

# Weida Hu

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/133503/weida-hu-publications-by-year.pdf>  
**Version:** 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.  
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

286 papers	13,869 citations	60 h-index	106 g-index
323 ext. papers	17,569 ext. citations	9.7 avg, IF	6.73 L-index

#	Paper	IF	Citations
286	Van der Waals two-color infrared photodetector.. <i>Light: Science and Applications</i> , <b>2022</b> , 11, 6	16.7	18
285	Next-generation machine vision systems incorporating two-dimensional materials: Progress and perspectives. <i>Information Materials</i> , <b>2022</b> , 4,	23.1	7
284	HgCdTe/black phosphorus van der Waals heterojunction for high-performance polarization-sensitive midwave infrared photodetector.. <i>Science Advances</i> , <b>2022</b> , 8, eabn1811	14.3	8
283	Graphene-assisted metal transfer printing for wafer-scale integration of metal electrodes and two-dimensional materials. <i>Nature Electronics</i> , <b>2022</b> , 5, 275-280	28.4	4
282	High-operating temperature far-infrared Si:Ga blocked-impurity-band detectors. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 211103	3.4	
281	All-in-one two-dimensional retinomorphic hardware device for motion detection and recognition. <i>Nature Nanotechnology</i> , <b>2021</b> ,	28.7	33
280	Coexistence of Photoelectric Conversion and Storage in van der Waals Heterojunctions. <i>Physical Review Letters</i> , <b>2021</b> , 127, 217401	7.4	1
279	Fast Uncooled Mid-Wavelength Infrared Photodetectors with Heterostructures of van der Waals on Epitaxial HgCdTe. <i>Advanced Materials</i> , <b>2021</b> , e2107772	24	12
278	Silicon: quantum dot photovoltage triodes. <i>Nature Communications</i> , <b>2021</b> , 12, 6696	17.4	2
277	Temperature-sensitive mechanism for silicon blocked-impurity-band photodetectors. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 191104	3.4	1
276	Recent Progress on Two-Dimensional Materials. <i>Wuli Huaxue Xuebao/Acta Physico - Chimica Sinica</i> , <b>2021</b> , 2108017-0	3.8	69
275	Substitutionally Doped MoSe for High-Performance Electronics and Optoelectronics. <i>Small</i> , <b>2021</b> , 17, e2102855	11	3
274	Emerging Single-Photon Detectors Based on Low-Dimensional Materials. <i>Small</i> , <b>2021</b> , e2103963	11	7
273	Polarizer-free polarimetric image sensor through anisotropic two-dimensional GeSe. <i>Science China Materials</i> , <b>2021</b> , 64, 1230-1237	7.1	6
272	Direct observation and manipulation of hot electrons at room temperature. <i>National Science Review</i> , <b>2021</b> , 8, nwaa295	10.8	9
271	Stoichiometric effect on electrical and near-infrared photodetection properties of full-composition-range GaAs <sub>1-x</sub> Sb <sub>x</sub> nanowires. <i>Nano Research</i> , <b>2021</b> , 14, 3961	10	5
270	Narrowing Bandgap of HfS <sub>2</sub> by Te Substitution for Short-Wavelength Infrared Photodetection. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2002248	8.1	7

269	Gate-Tunable Photodiodes Based on Mixed-Dimensional Te/MoTe <sub>2</sub> Van der Waals Heterojunctions. <i>Advanced Electronic Materials</i> , <b>2021</b> , 7, 2001066	6.4	13
268	Simultaneous control of intensity, phase, and polarization in real time under a weak oscillation theory. <i>Optics Letters</i> , <b>2021</b> , 46, 1361-1364	3	4
267	Interface engineering of ferroelectric-gated MoS <sub>2</sub> phototransistor. <i>Science China Information Sciences</i> , <b>2021</b> , 64, 1	3.4	4
266	Spatial description theory of narrow-band single-carrier avalanche photodetectors. <i>Optics Express</i> , <b>2021</b> , 29, 16432-16446	3.3	3
265	Broadband Photodetectors: Broadband Bi <sub>2</sub> O <sub>2</sub> Se Photodetectors from Infrared to Terahertz (Adv. Funct. Mater. 14/2021). <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2170093	15.6	3
264	Blackbody-sensitive room-temperature infrared photodetectors based on low-dimensional tellurium grown by chemical vapor deposition. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	34
263	Recent Progress on Electrical and Optical Manipulations of Perovskite Photodetectors. <i>Advanced Science</i> , <b>2021</b> , 8, e2100569	13.6	37
262	Unipolar barrier photodetectors based on van der Waals heterostructures. <i>Nature Electronics</i> , <b>2021</b> , 4, 357-363	28.4	87
261	Ternary 2D Layered Material FePSe <sub>3</sub> and Near-Infrared Photodetector. <i>Advanced Electronic Materials</i> , <b>2021</b> , 7, 2100207	6.4	5
260	Logic gates based on neuristors made from two-dimensional materials. <i>Nature Electronics</i> , <b>2021</b> , 4, 399-404	28.4	22
259	Down-Scalable and Ultra-fast Memristors with Ultra-high Density Three-Dimensional Arrays of Perovskite Quantum Wires. <i>Nano Letters</i> , <b>2021</b> , 21, 5036-5044	11.5	11
258	Ferroelectric-tuned van der Waals heterojunction with band alignment evolution. <i>Nature Communications</i> , <b>2021</b> , 12, 4030	17.4	18
257	Optoelectronic Synapses Based on Photo-Induced Doping in MoS <sub>2</sub> /h-BN Field-Effect Transistors. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2100937	8.1	8
256	Skin effect photon-trapping enhancement in infrared photodiodes. <i>Optics Express</i> , <b>2021</b> , 29, 22823-22833	3.3	2
255	Gate Stack Engineering in MoS <sub>2</sub> Field-Effect Transistor for Reduced Channel Doping and Hysteresis Effect. <i>Advanced Electronic Materials</i> , <b>2021</b> , 7, 2000395	6.4	5
254	Recent progress and challenges on two-dimensional material photodetectors from the perspective of advanced characterization technologies. <i>Nano Research</i> , <b>2021</b> , 14, 1840-1862	10	13
253	Extrinsic Photoconduction Induced Short-Wavelength Infrared Photodetectors Based on Ge-Based Chalcogenides. <i>Small</i> , <b>2021</b> , 17, e2006765	11	9
252	Direct Polarimetric Image Sensor and Wide Spectral Response Based on Quasi-1D Sb <sub>2</sub> S <sub>3</sub> Nanowire. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2006601	15.6	16

251	Trends in Performance Limits of the HOT Infrared Photodetectors. <i>Applied Sciences (Switzerland)</i> , <b>2021</b> , 11, 501	2.6	15
250	Infrared Gesture Recognition System Based on Near-Sensor Computing. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 1-1	4.4	1
249	Corrections to Optimized Si-Based Blocked Impurity Band Detector Under Alternative Operational Model [Sep 19 3891-3895]. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 447-447	2.9	
248	Fabrication of 1D Te/2D ReS Mixed-Dimensional van der Waals Heterojunction for High-Performance Phototransistor. <i>ACS Nano</i> , <b>2021</b> , 15, 3241-3250	16.7	30
247	Slowing Hot-Electron Relaxation in Mix-Phase Nanowires for Hot-Carrier Photovoltaics. <i>Nano Letters</i> , <b>2021</b> , 21, 7761-7768	11.5	3
246	Stable and sensitive tin-lead perovskite photodetectors enabled by azobenzene derivative for near-infrared acousto-optic conversion communications. <i>Nano Energy</i> , <b>2021</b> , 86, 106113	17.1	23
245	2D materials-based homogeneous transistor-memory architecture for neuromorphic hardware. <i>Science</i> , <b>2021</b> , 373, 1353-1358	33.3	46
244	Controllable Doping in 2D Layered Materials. <i>Advanced Materials</i> , <b>2021</b> , 33, e2104942	24	20
243	Extended infrared responses in Er/O-hyperdoped Si at room temperature. <i>Optics Letters</i> , <b>2021</b> , 46, 5165-5168	5.168	1
242	Broadband Bi <sub>2</sub> O <sub>2</sub> Se Photodetectors from Infrared to Terahertz. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2009554	15.6	26
241	Stable mid-infrared polarization imaging based on quasi-2D tellurium at room temperature. <i>Nature Communications</i> , <b>2020</b> , 11, 2308	17.4	120
240	Ultrabroadband Photodetectors up to 10.6 $\mu$ m Based on 2D Fe O Nanosheets. <i>Advanced Materials</i> , <b>2020</b> , 32, e2002237	24	29
239	Gate-Tunable Semiconductor Heterojunctions from 2D/3D van der Waals Interfaces. <i>Nano Letters</i> , <b>2020</b> , 20, 2907-2915	11.5	42
238	Ultrafast and broadband photodetectors based on a perovskite/organic bulk heterojunction for large-dynamic-range imaging. <i>Light: Science and Applications</i> , <b>2020</b> , 9, 31	16.7	194
237	Epitaxial growth of metal-semiconductor van der Waals heterostructures NbS <sub>2</sub> /MoS <sub>2</sub> with enhanced performance of transistors and photodetectors. <i>Science China Materials</i> , <b>2020</b> , 63, 1548-1559	7.1	16
236	High-Performance Broadband Tungsten Disulfide Photodetector Decorated with Indium Arsenide Nanoislands. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 2000297	1.6	0
235	MoTe p-n Homojunctions Defined by Ferroelectric Polarization. <i>Advanced Materials</i> , <b>2020</b> , 32, e1907937	24	60
234	Two-dimensional series connected photovoltaic cells defined by ferroelectric domains. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 073101	3.4	6

233	Programmable transition metal dichalcogenide homojunctions controlled by nonvolatile ferroelectric domains. <i>Nature Electronics</i> , <b>2020</b> , 3, 43-50	28.4	98
232	Multicolor Broadband and Fast Photodetector Based on InGaAs/Insulator/Graphene Hybrid Heterostructure. <i>Advanced Electronic Materials</i> , <b>2020</b> , 6, 1901007	6.4	19
231	Enhanced Performance of HgCdTe Long-Wavelength Infrared Photodetectors With nBn Design. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 2001-2007	2.9	8
230	Multifunctional MoS Transistors with Electrolyte Gel Gating. <i>Small</i> , <b>2020</b> , 16, e2000420	11	13
229	Non-layered ZnSb nanoplates for room temperature infrared polarized photodetectors. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 6388-6395	7.1	14
228	Ferroelectric Enhanced Performance of a GeSn/Ge Dual-Nanowire Photodetector. <i>Nano Letters</i> , <b>2020</b> , 20, 3872-3879	11.5	21
227	Graphene Hybrid Structures for Integrated and Flexible Optoelectronics. <i>Advanced Materials</i> , <b>2020</b> , 32, e1902039	24	53
226	Design of a bandgap-engineered barrier-blocking HOT HgCdTe long-wavelength infrared avalanche photodiode. <i>Optics Express</i> , <b>2020</b> , 28, 33556-33563	3.3	11
225	Light-Driven WSe-ZnO Junction Field-Effect Transistors for High-Performance Photodetection. <i>Advanced Science</i> , <b>2020</b> , 7, 1901637	13.6	36
224	A Noble Metal Dichalcogenide for High-Performance Field-Effect Transistors and Broadband Photodetectors. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1907945	15.6	45
223	Ultrasensitive negative capacitance phototransistors. <i>Nature Communications</i> , <b>2020</b> , 11, 101	17.4	63
222	Enhanced Performance of HgCdTe Midwavelength Infrared Electron Avalanche Photodetectors With Guard Ring Designs. <i>IEEE Transactions on Electron Devices</i> , <b>2020</b> , 67, 542-546	2.9	13
221	Edge-Epitaxial Growth of InSe Nanowires toward High-Performance Photodetectors. <i>Small</i> , <b>2020</b> , 16, e1905902	11	14
220	Flexible Quasi-2D Perovskite/IGZO Phototransistors for Ultrasensitive and Broadband Photodetection. <i>Advanced Materials</i> , <b>2020</b> , 32, e1907527	24	54
219	Toward Scalable Fabrication of Atomic Wires in Silicon by Nanopatterning Self-Assembled Molecular Monolayers. <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 275-281	4	2
218	Ambipolar and Robust WSe <sub>2</sub> Field-Effect Transistors Utilizing Self-Assembled Edge Oxides. <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 1901628	4.6	5
217	A Dual-Gate MoS Photodetector Based on Interface Coupling Effect. <i>Small</i> , <b>2020</b> , 16, e1904369	11	27
216	Air-Stable Low-Symmetry Narrow-Bandgap 2D Sulfide Niobium for Polarization Photodetection. <i>Advanced Materials</i> , <b>2020</b> , 32, e2005037	24	34

215	Surface-States-Modulated High-Performance InAs Nanowire Phototransistor. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 6413-6419	6.4	10
214	Highly Sensitive InSb Nanosheets Infrared Photodetector Passivated by Ferroelectric Polymer. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2006156	15.6	15
213	Light-modulated vertical heterojunction phototransistors with distinct logical photocurrents. <i>Light: Science and Applications</i> , <b>2020</b> , 9, 167	16.7	18
212	Bi2O2Se/Au-Based Schottky Phototransistor With Fast Response and Ultrahigh Responsivity. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 1464-1467	4.4	2
211	A versatile photodetector assisted by photovoltaic and bolometric effects. <i>Light: Science and Applications</i> , <b>2020</b> , 9, 160	16.7	24
210	Optically and electrically modulated printed carbon nanotube synaptic transistors with a single input terminal and multi-functional output characteristics. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 6914-6922	7.1	7
209	NbSiTe: A Stable Narrow-Gap Two-Dimensional Material with Ambipolar Transport and Mid-Infrared Response. <i>ACS Nano</i> , <b>2019</b> , 13, 10705-10710	16.7	24
208	Global Photocurrent Generation in Phototransistors Based on Single-Walled Carbon Nanotubes toward Highly Sensitive Infrared Detection. <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1900597	8.1	6
207	Time-Tailoring van der Waals Heterostructures for Human Memory System Programming. <i>Advanced Science</i> , <b>2019</b> , 6, 1901072	13.6	31
206	Optimized Si-Based Blocked Impurity Band Detector Under Alternative Operational Mode. <i>IEEE Transactions on Electron Devices</i> , <b>2019</b> , 66, 3891-3895	2.9	6
205	Magnetism and Optical Anisotropy in van der Waals Antiferromagnetic Insulator CrOCl. <i>ACS Nano</i> , <b>2019</b> , 13, 11353-11362	16.7	46
204	Multimode Signal Processor Unit Based on the Ambipolar WSe-Cr Schottky Junction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 38895-38901	9.5	1
203	Observation of ballistic avalanche phenomena in nanoscale vertical InSe/BP heterostructures. <i>Nature Nanotechnology</i> , <b>2019</b> , 14, 217-222	28.7	99
202	AsP/InSe Van der Waals Tunneling Heterojunctions with Ultrahigh Reverse Rectification Ratio and High Photosensitivity. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1900314	15.6	76
201	Symmetric Ultrafast Writing and Erasing Speeds in Quasi-Nonvolatile Memory via van der Waals Heterostructures. <i>Advanced Materials</i> , <b>2019</b> , 31, e1808035	24	33
200	Controllable Growth of Lead-Free All-Inorganic Perovskite Nanowire Array with Fast and Stable Near-Infrared Photodetection. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 17566-17573	3.8	49
199	Amorphous Gallium Oxide-Based Gate-Tunable High-Performance Thin Film Phototransistor for Solar-Blind Imaging. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1900389	6.4	50
198	Highly Polarized Photoelectrical Response in vdW ZrS3 Nanoribbons. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1900419	6.4	29

197	Ultrasensitive Hybrid MoS-ZnCdSe Quantum Dot Photodetectors with High Gain. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 23667-23672	9.5	40
196	Multimechanism Synergistic Photodetectors with Ultrabroad Spectrum Response from 375 nm to 10 $\mu$ m. <i>Advanced Science</i> , <b>2019</b> , 6, 1901050	13.6	32
195	Etching Techniques in 2D Materials. <i>Advanced Materials Technologies</i> , <b>2019</b> , 4, 1900064	6.8	22
194	Vapor growth of CdS nanowires/WS nanosheet heterostructures with sensitive photodetections. <i>Nanotechnology</i> , <b>2019</b> , 30, 345603	3.4	8
193	Enhancement-mode CdS nanobelts field effect transistors and phototransistors with HfO <sub>2</sub> passivation. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 111103	3.4	5
192	Memory Devices: Symmetric Ultrafast Writing and Erasing Speeds in Quasi-Nonvolatile Memory via van der Waals Heterostructures (Adv. Mater. 11/2019). <i>Advanced Materials</i> , <b>2019</b> , 31, 1970081	24	
191	Characterization of atomic defects on the photoluminescence in two-dimensional materials using transmission electron microscope. <i>Information Materials</i> , <b>2019</b> , 1, 85-97	23.1	32
190	Ultrahigh-Detectivity Photodetectors with Van der Waals Epitaxial CdTe Single-Crystalline Films. <i>Small</i> , <b>2019</b> , 15, e1900236	11	15
189	Artificial control of in-plane anisotropic photoelectricity in monolayer MoS <sub>2</sub> . <i>Applied Materials Today</i> , <b>2019</b> , 15, 203-211	6.6	27
188	Enhanced Photoresponsivity of a GaAs Nanowire Metal-Semiconductor-Metal Photodetector by Adjusting the Fermi Level. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 33188-33193	9.5	115
187	Ultrabroad-Spectrum Photodetectors: Multimechanism Synergistic Photodetectors with Ultrabroad Spectrum Response from 375 nm to 10 $\mu$ m (Adv. Sci. 15/2019). <i>Advanced Science</i> , <b>2019</b> , 6, 1970089	13.6	1
186	Light-Induced Positive and Negative Photoconductances of InAs Nanowires toward Rewritable Nonvolatile Memory. <i>ACS Applied Electronic Materials</i> , <b>2019</b> , 1, 1825-1831	4	9
185	Ultrahigh Hole Mobility of Sn-Catalyzed GaSb Nanowires for High Speed Infrared Photodetectors. <i>Nano Letters</i> , <b>2019</b> , 19, 5920-5929	11.5	41
184	Modulated Metal/Insulator Transition Behaviors in Vanadium Dioxide Nanowires with an Artificial Oxidized Domain. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2019</b> , 13, 1900383	2.5	3
183	High efficiency and fast van der Waals hetero-photodiodes with a unilateral depletion region. <i>Nature Communications</i> , <b>2019</b> , 10, 4663	17.4	127
182	Sensitive and Ultrabroadband Phototransistor Based on Two-Dimensional Bi <sub>2</sub> O <sub>2</sub> Se Nanosheets. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1905806	15.6	53
181	MoS <sub>2</sub> /HfO <sub>2</sub> /Silicon-On-Insulator Dual-Photogating Transistor with Ambipolar Photoresponsivity for High-Resolution Light Wavelength Detection. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1906242	15.6	12
180	Sensing Infrared Photons at Room Temperature: From Bulk Materials to Atomic Layers. <i>Small</i> , <b>2019</b> , 15, e1904396	11	48

- 179 A study on ionic gated MoS<sub>2</sub> phototransistors. *Science China Information Sciences*, **2019**, 62, 1 3.4 7
- 178 Anomalous Broadband Spectrum Photodetection in 2D Rhenium Disulfide Transistor. *Advanced Optical Materials*, **2019**, 7, 1901115 8.1 26
- 177 A gate-free MoS<sub>2</sub> phototransistor assisted by ferroelectrics. *Journal of Semiconductors*, **2019**, 40, 092002.3 5
- 176 Palladium Diselenide Long-Wavelength Infrared Photodetector with High Sensitivity and Stability. *ACS Nano*, **2019**, 13, 2511-2519 16.7 144
- 175 Optoelectronic Properties of Printed Photogating Carbon Nanotube Thin Film Transistors and Their Application for Light-Stimulated Neuromorphic Devices. *ACS Applied Materials & Interfaces*, **2019**, 11, 12161-12169 9.5 54
- 174 Ultrasensitive Mid-wavelength Infrared Photodetection Based on a Single InAs Nanowire. *ACS Nano*, **2019**, 13, 3492-3499 16.7 28
- 173 WSe Photovoltaic Device Based on Intramolecular p-n Junction. *Small*, **2019**, 15, e1805545 11 48
- 172 PtTe<sub>2</sub>-Based Type-II Dirac Semimetal and Its van der Waals Heterostructure for Sensitive Room Temperature Terahertz Photodetection. *Small*, **2019**, 15, e1903362 11 55
- 171 Atomic Layered 2d/3d Heterostructure for Sensitive Photodetection **2019**, 1
- 170 TMD-Based Phototransistors: Anomalous Broadband Spectrum Photodetection in 2D Rhenium Disulfide Transistor (Advanced Optical Materials 23/2019). *Advanced Optical Materials*, **2019**, 7, 1970088<sup>8.1</sup>
- 169 Progress, Challenges, and Opportunities for 2D Material Based Photodetectors. *Advanced Functional Materials*, **2019**, 29, 1803807 15.6 481
- 168 High performance charge-transfer induced homojunction photodetector based on ultrathin ZnO nanosheet. *Applied Physics Letters*, **2019**, 114, 011103 3.4 15
- 167 Controlled Doping of Wafer-Scale PtSe<sub>2</sub> Films for Device Application. *Advanced Functional Materials*, **2019**, 29, 1805614 15.6 60
- 166 Optoelectronics: High-Performance Photovoltaic Detector Based on MoTe<sub>2</sub>/MoS<sub>2</sub> Van der Waals Heterostructure (Small 9/2018). *Small*, **2018**, 14, 1870038 11 5
- 165 Emission Kinetics from PbSe Quantum Dots in Glass Matrix at High Excitation Levels. *Physica Status Solidi - Rapid Research Letters*, **2018**, 12, 1800012 2.5 0
- 164 WSe<sub>2</sub>/GeSe heterojunction photodiode with giant gate tunability. *Nano Energy*, **2018**, 49, 103-108 17.1 49
- 163 Inch-Size Single Crystal of a Lead-Free Organic-Inorganic Hybrid Perovskite for High-Performance Photodetector. *Advanced Functional Materials*, **2018**, 28, 1705467 15.6 108
- 162 Graphene Dirac point tuned by ferroelectric polarization field. *Nanotechnology*, **2018**, 29, 134002 3.4 9

161	High-Performance Photovoltaic Detector Based on MoTe <sub>2</sub> /MoS <sub>2</sub> Van der Waals Heterostructure. <i>Small</i> , <b>2018</b> , 14, 1703293	11	132
160	Novel Type-II InAs/AlSb Core/Shell Nanowires and Their Enhanced Negative Photocurrent for Efficient Photodetection. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1705382	15.6	26
159	The ambipolar evolution of a high-performance WSe <sub>2</sub> transistor assisted by a ferroelectric polymer. <i>Nanotechnology</i> , <b>2018</b> , 29, 105202	3.4	17
158	Ferroelectric Localized Field-Enhanced ZnO Nanosheet Ultraviolet Photodetector with High Sensitivity and Low Dark Current. <i>Small</i> , <b>2018</b> , 14, e1800492	11	65
157	Significant Enhancement of Single-Walled Carbon Nanotube Based Infrared Photodetector Using PbS Quantum Dots. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2018</b> , 24, 1-8	3.8	16
156	Influencing Sources for Dark Current Transport and Avalanche Mechanisms in Planar and Mesa HgCdTe p-i-n Electron-Avalanche Photodiodes. <i>IEEE Transactions on Electron Devices</i> , <b>2018</b> , 65, 572-576	2.9	28
155	Solution-Processed 3D RGO-MoS <sub>2</sub> /Pyramid Si Heterojunction for Ultrahigh Detectivity and Ultra-Broadband Photodetection. <i>Advanced Materials</i> , <b>2018</b> , 30, e1801729	24	117
154	Negative Photoconductance in van der Waals Heterostructure-Based Floating Gate Phototransistor. <i>ACS Nano</i> , <b>2018</b> , 12, 9513-9520	16.7	75
153	Independent Band Modulation in 2D van der Waals Heterostructures via a Novel Device Architecture. <i>Advanced Science</i> , <b>2018</b> , 5, 1800237	13.6	27
152	Room-Temperature Single-Photon Detector Based on Single Nanowire. <i>Nano Letters</i> , <b>2018</b> , 18, 5439-5445	11.5	34
151	High-Performance Near-Infrared Photodetectors Based on p-Type SnX (X = S, Se) Nanowires Grown via Chemical Vapor Deposition. <i>ACS Nano</i> , <b>2018</b> , 12, 7239-7245	16.7	62
150	Perpendicular Optical Reversal of the Linear Dichroism and Polarized Photodetection in 2D GeAs. <i>ACS Nano</i> , <b>2018</b> , 12, 12416-12423	16.7	100
149	Analysis of the relationship between the contact barrier and rectification ratio in a two-dimensional PN heterojunction. <i>Semiconductor Science and Technology</i> , <b>2018</b> , 33, 114012	1.8	5
148	Ambipolar Graphene/Quantum Dot Phototransistors with CMOS Compatibility. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1800985	8.1	34
147	High-Performance Wafer-Scale MoS <sub>2</sub> Transistors toward Practical Application. <i>Small</i> , <b>2018</b> , 14, e1803465	11	48
146	A Colloidal-Quantum-Dot Infrared Photodiode with High Photoconductive Gain. <i>Small</i> , <b>2018</b> , 14, e1803158	15.8	25
145	Complementary Logic with Voltage Zero-Loss and Nano-Watt Power via Configurable MoS <sub>2</sub> /WSe <sub>2</sub> Gate. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1805171	15.6	20
144	Ultrahigh photoresponsivity MoS <sub>2</sub> photodetector with tunable photocurrent generation mechanism. <i>Nanotechnology</i> , <b>2018</b> , 29, 485204	3.4	24

143	Diamond-Based All-Carbon Photodetectors for Solar-Blind Imaging. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1800068	8.1	71
142	Exploring a Polar Two-dimensional Multi-layered Hybrid Perovskite of (C <sub>5</sub> H <sub>11</sub> NH <sub>3</sub> ) <sub>2</sub> (CH <sub>3</sub> NH <sub>3</sub> )Pb <sub>2</sub> I <sub>7</sub> for Ultrafast-Responding Photodetection. <i>Laser and Photonics Reviews</i> , <b>2018</b> , 12, 1800060	8.3	55
141	Toward Sensitive Room-Temperature Broadband Detection from Infrared to Terahertz with Antenna-Integrated Black Phosphorus Photoconductor. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1604414	15.6	68
140	High performance top-gated ferroelectric field effect transistors based on two-dimensional ZnO nanosheets. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 043505	3.4	24
139	Arrayed Van Der Waals Broadband Detectors for Dual-Band Detection. <i>Advanced Materials</i> , <b>2017</b> , 29, 1604439	24	161
138	Ferroelectric FET for nonvolatile memory application with two-dimensional MoSe <sub>2</sub> channels. <i>2D Materials</i> , <b>2017</b> , 4, 025036	5.9	63
137	Recent progress on integrating two-dimensional materials with ferroelectrics for memory devices and photodetectors. <i>Chinese Physics B</i> , <b>2017</b> , 26, 037106	1.2	23
136	Photodetectors: Solvent-Based Soft-Patterning of Graphene Lateral Heterostructures for Broadband High-Speed Metal-Semiconductor-Metal Photodetectors (Adv. Mater. Technol. 2/2017). <i>Advanced Materials Technologies</i> , <b>2017</b> , 2,	6.8	2
135	A self-powered high-performance graphene/silicon ultraviolet photodetector with ultra-shallow junction: breaking the limit of silicon?. <i>Npj 2D Materials and Applications</i> , <b>2017</b> , 1,	8.8	144
134	Photothermal Effect Induced Negative Photoconductivity and High Responsivity in Flexible Black Phosphorus Transistors. <i>ACS Nano</i> , <b>2017</b> , 11, 6048-6056	16.7	71
133	Highly polarization sensitive infrared photodetector based on black phosphorus-on-WSe <sub>2</sub> photogate vertical heterostructure. <i>Nano Energy</i> , <b>2017</b> , 37, 53-60	17.1	185
132	Ultrafast Dynamic Pressure Sensors Based on Graphene Hybrid Structure. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 24148-24154	9.5	89
131	Photodetectors: A Broadband Fluorographene Photodetector (Adv. Mater. 22/2017). <i>Advanced Materials</i> , <b>2017</b> , 29,	24	1
130	Recent Progress on Localized Field Enhanced Two-dimensional Material Photodetectors from Ultraviolet-Visible to Infrared. <i>Small</i> , <b>2017</b> , 13, 1700894	11	181
129	A Broadband Fluorographene Photodetector. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700463	24	72
128	Perovskite-Erbium Silicate Nanosheet Hybrid Waveguide Photodetectors at the Near-Infrared Telecommunication Band. <i>Advanced Materials</i> , <b>2017</b> , 29, 1604431	24	99
127	SWCNT-MoS <sub>2</sub> -SWCNT Vertical Point Heterostructures. <i>Advanced Materials</i> , <b>2017</b> , 29, 1604469	24	26
126	Solvent-Based Soft-Patterning of Graphene Lateral Heterostructures for Broadband High-Speed Metal-Semiconductor-Metal Photodetectors. <i>Advanced Materials Technologies</i> , <b>2017</b> , 2, 1600241	6.8	43

125	Photogating in Low Dimensional Photodetectors. <i>Advanced Science</i> , <b>2017</b> , 4, 1700323	13.6	372
124	Two-dimensional negative capacitance transistor with polyvinylidene fluoride-based ferroelectric polymer gating. <i>Npj 2D Materials and Applications</i> , <b>2017</b> , 1,	8.8	57
123	Vertically Stacked and Self-Encapsulated van der Waals Heterojunction Diodes Using Two-Dimensional Layered Semiconductors. <i>ACS Nano</i> , <b>2017</b> , 11, 10472-10479	16.7	44
122	Plasmonic Silicon Quantum Dots Enabled High-Sensitivity Ultrabroadband Photodetection of Graphene-Based Hybrid Phototransistors. <i>ACS Nano</i> , <b>2017</b> , 11, 9854-9862	16.7	209
121	Benchmark characterization of the thermoelectric properties of individual single-crystalline CdS nanowires by a H-type sensor. <i>RSC Advances</i> , <b>2017</b> , 7, 25298-25304	3.7	2
120	Hybrid WSe-InO Phototransistor with Ultrahigh Detectivity by Efficient Suppression of Dark Currents. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 34489-34496	9.5	37
119	Tailored Engineering of an Unusual (C <sub>4</sub> H <sub>9</sub> NH <sub>3</sub> ) <sub>2</sub> (CH <sub>3</sub> NH <sub>3</sub> ) <sub>2</sub> Pb <sub>3</sub> Br <sub>10</sub> Two-Dimensional Multilayered Perovskite Ferroelectric for a High-Performance Photodetector. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 12318-12322	3.6	52
118	Tailored Engineering of an Unusual (C <sub>4</sub> H <sub>9</sub> NH <sub>3</sub> ) <sub>2</sub> (CH <sub>3</sub> NH <sub>3</sub> ) <sub>2</sub> Pb <sub>3</sub> Br <sub>10</sub> Two-Dimensional Multilayered Perovskite Ferroelectric for a High-Performance Photodetector. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 12150-12154	16.4	182
117	Intrinsic p-type W-based transition metal dichalcogenide by substitutional Ta-doping. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 043502	3.4	16
116	Van der Waals epitaxial growth and optoelectronics of large-scale WSe/SnS vertical bilayer p-n junctions. <i>Nature Communications</i> , <b>2017</b> , 8, 1906	17.4	258
115	Nonlocal Response in Infrared Detector with Semiconducting Carbon Nanotubes and Graphdiyne. <i>Advanced Science</i> , <b>2017</b> , 4, 1700472	13.6	21
114	Room temperature high-detectivity mid-infrared photodetectors based on black arsenic phosphorus. <i>Science Advances</i> , <b>2017</b> , 3, e1700589	14.3	269
113	High-performance, flexible graphene/ultra-thin silicon ultra-violet image sensor <b>2017</b> ,		15
112	Direct mapping and characterization of dry etch damage-induced PN junction for long-wavelength HgCdTe infrared detector arrays. <i>Optics Letters</i> , <b>2017</b> , 42, 1325-1328	3	14
111	Visible to near-infrared photodetectors based on MoS <sub>2</sub> vertical Schottky junctions. <i>Nanotechnology</i> , <b>2017</b> ,	3.4	51
110	P-N Junction Photodiodes <b>2017</b> , 307-336		3
109	Tunable Ambipolar Polarization-Sensitive Photodetectors Based on High-Anisotropy ReSe <sub>2</sub> Nanosheets. <i>ACS Nano</i> , <b>2016</b> , 10, 8067-77	16.7	200
108	High-Performance Ferroelectric Polymer Side-Gated CdS Nanowire Ultraviolet Photodetectors. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 7690-7696	15.6	87

107	Side-Gated InO Nanowire Ferroelectric FETs for High-Performance Nonvolatile Memory Applications. <i>Advanced Science</i> , <b>2016</b> , 3, 1600078	13.6	34
106	Optoelectronic Properties of Few-Layer MoS FET Gated by Ferroelectric Relaxor Polymer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 32083-32088	9.5	60
105	Current transport mechanisms in mercury cadmium telluride diode. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 084508	2.5	7
104	Epitaxial Ultrathin Organic Crystals on Graphene for High-Efficiency Phototransistors. <i>Advanced Materials</i> , <b>2016</b> , 28, 5200-5	24	109
103	High Responsivity Phototransistors Based on Few-Layer ReS <sub>2</sub> for Weak Signal Detection. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 1938-1944	15.6	217
102	Generalized colloidal synthesis of high-quality, two-dimensional cesium lead halide perovskite nanosheets and their applications in photodetectors. <i>Nanoscale</i> , <b>2016</b> , 8, 13589-96	7.7	215
101	Near-Infrared Plasmonic 2D Semimetals for Applications in Communication and Biology. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 1793-1802	15.6	88
100	When Nanowires Meet Ultrahigh Ferroelectric Field-High-Performance Full-Depleted Nanowire Photodetectors. <i>Nano Letters</i> , <b>2016</b> , 16, 2548-55	11.5	103
99	Surface leakage current in 12.5 $\mu$ m long-wavelength HgCdTe infrared photodiode arrays. <i>Optics Letters</i> , <b>2016</b> , 41, 828-31	3	37
98	Broadband Photovoltaic Detectors Based on an Atomically Thin Heterostructure. <i>Nano Letters</i> , <b>2016</b> , 16, 2254-9	11.5	248
97	Interlayer Transition and Infrared Photodetection in Atomically Thin Type-II MoTe <sub>2</sub> /MoS <sub>2</sub> van der Waals Heterostructures. <i>ACS Nano</i> , <b>2016</b> , 10, 3852-8	16.7	314
96	High-performance graphene photodetector using interfacial gating. <i>Optica</i> , <b>2016</b> , 3, 1066	8.6	104
95	High-Sensitivity Floating-Gate Phototransistors Based on WS <sub>2</sub> and MoS <sub>2</sub> . <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 6084-6090	15.6	103
94	Gate-tunable rectification inversion and photovoltaic detection in graphene/WSe <sub>2</sub> heterostructures. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 223501	3.4	39
93	Visible Light-Assisted High-Performance Mid-Infrared Photodetectors Based on Single InAs Nanowire. <i>Nano Letters</i> , <b>2016</b> , 16, 6416-6424	11.5	90
92	Ferroelectric polymer tuned two dimensional layered MoTe <sub>2</sub> photodetector. <i>RSC Advances</i> , <b>2016</b> , 6, 87436-87437	11.5	34
91	Highly sensitive visible to infrared MoTe <sub>2</sub> photodetectors enhanced by the photogating effect. <i>Nanotechnology</i> , <b>2016</b> , 27, 445201	3.4	126
90	High-quality infrared imaging with graphene photodetectors at room temperature. <i>Nanoscale</i> , <b>2016</b> , 8, 16065-72	7.7	40

89	Electronic properties of single Ge/Si quantum dot grown by ion beam sputtering deposition. <i>Nanotechnology</i> , <b>2015</b> , 26, 105201	3.4	11
88	Photodetectors: High-Responsivity Graphene/InAs Nanowire Heterojunction Near-Infrared Photodetectors with Distinct Photocurrent On/Off Ratios (Small 8/2015). <i>Small</i> , <b>2015</b> , 11, 890-890	11	2
87	Controllable Growth of Vertical Heterostructure GaTe(x)Se(1-x)/Si by Molecular Beam Epitaxy. <i>ACS Nano</i> , <b>2015</b> , 9, 8592-8	16.7	41
86	Arrayed van der Waals Vertical Heterostructures Based on 2D GaSe Grown by Molecular Beam Epitaxy. <i>Nano Letters</i> , <b>2015</b> , 15, 3571-7	11.5	119
85	Introduction to the special issue on numerical simulation of optoelectronic devices NUSOD14. <i>Optical and Quantum Electronics</i> , <b>2015</b> , 47, 1291-1292	2.4	3
84	Dark Current Transport and Avalanche Mechanism in HgCdTe Electron-Avalanche Photodiodes. <i>IEEE Transactions on Electron Devices</i> , <b>2015</b> , 62, 1926-1931	2.9	39
83	Wafer-scale arrayed p-n junctions based on few-layer epitaxial GaTe. <i>Nano Research</i> , <b>2015</b> , 8, 3332-3341	10	32
82	Laser beam induced current microscopy and photocurrent mapping for junction characterization of infrared photodetectors. <i>Science China: Physics, Mechanics and Astronomy</i> , <b>2015</b> , 58, 1-13	3.6	52
81	High-responsivity graphene/InAs nanowire heterojunction near-infrared photodetectors with distinct photocurrent on/off ratios. <i>Small</i> , <b>2015</b> , 11, 936-42	11	140
80	Au Nanoarrays: Surface Plasmon-Enhanced Photodetection in Few Layer MoS2 Phototransistors with Au Nanostructure Arrays (Small 20/2015). <i>Small</i> , <b>2015</b> , 11, 2346-2346	11	3
79	Photodetectors: Ultrasensitive and Broadband MoS2 Photodetector Driven by Ferroelectrics (Adv. Mater. 42/2015). <i>Advanced Materials</i> , <b>2015</b> , 27, 6538-6538	24	5
78	Characterization of leakage current mechanisms in long wavelength infrared HgCdTe photodiodes from a study of current-voltage characteristics under low illumination. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 224503	2.5	10
77	ReS2-Based Field-Effect Transistors and Photodetectors. <i>Advanced Functional Materials</i> , <b>2015</b> , 25, 4076-4082	19.2	235
76	Ultrasensitive and Broadband MoS2 Photodetector Driven by Ferroelectrics. <i>Advanced Materials</i> , <b>2015</b> , 27, 6575-81	24	559
75	Integration of High-k Oxide on MoS2 by Using Ozone Pretreatment for High-Performance MoS2 Top-Gated Transistor with Thickness-Dependent Carrier Scattering Investigation. <i>Small</i> , <b>2015</b> , 11, 5932-8	11	48
74	Low-Dimensional Semiconductor Structures for Optoelectronic Applications. <i>Advances in Condensed Matter Physics</i> , <b>2015</b> , 2015, 1-2	1	1
73	Solution-processed graphene quantum dot deep-UV photodetectors. <i>ACS Nano</i> , <b>2015</b> , 9, 1561-70	16.7	206
72	Distinct photoresponse in graphene induced by laser irradiation. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 021103	3.4	9

71	Surface Plasmon-Enhanced Photodetection in Few Layer MoS <sub>2</sub> Phototransistors with Au Nanostructure Arrays. <i>Small</i> , <b>2015</b> , 11, 2392-8	11	292
70	Performance Optimization of InSb Infrared Focal-Plane Arrays with Diffractive Microlenses. <i>Journal of Electronic Materials</i> , <b>2014</b> , 43, 2795-2801	1.9	24
69	Scalable integration of indium zinc oxide/photosensitive-nanowire composite thin-film transistors for transparent multicolor photodetectors array. <i>Advanced Materials</i> , <b>2014</b> , 26, 2919-24	24	57
68	Study of gain and photoresponse characteristics for back-illuminated separate absorption and multiplication GaN avalanche photodiodes. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 013103	2.5	44
67	Anomalous and highly efficient InAs nanowire phototransistors based on majority carrier transport at room temperature. <i>Advanced Materials</i> , <b>2014</b> , 26, 8203-9	24	133
66	Single InAs nanowire room-temperature near-infrared photodetectors. <i>ACS Nano</i> , <b>2014</b> , 8, 3628-35	16.7	202
65	Graphene-based terahertz tunable plasmonic directional coupler. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 081903	10.3	33
64	Introduction to the OQE special issue on numerical simulation of optoelectronic devices NUSOD-3. <i>Optical and Quantum Electronics</i> , <b>2014</b> , 46, 1187-1187	2.4	
63	Numerical Simulation of Refractive-Microlensed HgCdTe Infrared Focal Plane Arrays Operating in Optical Systems. <i>Journal of Electronic Materials</i> , <b>2014</b> , 43, 2879-2887	1.9	8
62	128 × 28 long-wavelength/mid-wavelength two-color HgCdTe infrared focal plane array detector with ultralow spectral cross talk. <i>Optics Letters</i> , <b>2014</b> , 39, 5184-7	3	58
61	Nanowires: Anomalous and Highly Efficient InAs Nanowire Phototransistors Based on Majority Carrier Transport at Room Temperature (Adv. Mater. 48/2014). <i>Advanced Materials</i> , <b>2014</b> , 26, 8232-8232 <sup>24</sup>		8
60	Temperature-sensitive junction transformations for mid-wavelength HgCdTe photovoltaic infrared detector arrays by laser beam induced current microscope. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 191106	3.4	13
59	Modelling of illuminated current-voltage characteristics to evaluate leakage currents in long wavelength infrared mercury cadmium telluride photovoltaic detectors. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 184503	2.5	23
58	Improved performance of HgCdTe infrared detector focal plane arrays by modulating light field based on photonic crystal structure. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 184504	2.5	29
57	Transparent, high-performance thin-film transistors with an InGaZnO/aligned-SnO <sub>2</sub> -nanowire composite and their application in photodetectors. <i>Advanced Materials</i> , <b>2014</b> , 26, 7399-404	24	91
56	Simulation of InGaN/GaN light-emitting diodes with a non-local quantum well transport model. <i>Optical and Quantum Electronics</i> , <b>2013</b> , 45, 597-604	2.4	3
55	Optimization for mid-wavelength InSb infrared focal plane arrays under front-side illumination. <i>Optical and Quantum Electronics</i> , <b>2013</b> , 45, 673-679	2.4	12
54	The photocurrent of resonant tunneling diode controlled by the charging effects of quantum dots. <i>Optical and Quantum Electronics</i> , <b>2013</b> , 45, 687-692	2.4	3

53	Depth Profiling of Electronic Transport Parameters in n-on-p Boron-Ion-Implanted Vacancy-Doped HgCdTe. <i>Journal of Electronic Materials</i> , <b>2013</b> , 42, 3108-3113	1.9	22
52	Temperature dependence characteristics of dark current for arsenic doped LWIR HgCdTe detectors. <i>Infrared Physics and Technology</i> , <b>2013</b> , 61, 157-161	2.7	14
51	Terahertz plasmon resonances in GaN and graphene <b>2013</b> ,		1
50	Dependence of Ion-Implant-Induced LBIC Novel Characteristic on Excitation Intensity for Long-Wavelength HgCdTe-Based Photovoltaic Infrared Detector Pixel Arrays. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2013</b> , 19, 1-7	3.8	43
49	Spectrum Analysis of 2-D Plasmon in GaN-Based High Electron Mobility Transistors. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2013</b> , 19, 8400507-8400507	3.8	8
48	Room-temperature plasmonic resonant absorption for grating-gate GaN HEMTs in far infrared terahertz domain. <i>Optical and Quantum Electronics</i> , <b>2013</b> , 45, 713-720	2.4	22
47	Investigations on a Multiple Mask Technique to Depress Processing-Induced Damage of ICP-Etched HgCdTe Trenches. <i>Journal of Electronic Materials</i> , <b>2013</b> , 42, 3164-3167	1.9	5
46	Investigation of Radiation Collection by InSb Infrared Focal-Plane Arrays with Micro-optic Structures. <i>Journal of Electronic Materials</i> , <b>2013</b> , 42, 3181-3185	1.9	5
45	Enhanced plasmonic resonant excitation in a grating gated field-effect transistor with supplemental gates. <i>Optics Express</i> , <b>2013</b> , 21, 1606-14	3.3	42
44	The absorption tunability and enhanced electromagnetic coupling of terahertz-plasmons in grating-gate AlN/GaN plasmonic device. <i>Optics Express</i> , <b>2013</b> , 21, 10821-30	3.3	3
43	The resonant tunability, enhancement, and damping of plasma waves in the two-dimensional electron gas plasmonic crystals at terahertz frequencies. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 243507	3.4	14
42	Fractal H-shaped plasmonic nanocavity. <i>Nanotechnology</i> , <b>2013</b> , 24, 205702	3.4	27
41	High mobility amorphous InGaZnO thin film transistor with single wall carbon nanotubes enhanced-current path. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 223108	3.4	13
40	The localized near-field enhancement of metallic periodic bowtie structure: An oscillating dipoles picture. <i>Physica B: Condensed Matter</i> , <b>2012</b> , 407, 2223-2228	2.8	9
39	. <i>IEEE Transactions on Electron Devices</i> , <b>2012</b> , 59, 1393-1401	2.9	134
38	A novel plasmonic resonance sensor based on an infrared perfect absorber. <i>Journal Physics D: Applied Physics</i> , <b>2012</b> , 45, 205102	3	66
37	Simulation of InGaN/GaN light-emitting diodes with a non-local quantum well transport model <b>2012</b> ,		1
36	Polarity inversion and coupling of laser beam induced current in As-doped long-wavelength HgCdTe infrared detector pixel arrays: Experiment and simulation. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 181108	3.4	26

35	Distinct photocurrent response of individual GaAs nanowires induced by n-type doping. <i>ACS Nano</i> , <b>2012</b> , 6, 6005-13	16.7	59
34	Study on GaN-based light emitting diode with InGaN/GaN/InGaN multi-layer barrier. <i>Optical and Quantum Electronics</i> , <b>2012</b> , 44, 75-81	2.4	10
33	Analysis of Interface Scattering in AlGaIn/GaN/InGaIn/GaN Double-Heterojunction High-Electron-Mobility Transistors. <i>Journal of Electronic Materials</i> , <b>2012</b> , 41, 2130-2138	1.9	10
32	Temperature dependence on photosensitive area extension in mercury cadmium telluride photodiodes using laser beam induced current. <i>Optical Engineering</i> , <b>2012</b> , 51, 036401	1.1	9
31	Efficiency enhancement of blue InGaIn/GaN light-emitting diodes with an AlGaIn-GaN-AlGaIn electron blocking layer. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 094503	2.5	37
30	Plasmon resonant excitation in grating-gated AlN barrier transistors at terahertz frequency. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 123501	3.4	30
29	Dependence of dark current and photoresponse characteristics on polarization charge density for GaN-based avalanche photodiodes. <i>Journal Physics D: Applied Physics</i> , <b>2011</b> , 44, 405102	3	28
28	Photoresponse study of visible blind GaN/AlGaIn p-i-n ultraviolet photodetector. <i>Optical and Quantum Electronics</i> , <b>2011</b> , 42, 755-764	2.4	29
27	Effects of absorption layer characteristic on spectral photoresponse of mid-wavelength InSb photodiodes. <i>Optical and Quantum Electronics</i> , <b>2011</b> , 42, 801-808	2.4	9
26	Low-Roughness Plasma Etching of HgCdTe Masked with Patterned Silicon Dioxide. <i>Journal of Electronic Materials</i> , <b>2011</b> , 40, 1642-1646	1.9	13
25	Optimization of Microlenses for InSb Infrared Focal-Plane Arrays. <i>Journal of Electronic Materials</i> , <b>2011</b> , 40, 1647-1650	1.9	18
24	The plasmonic resonant absorption in GaN double-channel high electron mobility transistors. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 063502	3.4	24
23	A hybrid surface passivation on HgCdTe long wave infrared detector with in-situ CdTe deposition and high-density hydrogen plasma modification. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 091101	3.4	45
22	Amorphous HgCdTe infrared photoconductive detector with high detectivity above 200 K. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 113508	3.4	28
21	The mechanism of the photoresponse blueshifts for the n-type conversion region of n+-on-p Hg <sub>0.722</sub> Cd <sub>0.278</sub> Te infrared photodiode. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 044513	2.5	8
20	An improvement on short-wavelength photoresponse for a heterostructure HgCdTe two-color infrared detector. <i>Semiconductor Science and Technology</i> , <b>2010</b> , 25, 045028	1.8	12
19	The role of ultrathin AlN barrier in the reduction in the hot electron and self-heating effects for GaN-based double-heterojunction high electron mobility transistors. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 054501	2.5	16
18	A Study of Sidewall Effects in HgCdTe Photoconductors Passivated with MBE-Grown CdTe. <i>Journal of Electronic Materials</i> , <b>2010</b> , 39, 1019-1022	1.9	10

17	Accurate Simulation of Temperature-Dependent Dark Current in HgCdTe Infrared Detectors Assisted by Analytical Modeling. <i>Journal of Electronic Materials</i> , <b>2010</b> , 39, 981-985	1.9	38
16	Scanning capacitance microscopy investigation on InGaAs/InP avalanche photodiode structures: Light-induced polarity reversal. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 093506	3.4	11
15	Two-dimensional transient simulations of drain lag and current collapse in GaN-based high-electron-mobility transistors. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 084502	2.5	60
14	Numerical analysis of two-color HgCdTe infrared photovoltaic heterostructure detector. <i>Optical and Quantum Electronics</i> , <b>2009</b> , 41, 699-704	2.4	7
13	Simulation of laser beam induced current for HgCdTe photodiodes with leakage current. <i>Optical and Quantum Electronics</i> , <b>2009</b> , 41, 805-810	2.4	15
12	Analysis of temperature dependence of dark current mechanisms for long-wavelength HgCdTe photovoltaic infrared detectors. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 104502	2.5	70
11	Dark current simulation of InP/In <sub>0.53</sub> Ga <sub>0.47</sub> As/InP p-i-n photodiode. <i>Optical and Quantum Electronics</i> , <b>2008</b> , 40, 1261-1266	2.4	28
10	Simulation and design consideration of photoresponse for HgCdTe infrared photodiodes. <i>Optical and Quantum Electronics</i> , <b>2008</b> , 40, 1255-1260	2.4	16
9	Fabrication of near infrared metallodielectric photonic crystal using metal-coated dielectric spheres. <i>Solid State Communications</i> , <b>2008</b> , 145, 582-584	1.6	4
8	Simulation of InGaN/GaN multiple quantum well light-emitting diodes with quantum dot model for electrical and optical effects. <i>Optical and Quantum Electronics</i> , <b>2007</b> , 38, 1077-1089	2.4	44
7	Modeling of dark characteristics for long-wavelength HgCdTe photodiode. <i>Optical and Quantum Electronics</i> , <b>2007</b> , 38, 1107-1113	2.4	16
6	Simulation and optimization of GaN-based metal-oxide-semiconductor high-electron-mobility-transistor using field-dependent drift velocity model. <i>Journal of Applied Physics</i> , <b>2007</b> , 102, 034502	2.5	35
5	Demonstration and dynamic analysis of trapping of hot electrons at gate edge model for current collapse and gate lag in GaN-based high-electron-mobility transistor including self-heating effect. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 243501	3.4	33
4	Parameter determination from resistance-voltage curve for long-wavelength HgCdTe photodiode. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 084503	2.5	28
3	Self-heating simulation of GaN-based metal-oxide-semiconductor high-electron-mobility transistors including hot electron and quantum effects. <i>Journal of Applied Physics</i> , <b>2006</b> , 100, 074501	2.5	53
2	Quantum-mechanical effects and gate leakage current of nanoscale n-type FinFETs: A 2d simulation study. <i>Microelectronics Journal</i> , <b>2006</b> , 37, 613-619	1.8	17
1	Composition and phase engineering of metal chalcogenides and phosphorous chalcogenides. <i>Nature Materials</i> ,	2.7	11