

# Yuh-Renn Wu

## List of Publications by Year in descending order

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212  
papers

3,707  
citations

126708

33  
h-index

161609

54  
g-index

213  
all docs

213  
docs citations

213  
times ranked

3409  
citing authors

#	ARTICLE	IF	CITATIONS
1	The 2020 UV emitter roadmap. Journal Physics D: Applied Physics, 2020, 53, 503001.	1.3	289
2	The influence of random indium alloy fluctuations in indium gallium nitride quantum wells on the device behavior. Journal of Applied Physics, 2014, 116, .	1.1	124
3	Study on the Current Spreading Effect and Light Extraction Enhancement of Vertical GaN/InGaN LEDs. IEEE Transactions on Electron Devices, 2012, 59, 400-407.	1.6	111
4	Impact of Gate Metal on the Performance of p-GaN/AlGaIn/GaN High Electron Mobility Transistors. IEEE Electron Device Letters, 2015, 36, 232-234.	2.2	105
5	Electronic and optical properties of InGaIn quantum dot based light emitters for solid state lighting. Journal of Applied Physics, 2009, 105, .	1.1	104
6	High-electron-mobility GaN grown on free-standing GaN templates by ammonia-based molecular beam epitaxy. Journal of Applied Physics, 2014, 115, .	1.1	103
7	Analyzing the physical properties of InGaIn multiple quantum well light emitting diodes from nano scale structure. Applied Physics Letters, 2012, 101, 083505.	1.5	101
8	Localization landscape theory of disorder in semiconductors. III. Application to carrier transport and recombination in light emitting diodes. Physical Review B, 2017, 95, .	1.1	95
9	Polar Heterostructure for Multifunction Devices: Theoretical Studies. IEEE Transactions on Electron Devices, 2005, 52, 284-293.	1.6	94
10	Size-Dependent Strain Relaxation and Optical Characteristics of InGaIn/GaN Nanorod LEDs. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 1226-1233.	1.9	85
11	Localization landscape theory of disorder in semiconductors. I. Theory and modeling. Physical Review B, 2017, 95, .	1.1	81
12	Strain-enhanced photoluminescence from Ge direct transition. Applied Physics Letters, 2010, 96, .	1.5	78
13	Localization landscape theory of disorder in semiconductors. II. Urbach tails of disordered quantum well layers. Physical Review B, 2017, 95, .	1.1	78
14	Real-time observation of ripple structure formation on a diamond surface under focused ion-beam bombardment. Physical Review B, 2001, 63, .	1.1	76
15	Carrier escape mechanism dependence on barrier thickness and temperature in InGaIn quantum well solar cells. Applied Physics Letters, 2012, 101, .	1.5	72
16	Two dimensional electron gases in polycrystalline MgZnO/ZnO heterostructures grown by rf-sputtering process. Journal of Applied Physics, 2010, 108, .	1.1	71
17	Giant gauge factor of Van der Waals material based strain sensors. Nature Communications, 2021, 12, 2018.	5.8	62
18	Influence of polarity on carrier transport in semipolar (2021 $\hat{A}$ ) and (202 $\hat{A}$ <sup>-1</sup> ) multiple-quantum-well light-emitting diodes. Applied Physics Letters, 2012, 100, .	1.5	54

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19	Performance and polarization effects in (112 $\bar{2}$ ) long wavelength light emitting diodes grown on stress relaxed InGaN buffer layers. Applied Physics Letters, 2012, 101, 121106.	1.5	53
20	Gate leakage suppression and contact engineering in nitride heterostructures. Journal of Applied Physics, 2003, 94, 5826-5831.	1.1	51
21	Device scaling physics and channel velocities in AlGaIn/GaN HFETs: velocities and effective gate length. IEEE Transactions on Electron Devices, 2006, 53, 588-593.	1.6	51
22	Mobility Enhancement of Polycrystalline MgZnO/ZnO Thin Film Layers With Modulation Doping and Polarization Effects. IEEE Transactions on Electron Devices, 2010, 57, 696-703.	1.6	51
23	Metal piezoelectric semiconductor field effect transistors for piezoelectric strain sensors. Applied Physics Letters, 2004, 85, 1223-1225.	1.5	50
24	Unipolar vertical transport in GaN/AlGaIn/GaN heterostructures. Applied Physics Letters, 2013, 103, .	1.5	49
25	Characteristics of large-scale nanohole arrays for thin-silicon photovoltaics. Progress in Photovoltaics: Research and Applications, 2014, 22, 452-461.	4.4	47
26	Electron transport in unipolar InGaIn/GaN multiple quantum well structures grown by NH <sub>3</sub> molecular beam epitaxy. Journal of Applied Physics, 2015, 117, .	1.1	42
27	Study on the effect of size on InGaIn red micro-LEDs. Scientific Reports, 2022, 12, 1324.	1.6	41
28	Transient study of self-heating effects in AlGaIn/GaN HFETs: Consequence of carrier velocities, temperature, and device performance. Journal of Applied Physics, 2007, 101, 113712.	1.1	39
29	Thin 3D Multiplication Regions in Plasmonically Enhanced Nanopillar Avalanche Detectors. Nano Letters, 2012, 12, 6448-6452.	4.5	39
30	Study of polarization properties of light emitted from a-plane InGaIn/GaN quantum well-based light emitting diodes. Journal of Applied Physics, 2009, 106, 023106.	1.1	37
31	3D numerical modeling of the carrier transport and radiative efficiency for InGaIn/GaN light emitting diodes with V-shaped pits. AIP Advances, 2016, 6, .	0.6	35
32	Light emission polarization properties of semipolar InGaIn/GaN quantum well. Journal of Applied Physics, 2010, 107, 053112.	1.1	34
33	Valence band states and polarized optical emission from nonpolar and semipolar III <sup>+</sup> nitride quantum well optoelectronic devices. Japanese Journal of Applied Physics, 2014, 53, 100206.	0.8	34
34	Transferring the bendable substrateless GaN LED grown on a thin C-rich SiC buffer layer to flexible dielectric and metallic plates. Journal of Materials Chemistry C, 2017, 5, 607-617.	2.7	30
35	Sources of Transconductance Collapse in III <sup>+</sup> Nitrides—Consequences of Velocity-Field Relations and Source/Gate Design. IEEE Transactions on Electron Devices, 2005, 52, 1048-1054.	1.6	28
36	Evidence of nanoscale Anderson localization induced by intrinsic compositional disorder in InGaIn/GaN quantum wells by scanning tunneling luminescence spectroscopy. Physical Review B, 2018, 98, .	1.1	28

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37	Three dimensional numerical study on the efficiency of a core-shell InGaN/GaN multiple quantum well nanowire light-emitting diodes. Journal of Applied Physics, 2013, 113, 183104.	1.1	27
38	Semipolar (202 <sub>1</sub> ,1) Single-Quantum-Well Red Light-Emitting Diodes with a Low Forward Voltage. Japanese Journal of Applied Physics, 2013, 52, 08JC08.	0.8	27
39	Three dimensional simulation on the transport and quantum efficiency of UVC-LEDs with random alloy fluctuations. Applied Physics Letters, 2018, 113, .	1.5	27
40	Suppression of Current Collapse in Enhancement Mode GaN-Based HEMTs Using an AlGaIn/GaN/AlGaIn Double Heterostructure. IEEE Transactions on Electron Devices, 2017, 64, 1505-1510.	1.6	26
41	Velocity Overshoot Effects and Scaling Issues in III-V Nitrides. IEEE Transactions on Electron Devices, 2005, 52, 311-316.	1.6	24
42	Electrical properties of modulation-doped rf-sputtered polycrystalline MgZnO/ZnO heterostructures. Journal Physics D: Applied Physics, 2011, 44, 455101.	1.3	24
43	Study of optical anisotropy in nonpolar and semipolar AlGaIn quantum well deep ultraviolet light emission diode. Journal of Applied Physics, 2012, 112, .	1.1	24
44	Surface-plasmon-coupled emission enhancement of a quantum well with a metal nanoparticle embedded in a light-emitting diode. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 2599.	0.9	23
45	Study on the Optimization for Current Spreading Effect of Lateral GaN/InGaIn LEDs. IEEE Transactions on Electron Devices, 2014, 61, 511-517.	1.6	23
46	Percolation transport study in nitride based LED by considering the random alloy fluctuation. Journal of Computational Electronics, 2015, 14, 416-424.	1.3	23
47	Disorder effects in nitride semiconductors: impact on fundamental and device properties. Nanophotonics, 2020, 10, 3-21.	2.9	23
48	Examination of LiNbO <sub>3</sub> /nitride heterostructures. Solid-State Electronics, 2003, 47, 2155-2159.	0.8	22
49	Strain relaxation induced microphotoluminescence characteristics of a single InGaIn-based nanopillar fabricated by focused ion beam milling. Applied Physics Letters, 2008, 93, 081110.	1.5	21
50	High optical power and low efficiency droop blue light-emitting diodes using compositionally step-graded InGaIn barrier. Electronics Letters, 2015, 51, 1187-1189.	0.5	21
51	Interwell carrier transport in InGaIn/(In)GaIn multiple quantum wells. Applied Physics Letters, 2019, 114, .	1.5	21
52	Optical Properties of the Partially Strain Relaxed InGaIn/GaN Light-Emitting Diodes Induced by p-Type GaN Surface Texturing. IEEE Electron Device Letters, 2011, 32, 182-184.	2.2	20
53	Short channel effects on gallium nitride/gallium oxide nanowire transistors. Applied Physics Letters, 2012, 101, 183501.	1.5	20
54	Hybrid classical-quantum linear solver using Noisy Intermediate-Scale Quantum machines. Scientific Reports, 2019, 9, 16251.	1.6	20



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73	Bistriazoles with a Biphenyl Core Derivative as an Electron-Favorable Bipolar Host of Efficient Blue Phosphorescent Organic Light-Emitting Diodes. ACS Applied Materials & Interfaces, 2020, 12, 49895-49904.	4.0	13
74	Efficiency and Forward Voltage of Blue and Green Lateral LEDs with V-shaped Defects and Random Alloy Fluctuation in Quantum Wells. Physical Review Applied, 2022, 17, .	1.5	13
75	Investigation of the strain induced optical transition energy shift of the GaN nanorod light emitting diode arrays. Optics Express, 2011, 19, A900.	1.7	12
76	On the Efficiency Decrease of the GaN Light-Emitting Nanorod Arrays. IEEE Journal of Quantum Electronics, 2013, 49, 224-231.	1.0	12
77	A review of non linear piezoelectricity in semiconductors. AIP Conference Proceedings, 2014, , .	0.3	12
78	A design of intermediate band solar cell for photon ratchet with multi-layer MoS2 nanoribbons. Applied Physics Letters, 2017, 110, .	1.5	12
79	Networking hole and electron hopping paths by Y-shaped host molecules: promoting blue phosphorescent organic light emitting diodes. Journal of Materials Chemistry C, 2017, 5, 3600-3608.	2.7	12
80	Influences of dielectric constant and scan rate on hysteresis effect in perovskite solar cell with simulation and experimental analyses. Scientific Reports, 2022, 12, 7927.	1.6	12
81	Transport properties of gallium nitride nanowire metal-oxide-semiconductor transistor. Applied Physics Letters, 2011, 99, .	1.5	11
82	Electronic properties of MoS <sub>2</sub> nanoribbon with strain using tight-binding method. Physica Status Solidi (B): Basic Research, 2017, 254, 1600565.	0.7	11
83	Vertical transport through AlGaIn barriers in heterostructures grown by ammonia molecular beam epitaxy and metalorganic chemical vapor deposition. Semiconductor Science and Technology, 2017, 32, 025010.	1.0	11
84	Optical polarization anisotropy of tensile strained InGaIn/AlInN quantum wells for TM mode lasers. Journal of Applied Physics, 2010, 108, 083108.	1.1	10
85	Study of thermoelectric properties of indium nitride nanowire. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1562-1565.	0.8	10
86	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. IEEE Journal of Photovoltaics, 2013, 3, 985-990.	1.5	10
87	The optimization study of textured a-Si:H solar cells. Journal of Renewable and Sustainable Energy, 2014, 6, 023111.	0.8	10
88	Optimization of thermoelectric properties for rough nano-ridge GaAs/AlAs superlattice structure. AIP Advances, 2016, 6, 115201.	0.6	10
89	Method for enhancing the favored transverse-electric-polarized emission of an AlGaIn deep-ultraviolet quantum well. Optics Express, 2017, 25, 26365.	1.7	10
90	Investigation of Electrical and Optical Properties of AlGaInP Red Vertical Micro-Light-Emitting Diodes With Cu/Invar/Cu Metal Substrates. IEEE Transactions on Electron Devices, 2021, 68, 2818-2822.	1.6	10

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91	Thermoelectric characteristic of the rough InN/GaN core-shell nanowires. Journal of Applied Physics, 2014, 116, 103707.	1.1	9
92	Polarization ratio enhancement of a-plane GaN light emitting diodes by asymmetric two-dimensional photonic crystals. Journal of Applied Physics, 2014, 115, .	1.1	9
93	Modeling and optimization of p-AlGaIn super lattice structure as the p-contact and transparent layer in AlGaIn UVLEDs. Optics Express, 2015, 23, 32367.	1.7	9
94	Different surface plasmon coupling behaviors of a surface Al nanoparticle between TE and TM polarizations in a deep-UV light-emitting diode. Optics Express, 2018, 26, 8340.	1.7	9
95	A 3D simulation comparison of carrier transport in green and blue c-plane multi-quantum well nitride light emitting diodes. Journal of Applied Physics, 2020, 128, 235703.	1.1	9
96	Wearable Devices Made of a Wireless Vertical-Type Light-Emitting Diode Package on a Flexible Polyimide Substrate with a Conductive Layer. ACS Applied Electronic Materials, 2021, 3, 979-987.	2.0	9
97	Improved Vertical Carrier Transport for Green III-Nitride LEDs Using $\text{In}_{0.784314}\text{Ga}_{0.215686}\text{N}$ Alloy Quantum Barriers. Physical Review Applied, 2022, 17, .	1.3	9
98	Modeling of carrier transport in organic light emitting diode with random dopant effects by two-dimensional simulation. Optics Express, 2017, 25, 25492.	1.7	8
99	Optimization of MAPbI <sub>3</sub> -Based Perovskite Solar Cell With Textured Surface. IEEE Journal of Photovoltaics, 2019, 9, 1686-1692.	1.5	8
100	Analysis and Optimization of GaN Based Multi-Channels FinFETs. IEEE Nanotechnology Magazine, 2020, 19, 439-445.	1.1	8
101	Study of Light Emission Enhancement in Nanostructured InGaIn/GaN Quantum Wells. IEEE Journal of Quantum Electronics, 2010, 46, 884-889.	1.0	7
102	Efficiency dip observed with InGaIn-based multiple quantum well solar cells. Optics Express, 2014, 22, A1753.	1.7	7
103	Enhancing the Hole-Injection Efficiency of a Light-Emitting Diode by Increasing Mg Doping in the p-AlGaIn Electron-Blocking Layer. IEEE Transactions on Electron Devices, 2017, 64, 3226-3233.	1.6	7
104	Characterization of semi-polar (0001) InGaIn microLEDs. Scientific Reports, 2020, 10, 15966.	1.6	7
105	Enhanced growth of anodic alumina nanochannels on Ga-ion pre-irradiated aluminum. Journal of Vacuum Science & Technology B, 2008, 26, 651-654.	1.3	6
106	Study of carrier dynamics and radiative efficiency in InGaIn/GaN LEDs with Monte Carlo method. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2393-2395.	0.8	6
107	GaN-Based Dual-Color LEDs With p-Type Insertion Layer for Controlling the Ratio of Two-Color Intensities. IEEE Transactions on Electron Devices, 2013, 60, 2821-2826.	1.6	6
108	Scaling performance of Ga <sub>2</sub> O <sub>3</sub> /GaN nanowire field effect transistor. Journal of Applied Physics, 2013, 114, 163706.	1.1	6



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109	Design of anti-ring back reflectors for thin-film solar cells based on three-dimensional optical and electrical modeling. Applied Physics Letters, 2014, 105, 061108.	1.5	6
110	Systematic investigation of the threshold voltage modulation of AlGaIn/GaN Schottky-gate Fin-HEMTs. Journal of Applied Physics, 2019, 125, 094502.	1.1	6
111	Modeling dislocation-related leakage currents in GaN p-n diodes. Journal of Applied Physics, 2019, 126, 245705.	1.1	6
112	Analysis of the triplet exciton transfer mechanism at the heterojunctions of organic light-emitting diodes. Journal Physics D: Applied Physics, 2020, 53, 345501.	1.3	6
113	Low-temperature carrier transport across InGaIn multiple quantum wells: Evidence of ballistic hole transport. Physical Review B, 2020, 101, .	1.1	6
114	Revealing the mechanism of carrier transport in host-guest systems of organic materials with a modified Poisson and drift-diffusion solver. Physical Review Materials, 2020, 4, .	0.9	6
115	Light Trapping Induced High Short-Circuit Current Density in III-Nitride Nanorods/Si (111) Heterojunction Solar Cells. Nanoscale Research Letters, 2020, 15, 167.	3.1	5
116	Hole mobility behavior in Al-gradient polarization-induced p-type AlGaIn grown on GaN template. Applied Physics Letters, 2022, 120, .	1.5	5
117	Extraction of Transport Dynamics in AlGaIn/GaN HFETs Through Free Carrier Absorption. Journal of Electronic Materials, 2008, 37, 578-584.	1.0	4
118	Transition rate in the InGaIn quantum dot intermediate-band solar cell. , 2012, , .		4
119	Photoelectrochemical hydrogen generation with linear gradient Al composition dodecagon faceted AlGaIn/n-GaN electrode. Optics Express, 2014, 22, A1853.	1.7	4
120	Back-contacted thin-film GaAs solar cells. , 2016, , .		4
121	Electronic properties of strained monolayer MoS2 using tight binding method. , 2016, , .		4
122	Nonpolar and semipolar LEDs. , 2018, , 273-295.		4
123	A Thermoelectrically Cooled nBn Type Superlattices InAs/InAsSb/AlAsSb Mid-Wave Infrared Detector. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900522.	0.8	4
124	Deep Source Metal Trenches in GaN-On-Si HEMTs for Relieving Current Collapse. IEEE Journal of the Electron Devices Society, 2021, 9, 557-563.	1.2	4
125	Investigating the high field transport properties of Janus WSSe and MoSSe by DFT analysis and Monte Carlo simulations. Journal of Applied Physics, 2022, 131, .	1.1	4
126	Polarization-Dependent Sidewall Light Diffraction of LEDs Surrounded by Nanorod Arrays. IEEE Photonics Technology Letters, 2009, 21, 1683-1685.	1.3	3



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127	100GHz depletion-mode Ga <sub>2</sub> O <sub>3</sub> /GaN single nanowire MOSFET by photo-enhanced chemical oxidation method. , 2010, , .		3
128	Abnormal polarization switching phenomenon in a-plane Al <sub>x</sub> Ga <sub>1-x</sub> N. Optics Express, 2010, 18, 21743.	1.7	3
129	Numerical Study of Scaling Issues in Graphene Nanoribbon Transistors. Materials Research Society Symposia Proceedings, 2011, 1344, 1.	0.1	3
130	Fabrication and modeling of large-scale silicon nanowire solar cells for thin-film photovoltaics. , 2012, , .		3
131	Influences of indium fluctuation to the carrier transport, auger recombination, and efficiency droop. , 2013, , .		3
132	The operation principle of the well in quantum dot stack infrared photodetector. Journal of Applied Physics, 2013, 114, 244504.	1.1	3
133	Mechanisms of the Asymmetric Light Output Enhancements in $a$ -Plane GaN Light-Emitting Diodes With Photonic Crystals. IEEE Journal of Quantum Electronics, 2014, 50, 1-6.	1.0	3
134	Mode-Hopping Phenomena in the InGaN-Based Core-Shell Nanorod Array Collective Lasing. ACS Photonics, 2018, 5, 2724-2729.	3.2	3
135	Calculation of Field Dependent Mobility in MoS <sub>2</sub> and WS <sub>2</sub> with Multi-Valley Monte Carlo Method. , 2021, , .		3
136	Analysis of light emissions polarization ratio in deep ultra-violet light emitting diodes by considering random alloy fluctuations with the 3D $k$ -p method. Physica Status Solidi - Rapid Research Letters, 0, , 2100498.	1.2	3
137	Design of Monolayer MoS <sub>2</sub> Nanosheet Transistors for Low-Power Applications. IEEE Transactions on Electron Devices, 2022, 69, 358-363.	1.6	3
138	Thermal Effects in a Bendable InGaN/GaN Quantum-Well Light-Emitting Diode. IEEE Photonics Technology Letters, 2014, 26, 1442-1445.	1.3	2
139	The Effect of Tensile Strain on Optical Anisotropy and Exciton of $a$ -Plane ZnO. IEEE Photonics Journal, 2015, 7, 1-8.	1.0	2
140	Numerical study of current spreading and light extraction in deep UV light-emitting diode. , 2015, , .		2
141	Modeling dislocation-related reverse bias leakage in GaN $n$ diodes. Semiconductor Science and Technology, 2021, 36, 075001.	1.0	2
142	Study of the Factors Limiting the Efficiency of Vertical-Type Nitride- and AlInGaP-Based Quantum-Well Micro-LEDs. Processes, 2022, 10, 489.	1.3	2
143	Vertical hole transport through unipolar InGaN quantum wells and double heterostructures. Physical Review Materials, 2022, 6, .	0.9	2
144	Gate Leakage Suppression and Contact Engineering in Nitride Heterostructures. Materials Research Society Symposia Proceedings, 2003, 798, 249.	0.1	1

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145	Lateral and Vertical Charge Transport in Polar Nitride Heterostructures. , 2008, , 111-159.		1
146	Analysis of strain relaxation and emission spectrum of a free-standing GaN-based nanopillar. , 2008, , .		1
147	Modeling of Junction Temperature and Current Flow in High Power InGaN/GaN Light Emission Diodes Using Finite Element Methods. , 2009, , .		1
148	Role of interface roughness on lateral transport in InGaN/GaN LEDs: diffusion length, dislocation spacing, and radiative efficiency. Proceedings of SPIE, 2010, , .	0.8	1
149	75GHz Ga2O3/GaN Single Nanowire Metal- Oxide-Semiconductor Field-Effect Transistors. , 2010, , .		1
150	Current spreading effect in vertical GaN/InGaN LEDs. Proceedings of SPIE, 2011, , .	0.8	1
151	Scaling of GaN single nanowire MOSFET with cut-off frequency 150GHz. , 2012, , .		1
152	DC and RF Characteristics of Ga2O3/GaN Single Nanowire MOSFET. ECS Transactions, 2013, 50, 75-79.	0.3	1
153	The optimization of textured a-Si:H solar cells with a fully three-dimensional simulation. , 2014, , .		1
154	Influence of nanoscale indium fluctuation in the InGaN quantum-well LED to the efficiency droop with a fully 3D simulation model. Proceedings of SPIE, 2014, , .	0.8	1
155	Optimization of all-back-contact GaAs solar cells. , 2015, , .		1
156	Design of nano-pattern reflectors for thin-film solar cells based on three-dimensional optical and electrical modeling. , 2015, , .		1
157	Optimization of the gain curve of the InGaN blue light laser diode. , 2016, , .		1
158	3D Self-Consistent Quantum Transport Simulation for GaAs Gate-All-Around Nanowire Field-Effect Transistor with Elastic and Inelastic Scattering Effects. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800524.	0.8	1
159	Theoretical modelling of XBn T2SLs InAs/InAsSb/B-AlAsSb mid-wave detector operating below thermoelectrical cooling. Opto-electronics Review, 2019, 27, 275-281.	2.4	1
160	Studies of 2D Bulk and Nanoribbon Band Structures in Mo x W 1â€“ x S 2 Alloy System Using Full sp 3 d 5 Tightâ€œBinding Model. Physica Status Solidi (B): Basic Research, 2021, 258, 2000375.	0.7	1
161	InGaN light emitters: A comparison of quantum dot and quantum well based devices. , 2008, , .		1
162	Study of Optical Anisotropy of c-plane/m-plane Ultra-violet LED and Laser Diode by kÂˆp Method. , 2012, , .		1

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163	GaN-Based Dual Color LEDs with P-Type Insertion Layer for Balancing Two-Color Intensities. , 2013, , .		1
164	Analysis of the hysteresis effect in Perovskite solar cells for the traditional and inverted architectures. , 2020, , .		1
165	Velocity overshoot effects and transit times in III-V nitride HFETs : A Monte Carlo study. , 0, , .		0
166	Polar flerostructure for multi-function devices: theoretical studies. , 0, , .		0
167	Monte Carlo study of noise scaling in AlGaN / GaN HFETs. AIP Conference Proceedings, 2005, , .	0.3	0
168	How does phonon generation influence AlGaN/GaN HFETs?- Transient and steady state studies. , 2006, , .		0
169	Strain relaxation characteristics of a single InGaN-based nanopillar fabricated by focused ion beam milling. Proceedings of SPIE, 2008, , .	0.8	0
170	Etching Depth Dependence of Emission Properties from InGaN/GaN Light Emitting Diodes with Nanohole Arrays: Analysis of Strain Relaxation and Surface States. , 2009, , .		0
171	Influences of Polarization Effects in the Electrical Properties of Polycrystalline MgZnO/ZnO Heterostructure. Materials Research Society Symposia Proceedings, 2009, 1201, 90.	0.1	0
172	Strain Relaxation Induced Micro-Photoluminescence haracteristics of a Single InGaN-based Nanopillar Fabricated by Focused Ion Beam Milling. ECS Transactions, 2009, 16, 139-143.	0.3	0
173	Mobility Study of Polycrystalline MgZnO/ZnO Thin Film Layers with Monte Carlo Method. , 2009, , .		0
174	Light emission polarization properties of strained (11\$ ar 2 \$2) semipolar InGaN quantum well. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1859-1862.	0.8	0
175	Study of Polarization Properties of Light Emitted from Tensile Strained InGaN/AlInN Quantum Well. , 2010, , .		0
176	X-ray absorption fine-structure and optical studies of AlZnO nano-thin films grown on sapphire by pulsed laser deposition. Proceedings of SPIE, 2011, , .	0.8	0
177	2-Dimensional optoelectronic simulation for nanostructured organic-inorganic hybrid solar cells. , 2011, , .		0
178	Study of thermoelectric properties of InGaN/GaN superlattice. Materials Research Society Symposia Proceedings, 2011, 1329, 1.	0.1	0
179	Intersubband and intrasubband transition in InGaN quantum dot for solar cell application. , 2012, , .		0
180	The effect of tailoring electron/hole blocking layers on the photovoltaic performance of the single junction solar cells. , 2012, , .		0

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181	Numerical modeling of In <sub>x</sub> Ga <sub>1-x</sub> silicon multi-junction tandem solar cell. , 2012, , .		0
182	Study of light emission polarization properties of semipolar InGa <sub>n</sub> /Ga <sub>n</sub> quantum well under different strain conditions. , 2013, , .		0
183	Three dimensional numerical study on the efficiency of a core-shell InGa <sub>n</sub> /Ga <sub>n</sub> multiple quantum well nanowire LED. , 2013, , .		0
184	Atom Probe Tomography of III-Nitrides Based Semiconducting Devices. Microscopy and Microanalysis, 2013, 19, 956-957.	0.2	0
185	Nonpolar and semipolar LEDs. , 2014, , 250-275.		0
186	Design of light trapping nanopatterned solar cells based on three-dimensional optical and electrical modeling. , 2014, , .		0
187	Efficiency enhancement of thin-film a-Si:H solar cell with periodic anti-ring back reflector. , 2014, , .		0
188	Study of percolation transport in the InGa <sub>n</sub> /AlGa <sub>n</sub> LEDs with random alloy fluctuation. , 2015, , .		0
189	Development of quantum transport simulation model by considering phonon scattering in nanowire device. , 2015, , .		0
190	Designing of p-Al <sub>x</sub> Ga <sub>1-x</sub> N/Al <sub>y</sub> Ga <sub>1-y</sub> N super lattice structure as the p-contact and transparent layer in AlGa <sub>n</sub> UVLEDs. , 2015, , .		0
191	3D finite element strain analysis of V-shaped pits in light emitting diodes. , 2015, , .		0
192	Investigation of carrier transport in nitride based LED by considering the random alloy fluctuation. , 2015, , .		0
193	Modeling for carrier transportation in organic light-emitting diode by considering effective tail states. , 2015, , .		0
194	Modeling for carrier transportation in organic light-emitting diode by considering effective tail states. , 2015, , .		0
195	Modeling of random dopant effects of organic light emitting diode with two dimensional simulation. , 2016, , .		0
196	Numerical analysis and optimization of PEDOT:PSS/Si nanowire hybrid solar cells. , 2016, , .		0
197	Electronic properties of MoS <sub>2</sub> nanoribbon with strain using tight binding method. , 2016, , .		0
198	Development of numerical modeling program for organic/inorganic hybrid solar cells by including tail/interfacial states models. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
199	Three dimensional compressive strain and its effect on optical properties of GaN-based light emitting diode grown on patterned sapphire substrate by confocal spectromicroscopy. , 2017, , .		0
200	Modeling of carrier transport and exciton diffusion in organic light emitting diodes with different doping effects. , 2017, , .		0
201	Optimized Design of Back-Contact Thin-Film GaAs Solar Cells. , 2017, , .		0
202	Back-contacted thin-film GaAs solar cells. , 2017, , .		0
203	Optimization of MAPbI <sub>3</sub> Perovskite Solar Cell with Nano Structures. , 2018, , .		0
204	Thermoelectrically Cooled nBn T2SLs InAs/InAsSb/B-AlAsSb MWIR Detector. , 2019, , .		0
205	Investigation of Electronic Properties of MoxW1-xS2 Alloy by Tight-binding Method for Interband transition. , 2019, , .		0
206	CMOS-compatible GaN HEMT on 200mm Si-substrate for RF application. , 2021, , .		0
207	Influences of Random Alloy Fluctuation to the Efficiency of $\mu$ LED and Optimization of Efficiency with Vertical Type Contact. , 2021, , .		0
208	Electro-Optical Numerical Modeling for the Design of UVA Nitride-Based Vertical-Cavity Surface-Emitting Laser Diodes. IEEE Journal of Selected Topics in Quantum Electronics, 2022, 28, 1-6.	1.9	0
209	Light Emission Polarization Properties of a-plane InGaN/GaN Quantum Wells Light Emitting Diodes. , 2009, , .		0
210	Abnormal polarization switching phenomenon in a-plane AlxGa1-xN. , 2011, , .		0
211	Influences of Indium Fluctuation to carrier transport and the Current-voltage Turn-on Behavior in the InGaN Quantum Well LEDs. , 2012, , .		0
212	Study of Carrier Scattering and Mobility in Monolayer MoTe <sub>2</sub> and WTe <sub>2</sub> by First-Principle Analysis. , 2022, , .		0