

# Dun-Jun Chen

## List of Publications by Citations

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106  
papers

1,189  
citations

19  
h-index

30  
g-index

116  
ext. papers

1,537  
ext. citations

4.2  
avg, IF

4.35  
L-index

#	Paper	IF	Citations
106	On the reverse gate leakage current of AlGaIn/GaN high electron mobility transistors. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 153503	3.4	92
105	Forward tunneling current in GaN-based blue light-emitting diodes. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 083504	3.4	68
104	Ultra-Low Dark Current AlGaIn-Based Solar-Blind Metal Semiconductor/Metal Photodetectors for High-Temperature Applications. <i>IEEE Sensors Journal</i> , <b>2012</b> , 12, 2086-2090	4	57
103	Progress on AlGaIn-based solar-blind ultraviolet photodetectors and focal plane arrays. <i>Light: Science and Applications</i> , <b>2021</b> , 10, 94	16.7	51
102	Enhanced bias stress stability of a-InGaZnO thin film transistors by inserting an ultra-thin interfacial InGaZnO:N layer. <i>Applied Physics Letters</i> , <b>2013</b> , 102, 193505	3.4	50
101	Stable response to visible light of InGaIn photoelectrodes. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 262110	3.4	50
100	High-Temperature Single Photon Detection Performance of 4H-SiC Avalanche Photodiodes. <i>IEEE Photonics Technology Letters</i> , <b>2014</b> , 26, 1136-1138	2.2	44
99	High Color Rendering Index Hybrid III-Nitride/Nanocrystals White Light-Emitting Diodes. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 36-43	15.6	41
98	Highly selective and sensitive phosphate anion sensors based on AlGaIn/GaN high electron mobility transistors functionalized by ion imprinted polymer. <i>Scientific Reports</i> , <b>2016</b> , 6, 27728	4.9	33
97	High Quantum Efficiency GaN-Based p-i-n Ultraviolet Photodetectors Prepared on Patterned Sapphire Substrates. <i>IEEE Photonics Technology Letters</i> , <b>2013</b> , 25, 652-654	2.2	32
96	Field-dependent carrier trapping induced kink effect in AlGaIn/GaN high electron mobility transistors. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 173508	3.4	29
95	A Reusable and High Sensitivity Nitrogen Dioxide Sensor Based on Monolayer SnSe. <i>IEEE Electron Device Letters</i> , <b>2018</b> , 39, 599-602	4.4	27
94	Large-Swing a-IGZO Inverter With a Depletion Load Induced by Laser Annealing. <i>IEEE Electron Device Letters</i> , <b>2014</b> , 35, 1034-1036	4.4	24
93	Significant improvements in InGaIn/GaN nano-photoelectrodes for hydrogen generation by structure and polarization optimization. <i>Scientific Reports</i> , <b>2016</b> , 6, 20218	4.9	24
92	Significant Performance Improvement in AlGaIn Solar-Blind Avalanche Photodiodes by Exploiting the Built-In Polarization Electric Field. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2014</b> , 20, 187-192	3.8	23
91	Performance of Monolayer Blue Phosphorene Double-Gate MOSFETs from the First Principles. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 20956-20964	9.5	22
90	Nanoplasmonically Enhanced High-Performance Metastable Phase $\beta$ -GaO Solar-Blind Photodetectors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 40283-40289	9.5	21

89	Magnesium ion-implantation-based gallium nitride p-i-n photodiode for visible-blind ultraviolet detection. <i>Photonics Research</i> , <b>2019</b> , 7, B48	6	20
88	Do all screw dislocations cause leakage in GaN-based devices?. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 062104	3.4	19
87	Manipulable and Hybridized, Ultralow-Threshold Lasing in a Plasmonic Laser Using Elliptical InGaN/GaN Nanorods. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1703198	15.6	19
86	Efficiency droop behavior of direct current aged GaN-based blue light-emitting diodes. <i>Applied Physics Letters</i> , <b>2009</b> , 95, 163504	3.4	19
85	Gate Reliability of p-GaN Gate AlGaIn/GaN High Electron Mobility Transistors. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 379-382	4.4	16
84	Improvement of Power Performance of GaN HEMT by Using Quaternary InAlGaIn Barrier. <i>IEEE Journal of the Electron Devices Society</i> , <b>2018</b> , 6, 360-364	2.3	16
83	High Fill-Factor 4H-SiC Avalanche Photodiodes With Partial Trench Isolation. <i>IEEE Photonics Technology Letters</i> , <b>2016</b> , 28, 2526-2528	2.2	16
82	Growth of In-rich and Ga-rich InGaIn alloys by MOCVD and fabrication of InGaIn-based photoelectrodes. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, 1817-1820		14
81	Photoluminescence Study of the Photoinduced Phase Separation in Mixed-Halide Hybrid Perovskite CH <sub>3</sub> NH <sub>3</sub> Pb(Br)I Crystals Synthesized via a Solvothermal Method. <i>Scientific Reports</i> , <b>2017</b> , 7, 17695	4.9	13
80	High-Voltage Quasi-Vertical GaN Junction Barrier Schottky Diode With Fast Switching Characteristics. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 42, 974-977	4.4	13
79	4H-SiC SACM Avalanche Photodiode With Low Breakdown Voltage and High UV Detection Efficiency. <i>IEEE Photonics Journal</i> , <b>2016</b> , 8, 1-7	1.8	12
78	Characteristics of polarization-doped N-face III-nitride light-emitting diodes. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 073507	3.4	12
77	High-Performance 4H-SiC p-i-n Ultraviolet Photodiode With p Layer Formed by Al Implantation. <i>IEEE Photonics Technology Letters</i> , <b>2016</b> , 28, 1189-1192	2.2	11
76	High Sensitive pH Sensor Based on AlInN/GaN Heterostructure Transistor. <i>Sensors</i> , <b>2018</b> , 18,	3.8	11
75	Hybrid Light Emitters and UV Solar-Blind Avalanche Photodiodes based on III-Nitride Semiconductors. <i>Advanced Materials</i> , <b>2020</b> , 32, e1904354	24	11
74	Analysis of Dark Count Mechanisms of 4H-SiC Ultraviolet Avalanche Photodiodes Working in Geiger Mode. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 4532-4539	2.9	11
73	An Improved Design for Solar-Blind AlGaIn Avalanche Photodiodes. <i>IEEE Photonics Journal</i> , <b>2017</b> , 9, 1-7	1.8	10
72	High-temperature and reliability performance of 4H-SiC Schottky-barrier photodiodes for UV detection. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2015</b> , 33, 040602	1.3	9

71	Spatially localised luminescence emission properties induced by formation of ring-shaped quasi-potential trap around V-pits in InGaN epi-layers. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2014</b> , 211, 2823-2827	1.6	9
70	GaN MSM photodetectors fabricated on bulk GaN with low dark-current and high UV/visible rejection ratio. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2473-2475		9
69	Electron-Beam-Driven III-Nitride Plasmonic Nanolasers in the Deep-UV and Visible Region. <i>Small</i> , <b>2020</b> , 16, e1906205	11	9
68	High-Responsivity Graphene/4H-SiC Ultraviolet Photodetector Based on a Planar Junction Formed by the Dual Modulation of Electric and Light Fields. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 2000559	8.1	8
67	3.4-kV AlGaIn/GaN Schottky Barrier Diode on Silicon Substrate With Engineered Anode Structure. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 42, 208-211	4.4	8
66	VT Shift and Recovery Mechanisms of p-GaN Gate HEMTs Under DC/AC Gate Stress Investigated by Fast Sweeping Characterization. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 42, 1508-1511	4.4	8
65	4H-SiC Ultraviolet Avalanche Photodiodes With Small Gain Slope and Enhanced Fill Factor. <i>IEEE Photonics Journal</i> , <b>2017</b> , 9, 1-8	1.8	7
64	Highly Enhanced Inductive Current Sustaining Capability and Avalanche Ruggedness in GaN p-i-n Diodes With Shallow Bevel Termination. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 41, 469-472	4.4	7
63	Single Photon Counting Spatial Uniformity of 4H-SiC APD Characterized by SNOM-Based Mapping System. <i>IEEE Photonics Technology Letters</i> , <b>2017</b> , 29, 1603-1606	2.2	7
62	4H-SiC Avalanche Photodiode Linear Array Operating in Geiger Mode. <i>IEEE Photonics Journal</i> , <b>2017</b> , 9, 1-7	1.8	7
61	Bias-Selective Dual-Operation-Mode Ultraviolet Schottky-Barrier Photodetectors Fabricated on High-Resistivity Homoepitaxial GaN. <i>IEEE Photonics Technology Letters</i> , <b>2012</b> , 24, 2203-2205	2.2	7
60	High- $k$ HfO <sub>2</sub> -Based AlGaIn/GaN MIS-HEMTs With Y <sub>2</sub> O <sub>3</sub> Interfacial Layer for High Gate Controllability and Interface Quality. <i>IEEE Journal of the Electron Devices Society</i> , <b>2020</b> , 8, 15-19	2.3	7
59	Spatial Non-Uniform Hot Carrier Luminescence From 4H-SiC p-i-n Avalanche Photodiodes. <i>IEEE Photonics Technology Letters</i> , <b>2019</b> , 31, 447-450	2.2	6
58	1.4-kV Quasi-Vertical GaN Schottky Barrier Diode With Reverse p-n Junction Termination. <i>IEEE Journal of the Electron Devices Society</i> , <b>2020</b> , 1-1	2.3	6
57	Vertical 4H-SiC n-i-p-n APDs With Partial Trench Isolation. <i>IEEE Photonics Technology Letters</i> , <b>2018</b> , 30, 805-808	2.2	6
56	Effect of Very High-Fluence Proton Radiation on 6H-SiC Photoconductive Proton Detectors. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 1929-1932	4.4	6
55	Demonstration of an AlGaIn-based solar-blind high-voltage photoconductive switch. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2015</b> , 33, 040601	1.3	6
54	High-Quality Crystal Growth and Characteristics of AlGaIn-Based Solar-Blind Distributed Bragg Reflectors with a Tri-layer Period Structure. <i>Scientific Reports</i> , <b>2016</b> , 6, 29571	4.9	6

53	Avalanche Ruggedness of GaN p-i-n Diodes Grown on Sapphire Substrate. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1800069	1.6	6
52	Demonstration of Avalanche and Surge Current Robustness in GaN Junction Barrier Schottky Diode With 600-V/10-A Switching Capability. <i>IEEE Transactions on Power Electronics</i> , <b>2021</b> , 36, 12163-12167	7.2	6
51	Precise Extraction of Dynamic R <sub>dson</sub> Under High Frequency and High Voltage by a Double-Diode-Isolation Method. <i>IEEE Journal of the Electron Devices Society</i> , <b>2019</b> , 1-1	2.3	5
50	Janus Ga <sub>2</sub> SeTe: A Promising Candidate for Highly Efficient Solar Cells. <i>Solar Rrl</i> , <b>2019</b> , 3, 1900321	7.1	5
49	Reverse leakage current in AlGaIn-based ultraviolet light-emitting diodes. <i>Science Bulletin</i> , <b>2014</b> , 59, 1276-1279	5	5
48	Highly solar-blind ultraviolet selective metal-semiconductor-metal photodetector based on back-illuminated AlGaIn heterostructure with integrated photonic crystal filter. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 142105	3.4	5
47	Fine Control of the Electric Field Distribution in the Heterostructure Multiplication Region of AlGaIn Avalanche Photodiodes. <i>IEEE Photonics Journal</i> , <b>2017</b> , 9, 1-7	1.8	4
46	Performance Modulation for Back-Illuminated AlGaIn Ultraviolet Avalanche Photodiodes Based on Multiplication Scaling. <i>IEEE Photonics Journal</i> , <b>2019</b> , 11, 1-7	1.8	4
45	AlGaIn: A Promising Candidate for High-Electron-Mobility Transistors. <i>IEEE Electron Device Letters</i> , <b>2020</b> , 1-1	4.4	4
44	High-Performance 4H-SiC Schottky Photodiode With Semitransparent Grid-Electrode for EUV Detection. <i>IEEE Photonics Technology Letters</i> , <b>2020</b> , 32, 791-794	2.2	4
43	Investigations of Sidewall Passivation Technology on the Optical Performance for Smaller Size GaN-Based Micro-LEDs. <i>Crystals</i> , <b>2021</b> , 11, 403	2.3	4
42	High Performance Quasi-Vertical GaN Junction Barrier Schottky Diode with Zero Reverse Recovery and Rugged Avalanche Capability <b>2021</b> ,		4
41	High-voltage photoconductive semiconductor switches fabricated on semi-insulating HVPE GaN:Fe template. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2016</b> , 13, 374-377		4
40	Effects of the Trap Level in the Unintentionally Doped GaN Buffer Layer on Optimized p-GaN Gate AlGaIn/GaN HEMTs. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 215, 1700368	1.6	4
39	Achieving Record High External Quantum Efficiency >86.7% in Solar-Blind Photoelectrochemical Photodetection. <i>Advanced Functional Materials</i> , <b>2020</b> , 10, 201604	15.6	4
38	Improvements in Microstructure and Leakage Current of High-In-Content InGaIn p-i-n Structure by Annealing. <i>IEEE Photonics Technology Letters</i> , <b>2012</b> , 24, 1478-1480	2.2	3
37	Synthesis and Properties of InGaIn/GaN Multiple Quantum Well Nanowires on Si (111) by Molecular Beam Epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900729	1.6	3
36	Effects of dissipative substrate on the performances of enhancement mode AlInN/GaN HEMTs. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , <b>2019</b> , 32, e2482	1	3

35	High-performance normally off p-GaN gate high-electron-mobility transistor with In <sub>0.17</sub> Al <sub>0.83</sub> N barrier layer design. <i>Optical and Quantum Electronics</i> , <b>2021</b> , 53, 1	2.4	3
34	1.2 kV/25 A Normally off P-N Junction/AlGaIn/GaN HEMTs With Nanosecond Switching Characteristics and Robust Overvoltage Capability. <i>IEEE Transactions on Power Electronics</i> , <b>2022</b> , 37, 26-30 <sup>2</sup>	7	3
33	Direct observation of reach-through behavior in back-illuminated algan avalanche photodiode with separate absorption and multiplication structure. <i>Journal Physics D: Applied Physics</i> , <b>2020</b> , 53, 425101	3	2
32	A High-Performance SiO <sub>2</sub> /SiN <sub>x</sub> 1-D Photonic Crystal UV Filter Used for Solar-Blind Photodetectors. <i>IEEE Photonics Journal</i> , <b>2019</b> , 11, 1-7	1.8	2
31	Over 1200 V Normally-OFF p-NiO gated AlGaIn/GaN HEMTs on Si with a Small Threshold Voltage Shift. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 1-1	4.4	2
30	Multi-aperture anode based AlGaIn/GaN Schottky barrier diodes with low turn-on voltage and high uniformity. <i>Applied Physics Express</i> , <b>2020</b> , 13, 096502	2.4	2
29	NiO/AlGaIn interface reconstruction and transport manipulation of p-NiO gated AlGaIn/GaN HEMTs. <i>Applied Physics Reviews</i> , <b>2021</b> , 8, 041405	17.3	2
28	Enhanced Stability and Sensitivity of AlGaIn/GaN-HEMTs pH Sensor by Reference Device. <i>IEEE Sensors Journal</i> , <b>2021</b> , 21, 9771-9776	4	2
27	An improved design for e-mode AlGaIn/GaN HEMT with gate stack E <sub>Ga2O3</sub> /p-GaN structure. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 035703	2.5	2
26	Observation and Modeling of Leakage Current in AlGaIn Ultraviolet Light Emitting Diodes. <i>IEEE Photonics Technology Letters</i> , <b>2019</b> , 31, 1697-1700	2.2	2
25	High Performance Wide Angle DBR Design for Optoelectronic Devices. <i>IEEE Photonics Journal</i> , <b>2021</b> , 13, 1-6	1.8	2
24	Temperature Dependence of the Energy Band Diagram of AlGaIn/GaN Heterostructure. <i>Advances in Condensed Matter Physics</i> , <b>2018</b> , 2018, 1-4	1	2
23	Normally-off GaN HEMTs with InGaIn p-gate cap layer formed by polarization doping. <i>Applied Physics Express</i> , <b>2022</b> , 15, 016502	2.4	2
22	After-Pulse Characterizations of Geiger-Mode 4H-SiC Avalanche Photodiodes. <i>IEEE Photonics Technology Letters</i> , <b>2020</b> , 32, 706-709	2.2	1
21	Low-Voltage p-i-n GaN-Based Alpha-Particle Detector With High Energy Resolution. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 1-1	4.4	1
20	Different I <sub>V</sub> Behaviors and Leakage Current Mechanisms in AlGaIn Solar-Blind Ultraviolet Avalanche Photodiodes. <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 2716-2720	4	1
19	High sensitivity x-ray detectors based on 4H-SiC p-i-n structure with 80 nm thick intrinsic layer. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2021</b> , 39, 022202	1.3	1
18	A High Quantum Efficiency Narrow-Band UV-B AlGaIn p-i-n Photodiode With Polarization Assistance. <i>IEEE Photonics Journal</i> , <b>2021</b> , 13, 1-8	1.8	1

17	A method of applying compressive pre-stress to AlGa <sub>N</sub> barrier in AlGa <sub>N</sub> /Ga <sub>N</sub> heterostructures by depositing an additional thermally mismatched dielectric. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2016</b> , 213, 2474-2478	1.6	1
16	Enhanced InGa <sub>N</sub> /Ga <sub>N</sub> photoelectrodes for visible-light-driven hydrogen generation by surface roughening. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2016</b> , 213, 2704-2708	1.6	1
15	Effective suppression of the high temperature DC performance degradation of AlInN/Ga <sub>N</sub> HEMTs by back barrier. <i>International Journal of Numerical Modelling: Electronic Networks, Devices and Fields</i> , <b>2018</b> , 31, e2299	1	1
14	The Sensing Mechanism of InAlN/Ga <sub>N</sub> HEMT. <i>Crystals</i> , <b>2022</b> , 12, 401	2.3	1
13	Investigation on the Activation Energy of Device Degradation and Switching Time in AlGa <sub>N</sub> /Ga <sub>N</sub> HEMTs for High-Frequency Application. <i>IEEE Journal of the Electron Devices Society</i> , <b>2019</b> , 1-1	2.3	0
12	Realization of regular resonance mode in Ga <sub>N</sub> -based polygonal microdisks on Si. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 113102	2.5	0
11	InGa <sub>N</sub> /Ga <sub>N</sub> multi-quantum-well-based light-emitting and photodetective dual-functional devices. <i>Frontiers of Optoelectronics in China</i> , <b>2009</b> , 2, 442-445		0
10	1000-W Resistive Energy Dissipating Capability Against Inductive Transients Demonstrated in Non-Avalanche AlGa <sub>N</sub> /Ga <sub>N</sub> Schottky Diode. <i>IEEE Electron Device Letters</i> , <b>2021</b> , 42, 1743-1746	4.4	0
9	Electronic properties of arsenene nanoribbons for FET application. <i>Optical and Quantum Electronics</i> , <b>2020</b> , 52, 1	2.4	0
8	4H-SiC $\bar{n}$ -i-p extreme ultraviolet detector with gradient doping-induced surface junction. <i>IEEE Electron Device Letters</i> , <b>2022</b> , 1-1	4.4	0
7	Synthesis and Properties of InGa <sub>N</sub> /Ga <sub>N</sub> Multiple Quantum Well Nanowires on Si (111) by Molecular Beam Epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 2070028	1.6	
6	Light-Emitting Diodes: High Color Rendering Index Hybrid III-Nitride/Nanocrystals White Light-Emitting Diodes (Adv. Funct. Mater. 1/2016). <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 156-156	15.6	
5	Utilization of FIB Technique in TEM Specimen Preparation of Ga <sub>N</sub> -based Devices for Dislocation Investigation. <i>Microscopy and Microanalysis</i> , <b>2015</b> , 21, 1991-1992	0.5	
4	Determination of Temperature-Dependent Stress State in Thin AlGa <sub>N</sub> Layer of AlGa <sub>N</sub> /Ga <sub>N</sub> HEMT Heterostructures by Near-Resonant Raman Scattering. <i>Advances in Condensed Matter Physics</i> , <b>2015</b> , 2015, 1-6	1	
3	Improved Schottky contacts to InGa <sub>N</sub> alloys by a photoelectrochemical treatment. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2016</b> , 213, 1034-1038	1.6	
2	46.4: Fabrication of InGa <sub>N</sub> /Ga <sub>N</sub> -based nano-LEDs for display applications. <i>Digest of Technical Papers SID International Symposium</i> , <b>2021</b> , 52, 568-568	0.5	
1	3-D Simulation Study of a Normally-OFF Ga <sub>N</sub> Lateral Multi-Channel JFET With Optimized Electrical Field Transfer Terminal Structure. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 69, 1918-1923	2.9	