

# Yuh-Renn Wu

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

157  
papers

2,696  
citations

30  
h-index

46  
g-index

213  
ext. papers

3,223  
ext. citations

3.1  
avg. IF

5.26  
L-index

#	Paper	IF	Citations
157	Efficiency and Forward Voltage of Blue and Green Lateral LEDs with V-shaped Defects and Random Alloy Fluctuation in Quantum Wells. <i>Physical Review Applied</i> , <b>2022</b> , 17,	4.3	4
156	Study on the effect of size on InGaN red micro-LEDs.. <i>Scientific Reports</i> , <b>2022</b> , 12, 1324	4.9	7
155	Hole mobility behavior in Al-gradient polarization-induced p-type AlGaIn grown on GaN template. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 022103	3.4	0
154	Design of Monolayer MoS2 Nanosheet Transistors for Low-Power Applications. <i>IEEE Transactions on Electron Devices</i> , <b>2022</b> , 69, 358-363	2.9	1
153	Study of the Factors Limiting the Efficiency of Vertical-Type Nitride- and AlInGaP-Based Quantum-Well Micro-LEDs. <i>Processes</i> , <b>2022</b> , 10, 489	2.9	
152	Investigating the high field transport properties of Janus WSe and MoSSe by DFT analysis and Monte Carlo simulations. <i>Journal of Applied Physics</i> , <b>2022</b> , 131, 144303	2.5	1
151	Influences of dielectric constant and scan rate on hysteresis effect in perovskite solar cell with simulation and experimental analyses.. <i>Scientific Reports</i> , <b>2022</b> , 12, 7927	4.9	1
150	Giant gauge factor of Van der Waals material based strain sensors. <i>Nature Communications</i> , <b>2021</b> , 12, 2018	17.4	14
149	Calculation of Field Dependent Mobility in MoS2 and WS2 with Multi-Valley Monte Carlo Method <b>2021</b> ,		1
148	. <i>IEEE Transactions on Electron Devices</i> , <b>2021</b> , 68, 2818-2822	2.9	6
147	Studies of 2D Bulk and Nanoribbon Band Structures in MoxW1-xS2 Alloy System Using Full sp3d5 Tight-Binding Model. <i>Physica Status Solidi (B): Basic Research</i> , <b>2021</b> , 258, 2000375	1.3	
146	Deep Source Metal Trenches in GaN-On-Si HEMTs for Relieving Current Collapse. <i>IEEE Journal of the Electron Devices Society</i> , <b>2021</b> , 9, 557-563	2.3	1
145	Wearable Devices Made of a Wireless Vertical-Type Light-Emitting Diode Package on a Flexible Polyimide Substrate with a Conductive Layer. <i>ACS Applied Electronic Materials</i> , <b>2021</b> , 3, 979-987	4	6
144	Three-Dimensional Modeling of Minority-Carrier Lateral Diffusion Length Including Random Alloy Fluctuations in (In,Ga)N and (Al,Ga)N Single Quantum Wells. <i>Physical Review Applied</i> , <b>2021</b> , 16,	4.3	4
143	Graphene/SnS van der Waals Photodetector with High Photoresponsivity and High Photodetectivity for Broadband 365-2240 nm Detection. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 47198-47207	9.5	3
142	Electro-optical numerical modeling for the design of UVA nitrides based vertical cavity surface emitting laser diodes. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2021</b> , 1-1	3.8	
141	Analysis of the triplet exciton transfer mechanism at the heterojunctions of organic light-emitting diodes. <i>Journal Physics D: Applied Physics</i> , <b>2020</b> , 53, 345501	3	2

140	Overcoming the excessive compressive strain in AlGa <sub>N</sub> epitaxy by introducing high Si-doping in AlN templates. <i>Japanese Journal of Applied Physics</i> , <b>2020</b> , 59, 070904	1.4	8
139	Analysis and Optimization of GaN Based Multi-Channels FinFETs. <i>IEEE Nanotechnology Magazine</i> , <b>2020</b> , 19, 439-445	2.6	6
138	Low-temperature carrier transport across InGa <sub>N</sub> multiple quantum wells: Evidence of ballistic hole transport. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	3
137	A Thermoelectrically Cooled nBn Type-II Superlattices InAs/InAsSb/B-AlAsSb Mid-Wave Infrared Detector. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2020</b> , 217, 1900522	1.6	2
136	Application of localization landscape theory and the k- $\Gamma$ -p model for direct modeling of carrier transport in a type II superlattice InAs/InAsSb photoconductor system. <i>Journal of Applied Physics</i> , <b>2020</b> , 127, 033104	2.5	9
135	Barriers to carrier transport in multiple quantum well nitride-based c-plane green light emitting diodes. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	7
134	Revealing the mechanism of carrier transport in host-guest systems of organic materials with a modified Poisson and drift-diffusion solver. <i>Physical Review Materials</i> , <b>2020</b> , 4,	3.2	1
133	Light Trapping Induced High Short-Circuit Current Density in III-Nitride Nanorods/Si (111) Heterojunction Solar Cells. <i>Nanoscale Research Letters</i> , <b>2020</b> , 15, 167	5	3
132	Dependence of carrier escape lifetimes on quantum barrier thickness in InGa <sub>N</sub> /Ga <sub>N</sub> multiple quantum well photodetectors. <i>Optics Express</i> , <b>2020</b> , 28, 23796-23805	3.3	4
131	Disorder effects in nitride semiconductors: impact on fundamental and device properties. <i>Nanophotonics</i> , <b>2020</b> , 10, 3-21	6.3	6
130	AlGa <sub>N</sub> -based deep ultraviolet light emitting diodes with magnesium delta-doped AlGa <sub>N</sub> last barrier. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 251101	3.4	7
129	The 2020 UV emitter roadmap. <i>Journal Physics D: Applied Physics</i> , <b>2020</b> , 53, 503001	3	123
128	Theoretical and experimental investigations of vertical hole transport through unipolar AlGa <sub>N</sub> structures: Impacts of random alloy disorder. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 022107	3.4	5
127	Characterization of semi-polar (20[Formula: see text]1) InGa <sub>N</sub> microLEDs. <i>Scientific Reports</i> , <b>2020</b> , 10, 15966	4.9	3
126	Bistriazoles with a Biphenyl Core Derivative as an Electron-Favorable Bipolar Host of Efficient Blue Phosphorescent Organic Light-Emitting Diodes. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 49895-49904 <sup>2</sup>	9.5	2
125	A 3D simulation comparison of carrier transport in green and blue c-plane multi-quantum well nitride light emitting diodes. <i>Journal of Applied Physics</i> , <b>2020</b> , 128, 235703	2.5	3
124	Interwell carrier transport in InGa <sub>N</sub> /(In)Ga <sub>N</sub> multiple quantum wells. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 151103	3.4	15
123	Systematic investigation of the threshold voltage modulation of AlGa <sub>N</sub> /Ga <sub>N</sub> Schottky-gate Fin-HEMTs. <i>Journal of Applied Physics</i> , <b>2019</b> , 125, 094502	2.5	2

122	Demonstration of the Very Long Wavelength Infrared Type-II Superlattice InAs/InAsSb GaAs Immersed Photodetector Operating at Thermoelectric Cooling. <i>IEEE Electron Device Letters</i> , <b>2019</b> , 40, 1396-1398	4.4	7
121	Theoretical modelling of X <sub>Bn</sub> T2SLs InAs/InAsSb/B-AlAsSb mid-wave detector operating below thermoelectrical cooling. <i>Opto-electronics Review</i> , <b>2019</b> , 27, 275-281	2.4	
120	Optimization of MAPbI <sub>3</sub> -Based Perovskite Solar Cell With Textured Surface. <i>IEEE Journal of Photovoltaics</i> , <b>2019</b> , 9, 1686-1692	3.7	4
119	Modeling dislocation-related leakage currents in GaN p-n diodes. <i>Journal of Applied Physics</i> , <b>2019</b> , 126, 245705	2.5	3
118	Hybrid classical-quantum linear solver using Noisy Intermediate-Scale Quantum machines. <i>Scientific Reports</i> , <b>2019</b> , 9, 16251	4.9	10
117	Different surface plasmon coupling behaviors of a surface Al nanoparticle between TE and TM polarizations in a deep-UV light-emitting diode. <i>Optics Express</i> , <b>2018</b> , 26, 8340-8355	3.3	7
116	Nonpolar and semipolar LEDs <b>2018</b> , 273-295		3
115	Evidence of nanoscale Anderson localization induced by intrinsic compositional disorder in InGaN/GaN quantum wells by scanning tunneling luminescence spectroscopy. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	15
114	Mode-Hopping Phenomena in the InGaN-Based CoreShell Nanorod Array Collective Lasing. <i>ACS Photonics</i> , <b>2018</b> , 5, 2724-2729	6.3	3
113	3D Self-Consistent Quantum Transport Simulation for GaAs Gate-All-Around Nanowire Field-Effect Transistor with Elastic and Inelastic Scattering Effects. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2018</b> , 216, 1800524	1.6	1
112	Three dimensional simulation on the transport and quantum efficiency of UVC-LEDs with random alloy fluctuations. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 153504	3.4	21
111	Electronic properties of MoS <sub>2</sub> nanoribbon with strain using tight-binding method. <i>Physica Status Solidi (B): Basic Research</i> , <b>2017</b> , 254, 1600565	1.3	9
110	Vertical transport through AlGa <sub>N</sub> barriers in heterostructures grown by ammonia molecular beam epitaxy and metalorganic chemical vapor deposition. <i>Semiconductor Science and Technology</i> , <b>2017</b> , 32, 025010	1.8	8
109	Suppression of Current Collapse in Enhancement Mode GaN-Based HEMTs Using an AlGa <sub>N</sub> /Ga <sub>N</sub> /AlGa <sub>N</sub> Double Heterostructure. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 1505-1510	2.9	11
108	Three dimensional characterization of GaN-based light emitting diode grown on patterned sapphire substrate by confocal Raman and photoluminescence spectromicroscopy. <i>Scientific Reports</i> , <b>2017</b> , 7, 45519	4.9	11
107	A design of intermediate band solar cell for photon ratchet with multi-layer MoS <sub>2</sub> nanoribbons. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 201109	3.4	9
106	Networking hole and electron hopping paths by Y-shaped host molecules: promoting blue phosphorescent organic light emitting diodes. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 3600-3608	7.1	9
105	Transferring the bendable substrateless GaN LED grown on a thin C-rich SiC buffer layer to flexible dielectric and metallic plates. <i>Journal of Materials Chemistry C</i> , <b>2017</b> , 5, 607-617	7.1	25

104	Combining High Hole Concentration in p-GaN and High Mobility in u-GaN for High p-Type Conductivity in a p-GaN/u-GaN Alternating-Layer Nanostructure. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 115-120	2.9	8
103	Localization landscape theory of disorder in semiconductors. I. Theory and modeling. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	50
102	Localization landscape theory of disorder in semiconductors. III. Application to carrier transport and recombination in light emitting diodes. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	68
101	Enhancing the Hole-Injection Efficiency of a Light-Emitting Diode by Increasing Mg Doping in the p-AlGaN Electron-Blocking Layer. <i>IEEE Transactions on Electron Devices</i> , <b>2017</b> , 64, 3226-3233	2.9	6
100	Modeling of carrier transport in organic light emitting diode with random dopant effects by two-dimensional simulation. <i>Optics Express</i> , <b>2017</b> , 25, 25492-25503	3.3	5
99	Method for enhancing the favored transverse-electric-polarized emission of an AlGaN deep-ultraviolet quantum well. <i>Optics Express</i> , <b>2017</b> , 25, 26365-26377	3.3	10
98	Localization landscape theory of disorder in semiconductors. II. Urbach tails of disordered quantum well layers. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	55
97	Electronic properties of strained monolayer MoS2 using tight binding method <b>2016</b> ,		4
96	Optimization of thermoelectric properties for rough nano-ridge GaAs/AlAs superlattice structure. <i>AIP Advances</i> , <b>2016</b> , 6, 115201	1.5	7
95	Analysis of the PEDOT:PSS/Si nanowire hybrid solar cell with a tail state model. <i>Journal of Applied Physics</i> , <b>2016</b> , 120, 215501	2.5	11
94	3D numerical modeling of the carrier transport and radiative efficiency for InGaN/GaN light emitting diodes with V-shaped pits. <i>AIP Advances</i> , <b>2016</b> , 6, 055208	1.5	25
93	Back-contacted thin-film GaAs solar cells <b>2016</b> ,		1
92	Impact of Gate Metal on the Performance of p-GaN/AlGaN/GaN High Electron Mobility Transistors. <i>IEEE Electron Device Letters</i> , <b>2015</b> , 36, 232-234	4.4	84
91	Design of nano-pattern reflectors for thin-film solar cells based on three-dimensional optical and electrical modeling <b>2015</b> ,		1
90	Percolation transport study in nitride based LED by considering the random alloy fluctuation. <i>Journal of Computational Electronics</i> , <b>2015</b> , 14, 416-424	1.8	19
89	Numerical study of current spreading and light extraction in deep UV light-emitting diode <b>2015</b> ,		2
88	High optical power and low-efficiency droop blue light-emitting diodes using compositionally step-graded InGaN barrier. <i>Electronics Letters</i> , <b>2015</b> , 51, 1187-1189	1.1	17
87	Electron transport in unipolar InGaN/GaN multiple quantum well structures grown by NH3 molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 185703	2.5	34

86	Modeling and optimization of p-AlGa <sub>N</sub> super lattice structure as the p-contact and transparent layer in AlGa <sub>N</sub> UVLEDs. <i>Optics Express</i> , <b>2015</b> , 23, 32367-76	3.3	8
85	The Effect of Tensile Strain on Optical Anisotropy and Exciton of $\Gamma$ -Plane ZnO. <i>IEEE Photonics Journal</i> , <b>2015</b> , 7, 1-8	1.8	2
84	Characteristics of large-scale nanohole arrays for thin-silicon photovoltaics. <i>Progress in Photovoltaics: Research and Applications</i> , <b>2014</b> , 22, 452-461	6.8	41
83	Polarization ratio enhancement of a-plane GaN light emitting diodes by asymmetric two-dimensional photonic crystals. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 193107	2.5	7
82	Study on the Optimization for Current Spreading Effect of Lateral GaN/InGa <sub>N</sub> LEDs. <i>IEEE Transactions on Electron Devices</i> , <b>2014</b> , 61, 511-517	2.9	19
81	Thermal Effects in a Bendable InGa <sub>N</sub> /Ga <sub>N</sub> Quantum-Well Light-Emitting Diode. <i>IEEE Photonics Technology Letters</i> , <b>2014</b> , 26, 1442-1445	2.2	2
80	High-electron-mobility GaN grown on free-standing GaN templates by ammonia-based molecular beam epitaxy. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 193702	2.5	68
79	Atomic-scale nanofacet structure in semipolar $\bar{2}0\bar{1}$ and $\bar{2}0\bar{1}$ InGa <sub>N</sub> single quantum wells. <i>Applied Physics Express</i> , <b>2014</b> , 7, 025503	2.4	13
78	Valence band states and polarized optical emission from nonpolar and semipolar III <sup>III</sup> nitride quantum well optoelectronic devices. <i>Japanese Journal of Applied Physics</i> , <b>2014</b> , 53, 100206	1.4	30
77	Nonpolar and semipolar LEDs <b>2014</b> , 250-275		
76	A review of non linear piezoelectricity in semiconductors <b>2014</b> ,		10
75	Photoelectrochemical hydrogen generation with linear gradient Al composition dodecagon faceted AlGa <sub>N</sub> /n-Ga <sub>N</sub> electrode. <i>Optics Express</i> , <b>2014</b> , 22 Suppl 7, A1853-61	3.3	4
74	The optimization study of textured a-Si:H solar cells. <i>Journal of Renewable and Sustainable Energy</i> , <b>2014</b> , 6, 023111	2.5	8
73	Design of anti-ring back reflectors for thin-film solar cells based on three-dimensional optical and electrical modeling. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 061108	3.4	4
72	Thermoelectric characteristic of the rough InN/Ga <sub>N</sub> core-shell nanowires. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 103707	2.5	7
71	The influence of random indium alloy fluctuations in indium gallium nitride quantum wells on the device behavior. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 113104	2.5	106
70	Mechanisms of the Asymmetric Light Output Enhancements in $\Gamma$ -Plane Ga <sub>N</sub> Light-Emitting Diodes With Photonic Crystals. <i>IEEE Journal of Quantum Electronics</i> , <b>2014</b> , 50, 1-6	2	2
69	The optimization of textured a-Si:H solar cells with a fully three-dimensional simulation <b>2014</b> ,		1

68	Influence of nanoscale indium fluctuation in the InGaN quantum-well LED to the efficiency droop with a fully 3D simulation model <b>2014</b> ,		1
67	Efficiency dip observed with InGaN-based multiple quantum well solar cells. <i>Optics Express</i> , <b>2014</b> , 22 Suppl 7, A1753-60	3.3	6
66	GaN-Based Dual-Color LEDs With p-Type Insertion Layer for Controlling the Ratio of Two-Color Intensities. <i>IEEE Transactions on Electron Devices</i> , <b>2013</b> , 60, 2821-2826	2.9	6
65	Enhancement of efficiency of InGaN-based light emitting diodes through strain and piezoelectric field management. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 073104	2.5	17
64	Influences of indium fluctuation to the carrier transport, auger recombination, and efficiency droop <b>2013</b> ,		3
63	On the Efficiency Decrease of the GaN Light-Emitting Nanorod Arrays. <i>IEEE Journal of Quantum Electronics</i> , <b>2013</b> , 49, 224-231	2	11
62	Projected Efficiency of Polarization-Matched p-In <sub>x</sub> Ga <sub>1-x</sub> N/i-In <sub>y</sub> Ga <sub>1-y</sub> N/n-GaN Double Heterojunction Solar Cells. <i>IEEE Journal of Photovoltaics</i> , <b>2013</b> , 3, 985-990	3.7	8
61	Studying the short channel effect in the scaling of the AlGaIn/GaN nanowire transistors. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 214501	2.5	14
60	Three dimensional numerical study on the efficiency of a core-shell InGaIn/GaN multiple quantum well nanowire light-emitting diodes. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 183104	2.5	24
59	The operation principle of the well in quantum dot stack infrared photodetector. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 244504	2.5	2
58	Surface-plasmon-coupled emission enhancement of a quantum well with a metal nanoparticle embedded in a light-emitting diode. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2013</b> , 30, 2599	1.7	21
57	Unipolar vertical transport in GaN/AlGaIn/GaN heterostructures. <i>Applied Physics Letters</i> , <b>2013</b> , 103, 022104	2.4	44
56	Scaling performance of Ga <sub>2</sub> O <sub>3</sub> /GaN nanowire field effect transistor. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 163706	2.5	6
55	Semipolar (202 1) Single-Quantum-Well Red Light-Emitting Diodes with a Low Forward Voltage. <i>Japanese Journal of Applied Physics</i> , <b>2013</b> , 52, 08JC08	1.4	24
54	GaN-Based Dual Color LEDs with P-Type Insertion Layer for Balancing Two-Color Intensities <b>2013</b> ,		1
53	Study on the Current Spreading Effect and Light Extraction Enhancement of Vertical GaN/InGaIn LEDs. <i>IEEE Transactions on Electron Devices</i> , <b>2012</b> , 59, 400-407	2.9	90
52	Carrier escape mechanism dependence on barrier thickness and temperature in InGaIn quantum well solar cells. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 181105	3.4	60
51	Short channel effects on gallium nitride/gallium oxide nanowire transistors. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 183501	3.4	19



50	Thin 3D multiplication regions in plasmonically enhanced nanopillar avalanche detectors. <i>Nano Letters</i> , <b>2012</b> , 12, 6448-52	11.5	31
49	Analyzing the physical properties of InGaN multiple quantum well light emitting diodes from nano scale structure. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 083505	3.4	92
48	Performance and polarization effects in (112 $\bar{2}$ ) long wavelength light emitting diodes grown on stress relaxed InGaN buffer layers. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 121106	3.4	51
47	Transition rate in the InGaN quantum dot intermediate-band solar cell <b>2012</b> ,		1
46	Influence of polarity on carrier transport in semipolar (2021 $\bar{0}$ ) and (202 $\bar{1}$ ) multiple-quantum-well light-emitting diodes. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 231110	3.4	48
45	Study of optical anisotropy in nonpolar and semipolar AlGaIn quantum well deep ultraviolet light emission diode. <i>Journal of Applied Physics</i> , <b>2012</b> , 112, 033104	2.5	20
44	Fabrication and modeling of large-scale silicon nanowire solar cells for thin-film photovoltaics <b>2012</b> ,		2
43	Numerical Study of Scaling Issues in Graphene Nanoribbon Transistors. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1344, 1		2
42	Investigation of the strain induced optical transition energy shift of the GaN nanorod light emitting diode arrays. <i>Optics Express</i> , <b>2011</b> , 19 Suppl 4, A900-7	3.3	11
41	Current spreading effect in vertical GaN/InGaN LEDs <b>2011</b> ,		1
40	Study of thermoelectric properties of indium nitride nanowire. <i>Physica Status Solidi (A) Applications and Materials Science</i> , <b>2011</b> , 208, 1562-1565	1.6	7
39	Study of carrier dynamics and radiative efficiency in InGaN/GaN LEDs with Monte Carlo method. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2011</b> , 8, 2393-2395		5
38	Electrical properties of modulation-doped rf-sputtered polycrystalline MgZnO/ZnO heterostructures. <i>Journal Physics D: Applied Physics</i> , <b>2011</b> , 44, 455101	3	24
37	Transport properties of gallium nitride nanowire metal-oxide-semiconductor transistor. <i>Applied Physics Letters</i> , <b>2011</b> , 99, 152108	3.4	8
36	Optical Properties of the Partially Strain Relaxed InGaN/GaN Light-Emitting Diodes Induced by p-Type GaN Surface Texturing. <i>IEEE Electron Device Letters</i> , <b>2011</b> , 32, 182-184	4.4	18
35	Study of thermoelectric properties of InGaN/GaN superlattice. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1329, 1		
34	Strain-enhanced photoluminescence from Ge direct transition. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 211108	3.4	66
33	100GHz depletion-mode Ga <sub>2</sub> O <sub>3</sub> /GaN single nanowire MOSFET by photo-enhanced chemical oxidation method <b>2010</b> ,		2



32	Two dimensional electron gases in polycrystalline MgZnO/ZnO heterostructures grown by rf-sputtering process. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 054503	2.5	64
31	Light emission polarization properties of semipolar InGaN/GaN quantum well. <i>Journal of Applied Physics</i> , <b>2010</b> , 107, 053112	2.5	31
30	A study of the role of dislocation density, indium composition on the radiative efficiency in InGaN/GaN polar and nonpolar light-emitting diodes using drift-diffusion coupled with a Monte Carlo method. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 124508	2.5	16
29	Optical polarization anisotropy of tensile strained InGaN/AlInN quantum wells for TM mode lasers. <i>Journal of Applied Physics</i> , <b>2010</b> , 108, 083108	2.5	10
28	Abnormal polarization switching phenomenon in a-plane Al <sub>x</sub> Ga(1-x)N. <i>Optics Express</i> , <b>2010</b> , 18, 21743-9	3.3	3
27	Role of interface roughness on lateral transport in InGaN/GaN LEDs: diffusion length, dislocation spacing, and radiative efficiency <b>2010</b> ,		1
26	Mobility Enhancement of Polycrystalline MgZnO/ZnO Thin Film Layers With Modulation Doping and Polarization Effects. <i>IEEE Transactions on Electron Devices</i> , <b>2010</b> , 57, 696-703	2.9	49
25	Study of Light Emission Enhancement in Nanostructured InGaN/GaN Quantum Wells. <i>IEEE Journal of Quantum Electronics</i> , <b>2010</b> , 46, 884-889	2	6
24	Light emission polarization properties of strained (11 $\bar{1}$ 2) semipolar InGaN quantum well. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , <b>2010</b> , 7, 1859-1862		
23	Influences of polarization effects in the electrical properties of polycrystalline MgZnO/ZnO heterostructure. <i>Materials Research Society Symposia Proceedings</i> , <b>2009</b> , 1201, 90		
22	Strain Relaxation Induced Micro-Photoluminescence characteristics of a Single InGaN-based Nanopillar Fabricated by Focused Ion Beam Milling. <i>ECS Transactions</i> , <b>2009</b> , 16, 139-143	1	
21	Size-Dependent Strain Relaxation and Optical Characteristics of InGaN/GaN Nanorod LEDs. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , <b>2009</b> , 15, 1226-1233	3.8	71
20	Study of polarization properties of light emitted from a-plane InGaN/GaN quantum well-based light emitting diodes. <i>Journal of Applied Physics</i> , <b>2009</b> , 106, 023106	2.5	35
19	Electronic and optical properties of InGaN quantum dot based light emitters for solid state lighting. <i>Journal of Applied Physics</i> , <b>2009</b> , 105, 013117	2.5	90
18	Polarization-Dependent Sidewall Light Diffraction of LEDs Surrounded by Nanorod Arrays. <i>IEEE Photonics Technology Letters</i> , <b>2009</b> , 21, 1683-1685	2.2	3
17	Lateral and Vertical Charge Transport in Polar Nitride Heterostructures <b>2008</b> , 111-159		1
16	Enhanced growth of anodic alumina nanochannels on Ga-ion pre-irradiated alumina. <i>Journal of Vacuum Science &amp; Technology B</i> , <b>2008</b> , 26, 651		5
15	Effect of image charges in the drain delay of AlGaIn/GaN high electron mobility transistors. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 093502	3.4	13

14	Strain relaxation induced microphotoluminescence characteristics of a single InGaN-based nanopillar fabricated by focused ion beam milling. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 081110	3.4	17
13	Extraction of Transport Dynamics in AlGaIn/GaN HFETs Through Free Carrier Absorption. <i>Journal of Electronic Materials</i> , <b>2008</b> , 37, 578-584	1.9	4
12	Transient study of self-heating effects in AlGaIn/GaN HFETs: Consequence of carrier velocities, temperature, and device performance. <i>Journal of Applied Physics</i> , <b>2007</b> , 101, 113712	2.5	33
11	Device scaling physics and channel velocities in AlGaIn/GaN HFETs: velocities and effective gate length. <i>IEEE Transactions on Electron Devices</i> , <b>2006</b> , 53, 588-593	2.9	40
10	. <i>IEEE Transactions on Electron Devices</i> , <b>2005</b> , 52, 284-293	2.9	63
9	Velocity overshoot effects and scaling issues in III-V nitrides. <i>IEEE Transactions on Electron Devices</i> , <b>2005</b> , 52, 311-316	2.9	21
8	Sources of transconductance collapse in III-V nitrides - consequences of velocity-field relations and source/gate design. <i>IEEE Transactions on Electron Devices</i> , <b>2005</b> , 52, 1048-1054	2.9	24
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3	Real-time observation of ripple structure formation on a diamond surface under focused ion-beam bombardment. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	69
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1	Analysis of Light-Emission Polarization Ratio in Deep-Ultraviolet Light-Emitting Diodes by Considering Random Alloy Fluctuations with the 3D k $\cdot$ p Method. <i>Physica Status Solidi - Rapid Research Letters</i> , 2100498	2.5	0