.	5.8	4
1629	Ultrasensitive Photodetectors Promoted by Interfacial Charge Transfer from Layered Perovskites to Chemical Vapor Deposition-grown MoS ₂ . <i>Small</i> , 2021, 17, e2102461.	5.2	14
1630	High responsivity graphene-InGaAs near-infrared photodetector realized by hole trapping and its response saturation mechanism. <i>Optics Express</i> , 2021, 29, 23234.	1.7	14
1631	Ammonia Gas Sensing Characteristic of P3HT-rGO-MWCNT Composite Films. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 6675.	1.3	5
1632	Optical modulation frequency mediated tunable response time and responsivity in graphene-PbS QD based hybrid photodetectors. <i>Nanotechnology</i> , 2021, 32, 405205.	1.3	2
1633	High Sensitive and Broadband Photodetectors Based on Hybrid Pb ₂ Nanosheet/CdSe Nanobelt. <i>Advanced Optical Materials</i> , 2021, 9, 2100927.	3.6	11
1634	Monolithic Tandem Multicolor Image Sensor Based on Electrochromic Color-Radix Demultiplexing. <i>Advanced Materials</i> , 2021, 33, e2102725.	11.1	10
1635	Exciton dynamics in monolayer graphene grown on a Cu(111) surface. <i>Npj 2D Materials and Applications</i> , 2021, 5, .	3.9	0
1636	van der Waals Epitaxial Growth of Borophene on a Mica Substrate toward a High-Performance Photodetector. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 31808-31815.	4.0	48
1637	Integrated Photonic Structure Enhanced Infrared Photodetectors. <i>Advanced Photonics Research</i> , 2021, 2, 2000187.	1.7	5
1638	Giant Photogalvanic effect in Janus monolayer In ₂ SSe. <i>Optics Communications</i> , 2021, 492, 126945.	1.0	5
1639	Using High- <i>k</i> VPP Modes in Grating-Coupled Graphene-Based Hyperbolic Metamaterial for Tunable Sensor Design. <i>IEEE Sensors Journal</i> , 2021, 21, 17790-17799.	2.4	3
1640	Graphene perfect absorber design based on an approach of mimicking a one-port system in an asymmetric single resonator. <i>Optics Express</i> , 2021, 29, 29631.	1.7	18
1641	Flexible Self-Powered Electrochemical Photodetector Functionalized by Multilayered Tantalum Diselenide Nanocrystals. <i>Advanced Optical Materials</i> , 2021, 9, 2100993.	3.6	21
1642	Magnetic single atom catalyst in C ₂ N to induce adsorption selectivity toward oxidizing gases. <i>Scientific Reports</i> , 2021, 11, 15848.	1.6	10

#	ARTICLE	IF	CITATIONS
1643	Ultrahigh-speed graphene-based optical coherent receiver. Nature Communications, 2021, 12, 5076.	5.8	39
1644	Biaxial Strain-Induced Electronic Structure and Optical Properties of SiP ₂ Monolayer. Journal of Electronic Materials, 2021, 50, 6253-6260.	1.0	11
1645	Large-Area Tellurium/Germanium Heterojunction Grown by Molecular Beam Epitaxy for High-Performance Self-Powered Photodetector. Advanced Optical Materials, 2021, 9, 2101052.	3.6	29
1646	Broadband photodetector based on ReS ₂ /graphene/WSe ₂ heterostructure. Nanotechnology, 2021, 32, 465201.	1.3	16
1647	Quantum dots/graphene nanohybrids photodetectors: progress and perspective. Nano Express, 2021, 2, 031002.	1.2	1
1648	Ultrahigh Photoresponsive Photodetector Based on Graphene/SnS ₂ van der Waals Heterostructure. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100228.	0.8	6
1649	Single-layer graphene-TiO ₂ nanotubes array heterojunction as photoanode to enhance the photoelectric of DSSCs. Optik, 2021, 242, 167245.	1.4	19
1650	Optical Resonance Coupled with Electronic Structure Engineering toward High-Sensitivity Photodetectors. Advanced Optical Materials, 2021, 9, 2101374.	3.6	12
1651	Carbon-Based Heterojunction Broadband Photodetectors. Springer Series in Materials Science, 2022, , 91-129.	0.4	0
1652	<i>In Operando</i> Visualization of Interfacial Band Bending in Photomultiplying Organic Photodetectors. Nano Letters, 2021, 21, 8474-8480.	4.5	13
1653	Visible to Short-Wave Infrared Photodetectors Based on ZrGeTe ₄ van der Waals Materials. ACS Applied Materials & Interfaces, 2021, 13, 45881-45889.	4.0	7
1654	Universal Transceivers: Opportunities and Future Directions for the Internet of Everything (IoE). Frontiers in Communications and Networks, 2021, 2, .	1.9	5
1655	New Organic Materials Based on Multitask 2H-benzo[d]1,2,3-triazole Moiety. Chemosensors, 2021, 9, 267.	1.8	4
1656	Investigation of mid-infrared rapid heating of a carbide-bonded graphene coating and its applications in precision optical molding. Optics Express, 2021, 29, 30761.	1.7	5
1657	Graphene-based mid-infrared photodetectors using metamaterials and related concepts. Applied Physics Reviews, 2021, 8, .	5.5	20
1658	Survey on Optical Wireless Communications-Based Services Applied to the Tourism Industry: Potentials and Challenges. Sensors, 2021, 21, 6282.	2.1	12
1659	Graphene/SnS ₂ van der Waals Photodetector with High Photoresponsivity and High Photodetectivity for Broadband 365–2240 nm Detection. ACS Applied Materials & Interfaces, 2021, 13, 47198-47207.	4.0	18
1660	Enhancement of Mobility and Modulation of Carrier Concentration in Graphene Field-Effect Transistors via Molecular Doping. Advanced Materials Interfaces, 2021, 8, 2100748.	1.9	4

#	ARTICLE	IF	CITATIONS
1661	Enhanced Absorption with Graphene-Coated Silicon Carbide Nanowires for Mid-Infrared Nanophotonics. <i>Nanomaterials</i> , 2021, 11, 2339.	1.9	7
1662	Highly sensitive broadband binary photoresponse in gateless epitaxial graphene on 4H-siC. <i>Carbon</i> , 2021, 184, 72-81.	5.4	13
1663	High-performance photodetector based on few-layered 2D MnPSe3. <i>Results in Physics</i> , 2021, 29, 104750.	2.0	12
1664	Terahertz binary coder based on graphene metasurface. <i>Carbon</i> , 2021, 184, 167-176.	5.4	20
1665	Graphene photodetectors with asymmetric device structures on silicon chips. <i>Carbon Trends</i> , 2021, 5, 100100.	1.4	5
1666	Effect of time and spatial domains on monolayer 2D material interface thermal conductance measurement using ns ET-Raman. <i>International Journal of Heat and Mass Transfer</i> , 2021, 179, 121644.	2.5	5
1667	Design and modulation of two-dimensional Dirac materials in beryllium/boron-based binary monolayers. <i>Computational Materials Science</i> , 2021, 199, 110727.	1.4	2
1668	In vitro and in vivo properties of graphene-incorporated scaffolds for bone defect repair. <i>Ceramics International</i> , 2021, 47, 29535-29549.	2.3	17
1669	Sensitivity enhancement by employing BiFeO3 and graphene hybrid structure in surface plasmon resonance biosensors. <i>Optical Materials</i> , 2021, 121, 111618.	1.7	9
1670	Enhanced performance of Mn-Co-Ni-O thermosensitive material by Cu and Sc co-dopants for uncooled infrared detector. <i>Journal of Alloys and Compounds</i> , 2021, 881, 159857.	2.8	6
1671	Mechanics and strain engineering of bulk and monolayer Bi2O2Se. <i>Journal of the Mechanics and Physics of Solids</i> , 2021, 157, 104626.	2.3	6
1672	Evaluation of the average grain size of polycrystalline graphene using an electrical characterization method. <i>Solid-State Electronics</i> , 2021, 186, 108172.	0.8	1
1673	Thermally and electrically tunable narrowband absorber in mid-infrared region. <i>International Journal of Thermal Sciences</i> , 2022, 171, 107225.	2.6	22
1674	Signal processing based on two-dimensional materials. , 2021, , 207-233.		0
1675	Metal Halide Perovskite/2D Material Heterostructures: Syntheses and Applications. <i>Small Methods</i> , 2021, 5, e2000937.	4.6	24
1676	Ultra-wideband self-powered photodetector based on suspended reduced graphene oxide with asymmetric metal contacts. <i>RSC Advances</i> , 2021, 11, 19482-19491.	1.7	10
1677	A High-performance Flexible Broadband Photodetector Based on Graphene-PTAA-Perovskite Heterojunctions. <i>Advanced Electronic Materials</i> , 2021, 7, 2000522.	2.6	24
1678	Interface Engineering of a Silicon/Graphene Heterojunction Photodetector via a Diamond-Like Carbon Interlayer. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 4692-4702.	4.0	18

#	ARTICLE	IF	CITATIONS
1679	Defect Engineering of Two-Dimensional Transition-Metal Dichalcogenides: Applications, Challenges, and Opportunities. ACS Nano, 2021, 15, 2165-2181.	7.3	217
1680	Room-temperature diffusion of metal clusters on graphene. Physical Chemistry Chemical Physics, 2021, 23, 13087-13094.	1.3	6
1681	High performance sub-bandgap photodetection <i>via</i> internal photoemission based on ideal metal/2D-material van der Waals Schottky interface. Nanoscale, 2021, 13, 16448-16456.	2.8	14
1682	Quantum Dot/Graphene Heterostructure Nanohybrid Photodetectors. Lecture Notes in Nanoscale Science and Technology, 2021, , 215-248.	0.4	4
1683	Research development of 2D materials based photodetectors towards midâ€infrared regime. Nano Select, 2021, 2, 527-540.	1.9	17
1684	Atomically thin heterostructure with gap-mode plasmon for overcoming trade-off between photoresponsivity and response time. Nano Research, 2021, 14, 1305-1310.	5.8	5
1685	Graphene-dispersed polymer waveguide for efficient formation of mode-locked lasers at extremely low graphene concentration. Carbon, 2020, 166, 123-130.	5.4	10
1686	Photodetectors based on controllable growth of large-area graphene films. Thin Solid Films, 2020, 709, 138129.	0.8	7
1688	Fabrication Techniques of Graphene Nanostructures. RSC Nanoscience and Nanotechnology, 2014, , 1-30.	0.2	17
1689	2D van der Waals heterostructures: processing, optical properties and applications in ultrafast photonics. Materials Horizons, 2020, 7, 2903-2921.	6.4	44
1690	High-performance light transmission based on graphene plasmonic waveguides. Journal of Materials Chemistry C, 2020, 8, 6832-6838.	2.7	25
1691	Photovoltage responses of graphene-Au heterojunctions. AIP Advances, 2017, 7, .	0.6	4
1692	Fabrication of PdSe2/GaAs heterojunction for sensitive near-infrared photovoltaic detector and image sensor application. Chinese Journal of Chemical Physics, 2020, 33, 733-742.	0.6	7
1693	Silicon-based PbS-CQDs infrared photodetector with high sensitivity and fast response. Nanotechnology, 2020, 31, 485206.	1.3	17
1694	Highly efficient and controllable photoluminescence emission on a suspended MoS2-based plasmonic grating. Nanotechnology, 2020, 31, 505201.	1.3	2
1695	Electron Cooling with Graphene-Insulator-Superconductor Tunnel Junctions for Applications in Fast Bolometry. Physical Review Applied, 2020, 13, .	1.5	9
1696	Surface plasmon polariton graphene midinfrared photodetector with multifrequency resonance. Journal of Nanophotonics, 2018, 12, 1.	0.4	5
1697	Performance enhancement of graphene-coated surface plasmon resonance biosensor using tungsten disulfide. Optical Engineering, 2018, 57, 1.	0.5	14

#	ARTICLE	IF	CITATIONS
1698	Broadband photoresponse of graphene photodetector from visible to long-wavelength infrared wavelengths. <i>Optical Engineering</i> , 2019, 58, 1.	0.5	15
1699	Photogating for small high-responsivity graphene middle-wavelength infrared photodetectors. <i>Optical Engineering</i> , 2020, 59, 1.	0.5	11
1700	Broadband photoresponse of graphene photodetector from visible to long-wavelength infrared wavelengths. , 2018, , .		5
1701	Design of electro-optic modulators and switches based on graphene and phase change materials. , 2019, , .		2
1702	Dynamic Control of High-Range Photoresponsivity in a Graphene Nanoribbon Photodetector. <i>Nanoscale Research Letters</i> , 2020, 15, 124.	3.1	13
1703	In-plane electric field confinement engineering in graphene-based hybrid plasmonic waveguides. <i>Applied Optics</i> , 2019, 58, 7503.	0.9	15
1704	Intense Terahertz Field-induced Carrier Dynamics in Gated Monolayer Graphene. , 2015, , .		1
1705	100 Gbit/s Graphene Photodetector. , 2018, , .		2
1706	Sensitivity enhancement of a graphene-barium titanate-based surface plasmon resonance biosensor with an Ag-Au bimetallic structure in the visible region. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2019, 36, 1108.	0.9	39
1707	Design of high-efficiency small-size passive all-optical diodes based on photonic crystal and graphene. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2019, 36, 1748.	0.9	2
1708	Characterization method of a mid-infrared graphene-on-silicon microring with a monochromatic laser. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2020, 37, 1683.	0.9	3
1709	Double-side operable perovskite photodetector using Cu/Cu ₂ O as a hole transport layer. <i>Optics Express</i> , 2019, 27, 24900.	1.7	9
1710	Diamond based photodetectors for solar-blind communication. <i>Optics Express</i> , 2019, 27, 29962.	1.7	65
1711	Far-infrared photodetectors based on graphene/black-AsP heterostructures. <i>Optics Express</i> , 2020, 28, 2480.	1.7	27
1712	Ultra-narrowband visible light absorption in a monolayer MoS ₂ based resonant nanostructure. <i>Optics Express</i> , 2020, 28, 27608.	1.7	15
1713	Low dark current and high-responsivity graphene mid-infrared photodetectors using amplification of injected photo-carriers by photo-gating. <i>Optics Letters</i> , 2019, 44, 2598.	1.7	24
1714	Direct detection of photon spin angular momentum by a chiral graphene mid-infrared photodetector. <i>Optics Letters</i> , 2019, 44, 2998.	1.7	12
1715	Slow light enabled high-modulation-depth graphene modulator with plasmonic metasurfaces. <i>Optics Letters</i> , 2019, 44, 5446.	1.7	11

#	ARTICLE	IF	CITATIONS
1716	Efficient room-temperature terahertz detection via bolometric and photothermoelectric effects in EuBiTe ₃ crystal. Optical Materials Express, 2020, 10, 952.	1.6	9
1717	Roadmap for gain-bandwidth-product enhanced photodetectors: opinion. Optical Materials Express, 2020, 10, 2192.	1.6	11
1718	Direct growth of high quality graphene nanowalls on dielectric surfaces by plasma-enhanced chemical vapor deposition for photo detection. Optical Materials Express, 2020, 10, 2909.	1.6	13
1719	Design and optimization of tunneling photodetectors based on graphene/Al ₂ O ₃ /silicon heterostructures. Nanophotonics, 2020, 9, 3841-3848.	2.9	20
1720	Advances in photonics of recently developed Xenes. Nanophotonics, 2020, 9, 1621-1649.	2.9	11
1721	MXenes for future nanophotonic device applications. Nanophotonics, 2020, 9, 1831-1853.	2.9	31
1722	2D materials integrated with metallic nanostructures: fundamentals and optoelectronic applications. Nanophotonics, 2020, 9, 1877-1900.	2.9	36
1723	Hybrid silicon photonic devices with two-dimensional materials. Nanophotonics, 2020, 9, 2295-2314.	2.9	20
1724	SYNTHESIS OF GRAPHENE VIA CHEMICAL VAPOUR DEPOSITION ON COPPER SUBSTRATES WITH DIFFERENT THICKNESSES. Anadolu University Journal of Sciences & Technology, 0, , 1-1.	0.2	2
1726	The Impact of Doping on the Anti-Resonance Effects of A11g Mode of InSe. International Journal of Optics and Photonics, 2019, 13, 171-180.	0.2	1
1727	SnSe Nanosheets: From Facile Synthesis to Applications in Broadband Photodetections. Nanomaterials, 2021, 11, 49.	1.9	6
1728	Engineering of Bi-/Mono-layer Graphene Film Using Reactive Ion Etching. Transactions on Electrical and Electronic Materials, 2015, 16, 169-172.	1.0	6
1729	Design and performance analysis of microcavity-enhanced graphene photodetector. Wuli Xuebao/Acta Physica Sinica, 2016, 65, 138501.	0.2	5
1730	Research status and development graphene devices using silicon as the substrate. Wuli Xuebao/Acta Physica Sinica, 2017, 66, 218102.	0.2	5
1731	Field effect transistor photodetector based on graphene and perovskite quantum dots. Wuli Xuebao/Acta Physica Sinica, 2018, 67, 118502.	0.2	8
1732	Lateral Photocurrent Scanning of Donor and Acceptor Polymers on Graphene Coated Substrates. Japanese Journal of Applied Physics, 2011, 50, 061602.	0.8	3
1733	Theoretical Study on Magnetoelectric and Thermoelectric Properties for Graphene Devices. Japanese Journal of Applied Physics, 2011, 50, 070115.	0.8	9
1734	Plasma Treatment to Improve Chemical Vapor Deposition-Grown Graphene to Metal Electrode Contact. Japanese Journal of Applied Physics, 2012, 51, 04DN04.	0.8	4

#	ARTICLE	IF	CITATIONS
1735	Directly written DPP-DTT/SrTiO ₃ organic/inorganic heterojunctions for anisotropic self-powered photodetectors. <i>Journal of Materials Chemistry C</i> , 2021, 9, 15654-15661.	2.7	17
1736	Design and Performance Study of Hybrid Graphene/HgCdTe Mid-Infrared Photodetector. <i>IEEE Sensors Journal</i> , 2021, 21, 26708-26715.	2.4	8
1737	A strategic review of recent progress, prospects and challenges of MoS ₂ -based photodetectors. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 063002.	1.3	35
1738	Enhancing the ultraviolet response of silicon photodetectors using Yb ³⁺ -doped CsPbCl ₂ Br nanocrystals glass with self-crystallization inhibited by ZnO. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	6
1739	Mechanism, Material, Design, and Implementation Principle of Two-Dimensional Material Photodetectors. <i>Nanomaterials</i> , 2021, 11, 2688.	1.9	17
1740	Interface Engineering in 1D ZnO-Based Heterostructures for Photoelectrical Devices. <i>Advanced Functional Materials</i> , 2022, 32, 2106887.	7.8	27
1741	Synergistic optimization of photothermoelectric performance of a perovskite/graphene composite. <i>Ceramics International</i> , 2022, 48, 4366-4370.	2.3	5
1742	Solution-Processed Grapheneâ€“Nanographene van der Waals Heterostructures for Photodetectors with Efficient and Ultralong Charge Separation. <i>Journal of the American Chemical Society</i> , 2021, 143, 17109-17116.	6.6	19
1743	Recent Advances and Future Directions of Microwave Photonic Radars: A Review. <i>IEEE Sensors Journal</i> , 2021, 21, 21144-21158.	2.4	28
1744	Controlling Photocarrier Lifetime in Graphene for Enhanced Photocurrent Generation via Cascade Hot Electron Transfer. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 9989-9994.	2.1	6
1745	Toward the commercialization of chemical vapor deposition graphene films. <i>Applied Physics Reviews</i> , 2021, 8, .	5.5	19
1746	Phase Noise and Timing Jitter Eliminator for Mode-locked Lasers Based on External Graphene Layers. , 2011, , .		2
1747	Passive Mode-Locker Incorporating Physically Exfoliated Graphene for Fiber Ring Lasers. , 2011, , .		2
1748	Linear and Nonlinear Optical Absorption of on-chip Silicon-on-insulator Nanowires with Graphene. , 2012, , .		2
1749	The progress of semiconductor photoelectric devices based on graphene. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2012, 61, 248502.	0.2	15
1750	Modeling and Electrical Simulations of Thin-Film Gated SOI Lateral PIN Photodetectors for High Sensitivity and Speed Performances. <i>Communications in Computer and Information Science</i> , 2013, , 235-243.	0.4	1
1753	Grapheneâ€“Two-Dimensional Crystal. <i>Nanoscience and Technology</i> , 2014, , 3-27.	1.5	0
1754	Applications to Terahertz and Infrared Detectors with Graphene. <i>The Review of Laser Engineering</i> , 2014, 42, 645.	0.0	0

#	ARTICLE	IF	CITATIONS
1756	Recent progress on localized-field enhanced few-layer MoS ₂ photodetector. , 2015, , .		0
1757	Graphene Terahertz Devices. , 2015, , 105-122.		0
1760	Optoelectronics with two-dimensional atomic crystals. , 2016, , .		0
1762	Direct imprinting of few-layer graphene on amorphous graphite film by femtosecond laser direct write technique. , 2016, , .		0
1763	Analysis and Simulation of Temperature Characteristic of Sensitivity for SOI Lateral PIN Photodiode Gated by Transparent Electrode. Communications in Computer and Information Science, 2016, , 173-181.	0.4	4
1764	Symulacje ab-initio warstwy grafenowej wykorzystywanej w detektorze IR. Elektronika, 2016, 1, 33-34.	0.0	0
1765	Design of Optical and Radiative Properties of Surfaces. , 2017, , 1-46.		0
1766	Semiconductor Graphenes for Photovoltaics. Springer Proceedings in Energy, 2018, , 348-363.	0.2	0
1768	Electronic and Optical Properties of Graphite-Related Systems. , 0, , .		2
1769	Graphene-based Slot Waveguide Photodetectors for Optical Communications. , 2018, , .		0
1770	Graphene bolometer for vis-IR spectral range made on nano-SiN membrane. , 2018, , .		0
1771	Field effect photoconductivity in graphene on undoped semiconductor substrates. , 2018, , .		0
1772	High-responsivity graphene infrared photodetectors using photo-gating effect. , 2019, , .		1
1773	Strain-gated infrared photodetector based on helical graphene nanoribbon. Physical Review Materials, 2019, 3, .	0.9	0
1774	Black Phosphorous Photodetectors. Engineering Materials, 2020, , 171-186.	0.3	0
1775	Graphene on silicon-nitride photodetector. , 2019, , .		0
1776	Transport through vertical graphene contacts under intense laser fields. Physical Review Research, 2020, 2, .	1.3	5
1777	Recent advances in UV photodetectors based on 2D materials: a review. Journal Physics D: Applied Physics, 2022, 55, 133002.	1.3	26

#	ARTICLE	IF	CITATIONS
1778	Performance Improvement of Residue-Free Graphene Field-Effect Transistor Using Au-Assisted Transfer Method. <i>Sensors</i> , 2021, 21, 7262.	2.1	3
1779	Review: Optoelectronic Response and van der Waals Materials. <i>Springer Theses</i> , 2020, , 37-77.	0.0	0
1780	Flexible high-performance graphene hybrid photodetectors functionalized with gold nanostars and perovskites. <i>NPG Asia Materials</i> , 2020, 12, .	3.8	21
1781	Passively Q-switched Nd:YVO4 laser with few-layered MoSe2 saturable absorber. <i>Modern Physics Letters B</i> , 2021, 35, 2150043.	1.0	1
1782	Corrugated graphene exposes the limits of a widely used ab initio van der Waals DFT functional. <i>Physical Review Materials</i> , 2019, 3, .	0.9	2
1784	Development of reduced graphene oxide-based broadband optical detector with high responsivity. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	0
1785	Hydrogen Interactions Mediated Pyrene Based Ligand Enhanced Photoresponse in Hybrid Graphene/PbS Quantum Dots Photodetectors. <i>Advanced Electronic Materials</i> , 2022, 8, 2100672.	2.6	5
1786	Tailored nano-electronics and photonics with two-dimensional materials at terahertz frequencies. <i>Journal of Applied Physics</i> , 2021, 130, .	1.1	11
1787	Direct Growth of Graphene Nanowalls on Silicon Using Plasma-Enhanced Atomic Layer Deposition for High-Performance Si-Based Infrared Photodetectors. <i>ACS Applied Electronic Materials</i> , 2021, 3, 5048-5058.	2.0	19
1788	Robust Visible-Blind Wearable Infrared Sensor Based on IrP2 Nanoparticle-Embedded Few-Layer Graphene and the Effect of Photogating. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 54258-54265.	4.0	0
1789	Effects of doping graphene on the performance of graphene-silicon hybrid photoconductive detectors. <i>Nanotechnology</i> , 2020, 31, 485201.	1.3	4
1790	Effect of Doping on the Characteristics of Infrared Photodetectors Based on van der Waals Heterostructures with Multiple Graphene Layers *. , 2020, , 911-930.		0
1791	The Impact of Incident Wavelength and Incident Intensity on Light-modulated Subthreshold Swing Effect. , 2021, , .		0
1792	Analytical Transient Responses and Gain-Bandwidth Products of Low-Dimensional High-Gain Photodetectors. <i>ACS Nano</i> , 2021, 15, 20242-20252.	7.3	6
1793	An on-chip integrated microfiber-silicon-graphene hybrid structure photodetector. <i>Laser Physics</i> , 2021, 31, 126207.	0.6	0
1794	Upconversion lanthanide nanomaterials: basics introduction, synthesis approaches, mechanism and application in photodetector and photovoltaic devices. <i>Nanotechnology</i> , 2022, 33, 082001.	1.3	11
1795	Mid-infrared photonics and optoelectronics in 2D materials. <i>Materials Today</i> , 2021, 51, 294-316.	8.3	28
1796	Ab-initio and experimental studies for the electronic and optical response of Zn-MoS2 thin films. <i>Physica B: Condensed Matter</i> , 2022, 628, 413558.	1.3	6

#	ARTICLE	IF	CITATIONS
1797	Graphene perfect absorber with loss adaptive Q-factor control function enabled by quasi-bound states in the continuum. <i>Scientific Reports</i> , 2021, 11, 22819.	1.6	9
1798	Atomic-scale perspective of mechanical properties and fracture mechanisms of graphene/WS ₂ /graphene heterostructure. <i>Computational Condensed Matter</i> , 2021, 29, e00612.	0.9	6
1799	Passive and Active Materials for Advanced Photonic Integrated Circuitry in Visible and Near-Infrared. , 2021, , .		0
1800	Influence of device architectures and mobility on response/recovery time of metal halide perovskites: A review. <i>Journal of Materials Science</i> , 2022, 57, 1555-1580.	1.7	8
1801	Apparent Colors of 2D Materials. <i>Advanced Photonics Research</i> , 2022, 3, 2100221.	1.7	8
1802	Geometric interference in a high-mobility graphene annulus <i>p-n</i> junction device. <i>Physical Review B</i> , 2022, 105, .	1.1	1
1803	Turbostratic stacked graphene-based high-responsivity mid-wavelength infrared detector using an enhanced photogating effect. <i>Optical Materials Express</i> , 2022, 12, 458.	1.6	4
1804	Zinc sulfide, silicon dioxide, and black phosphorus based ultra-sensitive surface plasmon biosensor. <i>Optical and Quantum Electronics</i> , 2022, 54, 1.	1.5	30
1805	Mechanically reconfigurable and electrically tunable active terahertz chiral metamaterials. <i>Extreme Mechanics Letters</i> , 2022, 51, 101562.	2.0	10
1806	Enhanced Photoelectric Properties of Multilayer Graphene Mg ₂ Si/Si Heterojunction Photodetector. <i>IEEE Photonics Journal</i> , 2022, 14, 1-9.	1.0	6
1807	Role of layer thickness and field-effect mobility on photoresponsivity of indium selenide (InSe)-based phototransistors. <i>Oxford Open Materials Science</i> , 2020, 1, .	0.5	3
1808	Graphene Nanoribbons based mid-infrared photodetectors. , 2021, , .		0
1809	High-Responsivity Gate-Tunable Ultraviolet-Visible Broadband Phototransistor Based on Graphene-WS ₂ Mixed-Dimensional (2D-0D) Heterostructure. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 5775-5784.	4.0	22
1810	Strong coupling in two-dimensional materials-based nanostructures: a review. <i>Journal of Optics (United Kingdom)</i> , 2022, 24, 024009.	1.0	23
1811	Graphene optical modulators using bound states in the continuum. <i>Scientific Reports</i> , 2022, 12, 1445.	1.6	7
1812	An ultrafast photodetector driven by interlayer exciton dissociation in a van der Waals heterostructure. <i>Nanoscale Horizons</i> , 2021, 7, 41-50.	4.1	11
1813	High-performance photodetector based on an interface engineering-assisted graphene/silicon Schottky junction. <i>Microsystems and Nanoengineering</i> , 2022, 8, 9.	3.4	30
1814	Performance optimization of silicon-doped titanium dioxide and multiwalled carbon nanotubes tricomposite nanostructures for electrical and optical applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 5105-5126.	1.1	4

#	ARTICLE	IF	CITATIONS
1815	Recent Progress in Improving the Performance of Infrared Photodetectors via Optical Field Manipulations. <i>Sensors</i> , 2022, 22, 677.	2.1	13
1816	Graphitic carbon nitride based optoelectronic devices. , 2022, , 515-544.		2
1817	Optogenetically engineered cell-based graphene transistor for pharmacodynamic evaluation of anticancer drugs. <i>Sensors and Actuators B: Chemical</i> , 2022, 358, 131494.	4.0	2
1818	High-sensitivity hybrid PbSe/ITZO thin film-based phototransistor detecting from 2100 to 2500 nm near-infrared illumination. <i>Nanotechnology</i> , 2022, 33, 165501.	1.3	2
1819	Tunable dual plasmon-induced transparency and slow-light analysis based on monolayer patterned graphene metamaterial. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 155105.	1.3	6
1820	Engineering sensitivity and spectral range of photodetection in van der Waals materials and hybrids. <i>Nano Express</i> , 2022, 3, 014001.	1.2	10
1821	Carbon materials: The burgeoning promise in electronics. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2022, 29, 404-423.	2.4	12
1822	Graphene oxide based semiconducting nanomaterials composites for environmental applications. , 2022, , 407-431.		2
1823	Performance enhancement of graphene/Ge near-infrared photodetector by modulating the doping level of graphene. <i>APL Photonics</i> , 2022, 7, .	3.0	11
1824	Investigation of the thermal and light sensing properties of graphene oxide and reduced graphene oxide films obtained by spin coating method. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2022, 30, 913-922.	1.0	7
1825	2D Heterostructures for Ubiquitous Electronics and Optoelectronics: Principles, Opportunities, and Challenges. <i>Chemical Reviews</i> , 2022, 122, 6514-6613.	23.0	187
1826	Two-dimensional material-based printed photonics: a review. <i>2D Materials</i> , 2022, 9, 042003.	2.0	5
1827	A brief review on photodetector performance based on zero dimensional and two dimensional materials and their hybrid structures. <i>Materials Today Communications</i> , 2022, 30, 103224.	0.9	8
1828	GaS:WS ₂ Heterojunctions for Ultrathin Two-Dimensional Photodetectors with Large Linear Dynamic Range across Broad Wavelengths. <i>ACS Nano</i> , 2021, 15, 19570-19580.	7.3	20
1829	Quantum emitters and detectors based on 2D van der Waals materials. <i>Nanoscale</i> , 2022, 14, 5289-5313.	2.8	12
1830	Silicon-Family Materials and Waveguides. , 2022, , 1-26.		0
1831	Defect-Mediated Work Function Regulation in Graphene Film for High-Performing Triboelectric Nanogenerators. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1832	Nonlinear optical properties of PtTe ₂ based saturable absorbers for ultrafast photonics. <i>Journal of Materials Chemistry C</i> , 2022, 10, 5124-5133.	2.7	20

#	ARTICLE	IF	CITATIONS
1833	Diffusion and Entropy of Supercooled Water in Nanoslit. SSRN Electronic Journal, 0, , .	0.4	0
1834	Plasmonic enhancement in deep ultraviolet photoresponse of hexagonal boron nitride thin films. Applied Physics Letters, 2022, 120, .	1.5	6
1835	High-Speed and On-Chip Optical Switch Based on a Graphene Microheater. ACS Nano, 2022, 16, 2690-2698.	7.3	9
1836	Realization of self-powered bidirectional photoresponse in the ultraviolet/visible wavelength region in ferroelectric heterojunctions. Applied Physics Letters, 2022, 120, .	1.5	9
1837	Enhanced Photogating Effect in Graphene Photodetectors <i>via</i> Potential Fluctuation Engineering. ACS Nano, 2022, 16, 4458-4466.	7.3	41
1838	Efficient Saturable Absorber Based on Ferromagnetic Insulator Cr ₂ Ge ₂ Te ₆ in Er-Doped Mode-Locked Fiber Laser. Nanomaterials, 2022, 12, 751.	1.9	9
1839	Graphene/Si Heterostructure with an Organic Interfacial Layer for a Self-Powered Photodetector with a High ON/OFF Ratio. ACS Applied Electronic Materials, 2022, 4, 1715-1722.	2.0	16
1840	Graphene photogated infrared photodetectors for high-performance infrared imaging. , 2022, , .		0
1841	Macroscopic assembled graphene nanofilms based room temperature ultrafast mid-infrared photodetectors. InformaAnMateriAjly, 2022, 4, .	8.5	24
1842	Mid-wave and long-wave infrared transmitters and detectors for optical satellite communicationsâ€”a review. Journal of Optics (United Kingdom), 2022, 24, 043002.	1.0	22
1843	Broadband, Ultra-High-Responsive Monolayer MoS ₂ /SnS ₂ Quantum-Dot-Based Mixed-Dimensional Photodetector. ACS Applied Materials & Interfaces, 2022, 14, 15415-15425.	4.0	40
1844	A 4Å–4 metal-semiconductor-metal rectangular deep-ultraviolet detector array of Ga ₂ O ₃ photoconductor with high photo response. Chinese Physics B, 2022, 31, 088503.	0.7	11
1845	Construction of Bi ₂ O ₂ Se/Bi ₂ Se ₃ Van Der Waals Heterostructures for Self-Powered and Broadband Photodetectors. ACS Applied Materials & Interfaces, 2022, 14, 13507-13515.	4.0	27
1846	PtTe ₂ -based terahertz photodetector integrated with an interdigital antenna. Infrared Physics and Technology, 2022, 123, 104168.	1.3	1
1847	Schottky-Contacted WSe ₂ Hot-Electron Photodetectors with Fast Response and High Sensitivity. ACS Photonics, 2022, 9, 132-137.	3.2	13
1848	Gold Enhanced Graphene-Based Photodetector on Optical Fiber with Ultrasensitivity over Near-Infrared Bands. Nanomaterials, 2022, 12, 124.	1.9	4
1849	Recent progress in optoelectronic applications of hybrid 2D/3D silicon-based heterostructures. Science China Materials, 2022, 65, 876-895.	3.5	9
1850	Perspectives of 2D Materials for Optoelectronic Integration. Advanced Functional Materials, 2022, 32, .	7.8	62

#	ARTICLE	IF	CITATIONS
1851	Neuromorphic sensory computing. <i>Science China Information Sciences</i> , 2022, 65, 1.	2.7	33
1852	Wafer-Scale Two-Dimensional Molybdenum Diselenide Phototransistor Array via Liquid-Precursor-Assisted Chemical Vapor Deposition. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	5
1853	High-performance graphene/n-Si hybrid photodetector toward self-driven optical communications. <i>Applied Physics Letters</i> , 2021, 119, .	1.5	4
1854	Broadband Optical Constants and Nonlinear Properties of SnS ₂ and SnSe ₂ . <i>Nanomaterials</i> , 2022, 12, 141.	1.9	11
1855	Infrared Photodetectors Based on 2D Materials and Nanophotonics. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	86
1857	Temperature controlled photorefractive effect of the graphene. <i>Journal of Optics (India)</i> , 0, , 1.	0.8	0
1858	Highly Sensitive Photodetectors Based on Monolayer MoS ₂ Field-Effect Transistors. <i>ACS Omega</i> , 2022, 7, 13615-13621.	1.6	10
1859	Chip-integrated van der Waals PN heterojunction photodetector with low dark current and high responsivity. <i>Light: Science and Applications</i> , 2022, 11, 101.	7.7	57
1860	Bandgap engineering of ZnX (X = O, S, Se, Te) QDs/Graphene nanocomposites: Towards the designing of a highly efficient light-harvesting device. <i>Journal of Physics and Chemistry of Solids</i> , 2022, 167, 110717.	1.9	1
1861	Bandgap Engineering of Ternary In _{1-x-y} Sn _x Te _y and In _{1-x-y} Sn _x Te _y Single Crystals for High-Performance Electronics and Optoelectronics. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	3
1865	van der Waals forces enhanced light-graphene interaction in optical microfiber polarizer. <i>AIP Advances</i> , 2022, 12, 045027.	0.6	1
1866	Graphene-based deep-ultraviolet photodetectors with ultrahigh responsivity using chemical vapor deposition of hexagonal boron nitride to achieve photogating. <i>Optical Materials Express</i> , 2022, 12, 2090.	1.6	9
1867	Engineering Plasmonic Environments for 2D Materials and 2D-Based Photodetectors. <i>Molecules</i> , 2022, 27, 2807.	1.7	4
1868	Weyl-Semimetal TaIrTe ₄ /Si Nanostructures for Self-Powered Schottky Photodetectors. <i>ACS Applied Nano Materials</i> , 2022, 5, 6523-6531.	2.4	4
1869	A Submicrosecond-Response Ultraviolet-Visible-Near-Infrared Broadband Photodetector Based on 2D Tellurosilicate InSiTe ₃ . <i>ACS Nano</i> , 2022, 16, 7745-7754.	7.3	32
1870	The Rise of Graphene Photonic Crystal Fibers. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	6
1871	An investigation and analysis of plasmonic modulators: a review. <i>Journal of Optical Communications</i> , 2022, .	4.0	4
1872	Gate-controlled polarization-resolving mid-infrared detection at metal-graphene junctions. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	4

#	ARTICLE	IF	CITATIONS
1873	Graphene-assisted tunable D-shaped photonic crystal fiber sensor in the visible and IR regions. Journal of the Optical Society of America B: Optical Physics, 2022, 39, 1490.	0.9	10
1874	Diffusion and Entropy of Supercooled Water in Nanoslit. Chemical Engineering Journal, 2022, 446, 136672.	6.6	0
1875	Dynamics of transient hole doping in epitaxial graphene. Physical Review B, 2022, 105, .	1.1	4
1876	Self-powered photodetector functionalized by SnS quantum dots. Optical Materials, 2022, 129, 112504.	1.7	11
1877	High-responsivity graphene/hyperdoped-silicon heterostructure infrared photodetectors. Optics and Laser Technology, 2022, 153, 108291.	2.2	8
1878	2D Materials for Efficient Photodetection: Overview, Mechanisms, Performance and UV-IR Range Applications. Frontiers in Chemistry, 0, 10, .	1.8	32
1879	A Review on MX ₂ (M=Mo, W and X=S, Se) layered material for opto-electronic devices. Advances in Natural Sciences: Nanoscience and Nanotechnology, 2022, 13, 023001.	0.7	5
1880	Wafer-Scale Growth of 3D Graphene on SiO ₂ by Remote Metal Catalyst-Assisted MOCVD and Its Application as a NO ₂ Gas Sensor. Crystal Growth and Design, 2022, 22, 4192-4202.	1.4	8
1881	Fragmented graphene synthesized on a dielectric substrate for THz applications. Nanotechnology, 2022, 33, 395703.	1.3	2
1882	Engineered Surface Halide Defects by Two-Dimensional Perovskite Passivation for Deformable Intelligent Photodetectors. ACS Applied Materials & Interfaces, 2022, 14, 26004-26013.	4.0	13
1883	Unbiased Plasmonic-Assisted Integrated Graphene Photodetectors. ACS Photonics, 2022, 9, 1992-2007.	3.2	4
1884	Defect-mediated work function regulation in graphene film for high-performing triboelectric nanogenerators. Nano Energy, 2022, 99, 107411.	8.2	10
1885	Towards the Development of Ultrafast Photodetectors Based on Graphene for the Next-generation Telecommunication Systems. , 2022, , .		0
1886	Review of Photodetection Properties of Graphene/Silicon van der Waals Heterojunction. ECS Journal of Solid State Science and Technology, 2022, 11, 061010.	0.9	4
1887	Advances in Flexible Optoelectronics Based on Chemical Vapor Deposition-Grown Graphene. Advanced Functional Materials, 2022, 32, .	7.8	19
1888	Recent Progress in 2D Inorganic/Organic Charge Transfer Heterojunction Photodetectors. Advanced Functional Materials, 2022, 32, .	7.8	23
1889	The Development and Progression of Micro-Nano Optics. Frontiers in Chemistry, 0, 10, .	1.8	6
1890	Hexagonal Boron Nitride on III-V Compounds: A Review of the Synthesis and Applications. Materials, 2022, 15, 4396.	1.3	9

#	ARTICLE	IF	CITATIONS
1891	First-principles study of the contact resistance and optoelectronic properties of PdSe ₂ /MoTe ₂ van der Waals heterostructure optoelectronic devices. Chinese Journal of Physics, 2022, 78, 57-71.	2.0	2
1892	Nano-engineering and nano-manufacturing in 2D materials: marvels of nanotechnology. Nanoscale Horizons, 2022, 7, 849-872.	4.1	19
1893	Manufacturable biosensors based on graphene films. , 2022, , 243-307.		0
1894	Nonscattering Photodetection in the Propagation of Unidirectional Surface Plasmon Polaritons Embedded with Graphene. ACS Applied Materials & Interfaces, 2022, 14, 30299-30305.	4.0	4
1895	Optimizing Photodetectors in Two-Dimensional Metal-Metalloporphyrinic Framework Thin Films. ACS Applied Materials & Interfaces, 2022, 14, 33548-33554.	4.0	13
1896	Mid-Infrared Optoelectronic Devices Based on Two-Dimensional Materials beyond Graphene: Status and Trends. Nanomaterials, 2022, 12, 2260.	1.9	16
1897	High-Efficiency Infrared Sensing with Optically Excited Graphene-Transition Metal Dichalcogenide Heterostructures. Small, 2022, 18, .	5.2	10
1898	Electronic, transport, magnetic, and optical properties of graphene nanoribbons and their optical sensing applications: A comprehensive review. Luminescence, 2023, 38, 909-953.	1.5	9
1899	Recent Progress on Graphene Flexible Photodetectors. Materials, 2022, 15, 4820.	1.3	10
1900	Printed GaAs Microstructures-Based Flexible High-Performance Broadband Photodetectors. Advanced Materials Technologies, 2022, 7, .	3.0	11
1901	Photoconductivity study of Zn _x S _{1-x} thin film using multiple light sources. Phase Transitions, 2022, 95, 567-580.	0.6	5
1902	Recent Developments in Chemical Doping of Graphene using Experimental Approaches and Its Applications. Advanced Engineering Materials, 2022, 24, .	1.6	10
1904	Bilayer armchair graphene nanoribbon photodetector with Stone-Wales defect: A computational study. Materials Science in Semiconductor Processing, 2022, 150, 106918.	1.9	9
1905	Solution-Processed Two-Dimensional Materials for Scalable Production of Photodetector Arrays. Journal of Sensor Science and Technology, 2022, 31, 228-237.	0.1	0
1906	Advances in solution-processed quantum dots based hybrid structures for infrared photodetector. Materials Today, 2022, 58, 119-134.	8.3	11
1907	Erbium-Doped WS ₂ with Down- and Up-Conversion Photoluminescence Integrated on Silicon for Heterojunction Infrared Photodetection. Advanced Materials Interfaces, 2022, 9, .	1.9	12
1908	Transport properties of vertical heterostructures under light irradiation. Physical Review B, 2022, 106, .	1.1	2
1909	Printing Polymeric Convex Lenses to Boost the Sensitivity of a Graphene-Based UV Sensor. Polymers, 2022, 14, 3204.	2.0	0

#	ARTICLE	IF	CITATIONS
1910	Carbon-Related Materials: Graphene and Carbon Nanotubes in Semiconductor Applications and Design. <i>Micromachines</i> , 2022, 13, 1257.	1.4	40
1911	Ultrafast light emission at telecom wavelengths from a wafer-scale monolayer graphene enabled by Fabry-Pérot interferences. <i>Optics Letters</i> , 2022, 47, 4668.	1.7	3
1912	Room-temperature electrical control of polarization and emission angle in a cavity-integrated 2D pulsed LED. <i>Nature Communications</i> , 2022, 13, .	5.8	8
1913	Photodetection and Infrared Imaging Based on Cd ₃ As ₂ Epitaxial Vertical Heterostructures. <i>ACS Nano</i> , 2022, 16, 12244-12252.	7.3	5
1914	SnS Nanoflakes/Graphene Hybrid: Towards Broadband Spectral Response and Fast Photoresponse. <i>Nanomaterials</i> , 2022, 12, 2777.	1.9	2
1915	Advances in Two-Dimensional Materials for Optoelectronics Applications. <i>Crystals</i> , 2022, 12, 1087.	1.0	18
1916	Bilayer graphene/HgCdTe heterojunction based novel GBn infrared detectors. , 2022, 169, 207345.		2
1917	Tunable mid-infrared absorber based on graphene/ferroelectric stacks with dual-band selectivity. <i>Optik</i> , 2022, 268, 169783.	1.4	0
1918	VO ₂ thin film based highly responsive and fast VIS/IR photodetector. <i>Materials Chemistry and Physics</i> , 2022, 290, 126655.	2.0	10
1919	Realization of p-type In _{1.75} Sb _{0.25} Se ₃ alloys for short-wave infrared photodetectors. <i>Applied Physics Letters</i> , 2022, 121, 112101.	1.5	0
1920	TiO ₂ nanoarrays/Au nanoparticles/PProDOT-Py hybrid heterojunction UV photodetector. <i>Organic Electronics</i> , 2022, 110, 106644.	1.4	1
1921	Large-area hierarchical Bi ₂ O ₂ S flowers composed of 2D ultrathin nanosheets for high performance self-powered IR photodetector. <i>Journal of Alloys and Compounds</i> , 2022, 928, 167128.	2.8	15
1922	Hot Carrier Photodetection In Graphene Coupled To a Plasmonic Grating Via 1D Electrodes. , 2022, , .		0
1923	Perovskite-transition metal dichalcogenides heterostructures: recent advances and future perspectives. , 2022, 1, 220006-220006.		17
1924	Silicon/Graphene-Ito Multiple Heterojunctions and 1-D Phc Waveguide-Based Photodetection for Mid-Nir Ipe with High Responsivity. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
1925	Study of a large-area graphene transistor on a CaF ₂ substrate using a full-coverage polymer film as an additional dielectric. <i>Journal of the Korean Physical Society</i> , 2022, 81, 942-947.	0.3	2
1926	2D Material-Based Photo- and Nanoelectronics. Part III. Photosensors Based on Graphene, Graphene-Like, and Related 2D Nanomaterials. <i>Journal of Communications Technology and Electronics</i> , 2022, 67, 1152-1174.	0.2	2
1928	Enhanced-performance self-powered photodetector based on multi-layer MoS ₂ sandwiched between two asymmetric graphene contacts. <i>Science China Technological Sciences</i> , 2022, 65, 2658-2666.	2.0	6

#	ARTICLE	IF	CITATIONS
1929	Addressing gain-bandwidth trade-off by a monolithically integrated photovoltaic transistor. <i>Science Advances</i> , 2022, 8, .	4.7	4
1930	Next generation lanthanide doped nanoscintillators and photon converters. <i>ELight</i> , 2022, 2, .	11.9	44
1931	Effect of Mo Vacancy on the Photoresponse of Bilayer MoS ₂ Film. <i>Applied Science and Convergence Technology</i> , 2022, 31, 107-109.	0.3	0
1932	Light-Tunable 2D Esaki Diode Photodetector with Well-Balanced High Detectivity and Response Speed. <i>Advanced Materials Interfaces</i> , 2022, 9, .	1.9	2
1933	Electrically controlled molecular fingerprint retrieval with van der Waals metasurface. <i>Applied Physics Letters</i> , 2022, 121, 141701.	1.5	1
1935	Omnidirectional and Highly Sensitive Microtubular Photodetectors Based on QD/2D Heterojunctions. <i>ACS Applied Electronic Materials</i> , 2022, 4, 5208-5214.	2.0	2
1936	Ultra-High Speed, High-Sensitivity Spin-Cast MXene-Semiconductor-MXene Photodetectors. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	6
1937	Self-Driven Ultrafast Response Photodetector Based on Graphene/Water/Silicon Structure. <i>Solar Rrl</i> , 2022, 6, .	3.1	3
1938	High-Speed Photodetectors on Silicon Photonics Platform for Optical Interconnect. <i>Laser and Photonics Reviews</i> , 2022, 16, .	4.4	14
1939	Graphene/Quantum Dot Heterostructure Photodetectors: From Material to Performance. <i>Advanced Optical Materials</i> , 2022, 10, .	3.6	12
1940	Mechanically Exfoliated Few-Layer SnS ₂ and Integrated van der Waals Electrodes for Ultrahigh Responsivity Phototransistors. <i>ACS Applied Electronic Materials</i> , 2022, 4, 5333-5339.	2.0	4
1941	1D/2D Hybrid Te/Graphene and Te/MoS ₂ : Multifaceted Broadband Photonics and Green-Energy Applications. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 51449-51458.	4.0	1
1942	Ultra-low-power photodetector based on a high-photoresponse, plasmonic-effect-induced gateless quasi-freestanding graphene device. <i>Applied Surface Science</i> , 2023, 610, 155275.	3.1	3
1943	Patterned Ga ₂ O ₃ nanowires synthesized by CVD method for High-performance self-powered ultraviolet photodetector. <i>Journal of Alloys and Compounds</i> , 2023, 934, 168070.	2.8	8
1944	Graphene nanoribbon/graphene hybrid broadband infrared photodetectors. <i>Optical Engineering</i> , 2022, 61, .	0.5	1
1945	Photodetectors Based on Emerging Materials. <i>Springer Handbooks</i> , 2023, , 777-805.	0.3	0
1946	Graphene-Coated Substrate-Mediated Photoresponse from MoS ₂ /UCNP Nanohybrid-Based Photodetectors. <i>ACS Applied Electronic Materials</i> , 2022, 4, 5475-5486.	2.0	5
1947	Flexible, robust and temperature resistive NIR photodetector based on P-WS ₂ /P-CuO hybrid on cellulose paper. <i>Materials Today: Proceedings</i> , 2023, 73, 576-583.	0.9	2

#	ARTICLE	IF	CITATIONS
1948	High-Performance Photodetectors Based on Graphene/MoS ₂ , Heterojunction FETs. IEEE Sensors Journal, 2023, 23, 293-299.	2.4	5
1950	Silicon/graphene-ITO multiple heterojunctions and 1D PhC waveguide-based photodetection for mid-NIR IPE with high responsivity. Optics Communications, 2023, 530, 129142.	1.0	2
1952	Recent progress in mid-infrared photodetection devices using 2D/nD (n=0, 1, 2, 3) heterostructures. Materials and Design, 2023, 225, 111446.	3.3	4
1953	Graphene Barristors for De Novo Optoelectronics. Chemical Communications, 0, , .	2.2	1
1954	Photoelectrical and thermal sensing measurement of spin coated ZnO and ZnO-RGO thin film. Physica B: Condensed Matter, 2023, 650, 414588.	1.3	10
1955	Zero Bias Operation: Photodetection Behaviors Obtained by Emerging Materials and Device Structures. Micromachines, 2022, 13, 2089.	1.4	3
1956	Filterless Visible-Range Color Sensing and Wavelength-Selective Photodetection Based on Barium/Nickel Codoped Bandgap-Engineered Potassium Sodium Niobate Ferroelectric Ceramics. Solar Rrl, 2023, 7, .	3.1	1
1957	Electrically tunable nanophotonic switch based on graphene-silicon hybrid ring resonator. Applied Physics B: Lasers and Optics, 2022, 128, .	1.1	1
1958	Tunable circular polarization responses of twisted black phosphorus metamaterials. Optics Express, 2022, 30, 47690.	1.7	2
1959	2D Few-Layered PdPS: Toward High-Efficient Self-Powered Broadband Photodetector and Sensors. ACS Applied Materials & Interfaces, 2023, 15, 1859-1870.	4.0	8
1960	Fast and sensitive terahertz detection with a current-driven epitaxial-graphene asymmetric dual-grating-gate field-effect transistor structure. APL Photonics, 2022, 7, .	3.0	15
1961	Resonant subsurface terahertz absorber based on patterned graphene. , 2022, , .		0
1962	Two-dimensional optoelectronic devices for silicon photonic integration. Journal of Materiomics, 2023, 9, 551-567.	2.8	3
1963	Silent-enhancement of multiple Raman modes via tuning optical properties of graphene nanostructures. European Physical Journal Plus, 2022, 137, .	1.2	0
1964	Ultrafast and low-power multichannel all-optical switcher based on multilayer graphene. Applied Optics, 2023, 62, 500.	0.9	1
1965	Multispectral and Circular Polarization-Sensitive Carbon Dot-Polydiacetylene Capacitive Photodetector. Small, 2023, 19, .	5.2	7
1966	Strongly Anisotropic Quasi-1D BaTiS ₃ Chalcogenide Perovskite for Near-Infrared Polarized Photodetection. Advanced Optical Materials, 2023, 11, .	3.6	9
1967	The Studies on Gallium Nitride-Based Materials: A Bibliometric Analysis. Materials, 2023, 16, 401.	1.3	5

#	ARTICLE	IF	CITATIONS
1968	Responsivity enhancement of a PtSi photodetector with graphene by the photogating effect. Applied Optics, 2023, 62, 1160.	0.9	3
1969	Highly Sensitive MoS ₂ Photodetectors Enabled with a Dry-Transferred Transparent Carbon Nanotube Electrode. ACS Applied Materials & Interfaces, 2023, 15, 4216-4225.	4.0	5
1970	Pyro-Phototronic Effect Enhanced Pyramid Structured p-Si/n-ZnO Nanowires Heterojunction Photodetector. ACS Applied Materials & Interfaces, 2023, 15, 4677-4689.	4.0	5
1971	Graphene oxide for photonics, electronics and optoelectronics. Nature Reviews Chemistry, 2023, 7, 162-183.	13.8	92
1972	Low-noise room-temperature terahertz detector based on the photothermoelectric effect of graphene oxide-Bi films. Optical Materials, 2023, 136, 113432.	1.7	3
1973	Graphene/Al ₂ O ₃ /InGaAs-based nanostructures for near-infrared photodetectors passivated by InP layer. Optical Materials, 2023, 136, 113408.	1.7	0
1974	High-performance self-powered ultraviolet to near-infrared photodetector based on WS ₂ /InSe van der Waals heterostructure. Nano Research, 2023, 16, 7851-7857.	5.8	12
1975	Free-Standing Carbon Nanotube Thin Film for Multifunctional Halide-Perovskite Optoelectronics. Bulletin of the Russian Academy of Sciences: Physics, 2022, 86, S127-S130.	0.1	0
1976	Two-Dimensional Transition Metal Dichalcogenide Based Biosensors: From Fundamentals to Healthcare Applications. Biosensors, 2023, 13, 169.	2.3	22
1977	Halide perovskite for photodetector applications. , 2023, , 335-367.		0
1978	Gate-enhanced broadband photodetection based on Cd ₃ As ₂ /graphene Dirac heterojunctions. Applied Physics Letters, 2023, 122, 031105.	1.5	3
1980	Graphene/HgCdTe Heterojunction-Based IR Detectors. , 2023, , 183-202.		1
1981	New Trends and Approaches in the Development of Photonic IR Detector Technology. , 2023, , 107-133.		0
1982	Gold Nanorod-Activated Graphene/MoS ₂ Nanosheet-Based Photodetectors for Bidirectional Photoconductance. ACS Applied Nano Materials, 2023, 6, 1783-1795.	2.4	3
1983	Embedded Integration of Sb ₂ Se ₃ Film by Low-Temperature Plasma-Assisted Chemical Vapor Reaction with Polycrystalline Si Transistor for High-Performance Flexible Visible-to-Near-Infrared Photodetector. ACS Nano, 2023, 17, 2019-2028.	7.3	7
1984	Borophene molecular plasmons. Journal of Physics and Chemistry of Solids, 2023, 176, 111267.	1.9	0
1985	Interdigitated electrodes enhanced photosensitive monolayer WS ₂ field effect transistor on glass substrate. Optics Communications, 2023, 534, 129323.	1.0	2
1986	A pH-value sensitive and self-powered photodetector based on an anthocyanin/graphene heterojunction. Journal of Materials Chemistry C, 2023, 11, 4182-4187.	2.7	3

#	ARTICLE	IF	CITATIONS
1987	Plasmonic photodetectors. , 2023, , 353-389.		0
1988	2D Rhenium Dichalcogenides: From Fundamental Properties to Recent Advances in Photodetector Technology. <i>Advanced Functional Materials</i> , 2023, 33, .	7.8	11
1989	Bipolar Thermoelectricity in Bilayer-Grapheneâ€“Superconductor Tunnel Junctions. <i>Physical Review Applied</i> , 2023, 19, .	1.5	5
1990	Morphologically controlled photodetector performance of molybdenum disulfide nanostructures. <i>Materials Chemistry and Physics</i> , 2023, 301, 127663.	2.0	5
1991	Long-wave bilayer graphene/HgCdTe based GBp type-II superlattice unipolar barrier infrared detector. <i>Results in Optics</i> , 2023, 12, 100425.	0.9	2
1992	Gate-tunable self-driven photodetector based on asymmetric monolayer WSe2 channel. <i>Applied Surface Science</i> , 2023, 616, 156444.	3.1	4
1993	Plasmon resonances of graphene-assisted core-bishell nanoparticles. <i>Physica Scripta</i> , 2023, 98, 035509.	1.2	5
1994	Wavelength- and Angle-Selective Photodetectors Enabled by Graphene Hot Electrons with Tamm Plasmon Polaritons. <i>Nanomaterials</i> , 2023, 13, 693.	1.9	6
1995	Study of magnetoplasmons in graphene rings with two-dimensional finite element method. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2023, 72, 087301.	0.2	0
1996	2D Material Infrared Photonics and Plasmonics. <i>ACS Nano</i> , 2023, 17, 4134-4179.	7.3	30
1997	Skin-Like Near-Infrared II Photodetector with High Performance for Optical Communication, Imaging, and Proximity Sensing. <i>Chemistry of Materials</i> , 2023, 35, 2114-2124.	3.2	8
1998	High-speed InAs quantum dot photodetectors for data/telecom. , 2023, , 199-231.		0
1999	Graphene Nanogap Interdigitated Asymmetric Electrodes for Photodetection. <i>Chemosensors</i> , 2023, 11, 181.	1.8	1
2000	Ultrafast Carbon Nanotube Photodetectors with Bandwidth over 60 GHz. <i>ACS Photonics</i> , 0, , .	3.2	1
2001	Fabrication of MoS2/C60 Nanolayer Field-Effect Transistor for Ultrasensitive Detection of miRNA-155. <i>Micromachines</i> , 2023, 14, 660.	1.4	2
2002	Silver-ion-passivated black phosphorus photodetectors to improve the response time. <i>New Journal of Chemistry</i> , 2023, 47, 7432-7437.	1.4	0
2003	Monolayer Graphene Terahertz Detector Integrated with Artificial Microstructure. <i>Sensors</i> , 2023, 23, 3203.	2.1	0
2004	Influence of multilayer graphene doping concentrations on detection properties of MLC/Mg ₂ Si/Si heterojunction photodetector. <i>Micro and Nano Letters</i> , 2023, 18, .	0.6	0

#	ARTICLE	IF	CITATIONS
2005	Graphene-black phosphorus printed photodetectors. <i>2D Materials</i> , 2023, 10, 035015.	2.0	3
2006	Modelling the Structure and Optical Properties of Reduced Graphene Oxide Produced by Laser Ablation: Insights from XPS and Time-Dependent DFT. <i>Crystals</i> , 2023, 13, 600.	1.0	0
2007	Silicon Waveguide-Integrated Carbon Nanotube Photodetector with Low Dark Current and 48 GHz Bandwidth. <i>ACS Nano</i> , 2023, 17, 7466-7474.	7.3	3
2008	In Situ Growth of Graphene on Polyimide for High-Responsivity Flexible PbSâ€“Graphene Photodetectors. <i>Nanomaterials</i> , 2023, 13, 1339.	1.9	2
2009	Prospective applications of two-dimensional materials beyond laboratory frontiers: A review. <i>IScience</i> , 2023, 26, 106671.	1.9	18
2010	Advances in the Field of Two-Dimensional Crystal-Based Photodetectors. <i>Nanomaterials</i> , 2023, 13, 1379.	1.9	6
2011	Waveguideâ€“Integrated Twoâ€“Dimensional Material Photodetectors in Thinâ€“Film Lithium Niobate. <i>Advanced Photonics Research</i> , 2023, 4, .	1.7	4
2018	2D nanomaterial aerogels integrated with phase change materials: a comprehensive review. <i>Materials Advances</i> , 2023, 4, 2698-2729.	2.6	4
2033	Zero-Bias Photodetection in 2D Materials via Geometric Design of Contacts. <i>Nano Letters</i> , 2023, 23, 5250-5256.	4.5	5
2036	Nonlinear optics in graphene: theoretical background and recent advances. <i>Rivista Del Nuovo Cimento</i> , 2023, 46, 295-380.	2.0	0
2083	van der Waals 2D transition metal dichalcogenide/organic hybridized heterostructures: recent breakthroughs and emerging prospects of the device. <i>Nanoscale Horizons</i> , 2023, 9, 44-92.	4.1	1
2094	Designing Graphene Based Perfect Absorber Using Machine Learning. , 2023, , .		0
2099	Progress in Photodetector Devices Utilizing Transition Metal Dichalcogenides. <i>Journal of Materials Chemistry C</i> , 0, , .	2.7	0
2106	On-chip two-dimensional material-based waveguide-integrated photodetectors. <i>Journal of Materials Chemistry C</i> , 2024, 12, 2279-2316.	2.7	0
2112	Heterostructures of graphene and related two-dimensional nanomaterials for photodetection. , 2024, , 421-446.		0
2117	Graphene as the Model Low-Dimensional Photogalvanic Material. <i>SpringerBriefs in Applied Sciences and Technology</i> , 2024, , 21-42.	0.2	0