

# Bilal Janjua

## List of Publications by Year in descending order

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51  
papers

1,396  
citations

430874

18  
h-index

361022

35  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1583  
citing authors

#	ARTICLE	IF	CITATIONS
1	48 Gbit/s 16-QAM-OFDM transmission based on compact 450-nm laser for underwater wireless optical communication. Optics Express, 2015, 23, 23302.	3.4	266
2	Going beyond 4 Gbps data rate by employing RGB laser diodes for visible light communication. Optics Express, 2015, 23, 18746.	3.4	127
3	2 Gbit/s data transmission from an unfiltered laser-based phosphor-converted white lighting communication system. Optics Express, 2015, 23, 29779.	3.4	103
4	Droop-Free, Reliable, and High-Power InGaN/GaN Nanowire Light-Emitting Diodes for Monolithic Metal-Optoelectronics. Nano Letters, 2016, 16, 4616-4623.	9.1	101
5	4-Gbit/s visible light communication link based on 16-QAM OFDM transmission over remote phosphor-film converted white light by using blue laser diode. Optics Express, 2015, 23, 33656.	3.4	87
6	Facile Formation of High-Quality InGaN/GaN Quantum-Disks-in-Nanowires on Bulk-Metal Substrates for High-Power Light-Emitters. Nano Letters, 2016, 16, 1056-1063.	9.1	84
7	Surface-Passivated AlGaIn Nanowires for Enhanced Luminescence of Ultraviolet Light Emitting Diodes. ACS Photonics, 2018, 5, 964-970.	6.6	67
8	Determination of band offsets at GaN/single-layer MoS <sub>2</sub> heterojunction. Applied Physics Letters, 2016, 109, .	3.3	64
9	Droop-free Al <sub>x</sub> Ga <sub>1-x</sub> N/Al <sub>y</sub> Ga <sub>1-y</sub> N quantum-disks-in-nanowires ultraviolet LED emitting at 337 nm on metal/silicon substrates. Optics Express, 2017, 25, 1381.	3.4	60
10	Photoinduced entropy of InGaN/GaN p-i-n double-heterostructure nanowires. Applied Physics Letters, 2017, 110, .	3.3	50
11	Self-planarized quantum-disks-in-nanowires ultraviolet-B emitters utilizing pendeo-epitaxy. Nanoscale, 2017, 9, 7805-7813.	5.6	36
12	Highly uniform ultraviolet-A quantum-confined AlGaIn nanowire LEDs on metal/silicon with a TaN interlayer. Optical Materials Express, 2017, 7, 4214.	3.0	27
13	Tapering-induced enhancement of light extraction efficiency of nanowire deep ultraviolet LED by theoretical simulations. Photonics Research, 2018, 6, 457.	7.0	27
14	Catalyst-Free Vertical ZnO-Nanotube Array Grown on p-GaN for UV-Light-Emitting Devices. ACS Applied Materials & Interfaces, 2019, 11, 27989-27996.	8.0	27
15	True Yellow Light-Emitting Diodes as Phosphor for Tunable Color-Rendering Index Laser-Based White Light. ACS Photonics, 2016, 3, 2089-2095.	6.6	25
16	Achieving Uniform Carrier Distribution in MBE-Grown Compositionally Graded InGaIn Multiple-Quantum-Well LEDs. IEEE Photonics Journal, 2015, 7, 1-9.	2.0	22
17	Ultrabroad linewidth orange-emitting nanowires LED for high CRI laser-based white lighting and gigahertz communications. Optics Express, 2016, 24, 19228.	3.4	20
18	Role of quantum-confined stark effect on bias dependent photoluminescence of N-polar GaN/InGaIn multi-quantum disk amber light emitting diodes. Journal of Applied Physics, 2018, 123, .	2.5	20

#	ARTICLE	IF	CITATIONS
19	Nanomembrane-Based, Thermal-Transport Biosensor for Living Cells. <i>Small</i> , 2017, 13, 1603080.	10.0	19
20	Quantified hole concentration in AlGaIn nanowires for high-performance ultraviolet emitters. <i>Nanoscale</i> , 2018, 10, 15980-15988.	5.6	17
21	Direct Growth of III-Nitride Nanowire-Based Yellow Light-Emitting Diode on Amorphous Quartz Using Thin Ti Interlayer. <i>Nanoscale Research Letters</i> , 2018, 13, 41.	5.7	17
22	Enhancing the Light-Extraction Efficiency of an AlGaIn Nanowire Ultraviolet Light-Emitting Diode by Using Nitride/Air Distributed Bragg Reflector Nanogratings. <i>IEEE Photonics Journal</i> , 2017, 9, 1-8.	2.0	15
23	Bandgap measurements and the peculiar splitting of E2H phonon modes of In <sub>x</sub> Al <sub>1-x</sub> N nanowires grown by plasma assisted molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2016, 120, .	2.5	14
24	On the optical and microstrain analysis of graded InGaIn/GaN MQWs based on plasma assisted molecular beam epitaxy. <i>Optical Materials Express</i> , 2016, 6, 2052.	3.0	13
25	Thermodynamic photoinduced disorder in AlGaIn nanowires. <i>AIP Advances</i> , 2017, 7, .	1.3	12
26	Wireless optical transmission of 450 nm, 3.2 Gbit/s 16-QAM-OFDM signals over 6.6 m underwater channel. , 2016, , .		11
27	Diode junction temperature in ultraviolet AlGaIn quantum-disks-in-nanowires. <i>Journal of Applied Physics</i> , 2018, 124, 015702.	2.5	11
28	Ultraviolet-A LED Based on Quantum-Disks-In-AlGaIn-Nanowires Optimization and Device Reliability. <i>IEEE Photonics Journal</i> , 2018, 10, 1-11.	2.0	8
29	Synthesis of In <sub>0.1</sub> Ga <sub>0.9</sub> N/GaN structures grown by MOCVD and MBE for high speed optoelectronics. <i>MRS Advances</i> , 2016, 1, 1735-1742.	0.9	7
30	Enhancing Carrier Injection Using Graded Superlattice Electron Blocking Layer for UVB Light-Emitting Diodes. <i>IEEE Photonics Journal</i> , 2014, 6, 1-12.	2.0	5
31	Distributed feedback lasers using surface gratings in Bragg waveguides. <i>Optics Letters</i> , 2021, 46, 3689.	3.3	5
32	Time-Energy Quantum Uncertainty: Quantifying the Effectiveness of Surface Defect Passivation Protocols for Low-Dimensional Semiconductors. <i>ACS Applied Electronic Materials</i> , 2020, 2, 409-418.	4.3	4
33	Passively Mode-Locked Bragg Lasers With 64 GHz Sub-300 fs Pulses at 785 nm. <i>IEEE Photonics Technology Letters</i> , 2020, 32, 1135-1138.	2.5	4
34	Single-mode Bragg ring laser diodes. <i>Optics Letters</i> , 2020, 45, 2490.	3.3	4
35	Enhancement of Hole Confinement by Monolayer Insertion in Asymmetric Quantum-Barrier UVB Light Emitting Diodes. <i>IEEE Photonics Journal</i> , 2014, 6, 1-9.	2.0	3
36	Health-friendly high-quality white light using violet-green-red laser and InGaIn nanowires-based true yellow nanowires light-emitting diodes. , 2017, , .		3

#	ARTICLE	IF	CITATIONS
37	Spatially resolved investigation of competing nanocluster emission in quantum-disks-in-nanowires structure characterized by nanoscale cathodoluminescence. Journal of Nanophotonics, 2017, 11, 026015.	1.0	3
38	Functional integrity and stable high-temperature operation of planarized ultraviolet-A Al <sub>x</sub> Ga <sub>1-x</sub> N/Al <sub>y</sub> Ga <sub>1-y</sub> N multiple-quantum-disk nanowire LEDs with charge-conduction promoting interlayer. , 2019, , .		3
39	Red to Near-Infrared Emission from InGaN/GaN Quantum-Disks-in-Nanowires LED. , 2014, , .		2
40	The formation of hexagonal-shaped InGaN-nanodisk on GaN-nanowire observed in plasma source molecular beam epitaxy. , 2014, , .		1
41	Ultraviolet-A LED Based on Quantum-Disks-in-AlGaIn-Nanowires Optimization and Device Reliability. , 2018, , .		1
42	Ti/TaN Bilayer for Efficient Injection and Reliable AlGaIn Nanowires LEDs. , 2018, , .		1
43	Broadband back grating design for thin film solar cells. , 2013, , .		0
44	Optical Gain and Absorption of 420 nm InGaIn-based Laser Diodes Grown on m-Plane GaN Substrate. , 2014, , .		0
45	Extending quantum efficiency roll-over threshold with compositionally graded InGaIn/GaN LED. , 2014, , .		0
46	Enhancing carrier injection in the active region of a 280nm emission wavelength LED using graded hole and electron blocking layers. Proceedings of SPIE, 2014, , .	0.8	0
47	Increasing wavefunction overlap of carriers in an asymmetrically graded quantum well with polarization-effect-band-engineering.. , 2013, , .		0
48	Direct Growth of High-Power InGaIn/GaN Quantum-Disks-in-Nanowires Red Light-Emitting Diodes on Polycrystalline Molybdenum Substrates. , 2016, , .		0
49	High-performance InGaIn/GaN Quantum-Disks-in-Nanowires Light-emitters for Monolithic Metal-Optoelectronics. , 2016, , .		0
50	A Yellow Emitting InGaIn/GaN Nanowires-based Light Emitting Diode Grown on Scalable Quartz Substrate. , 2017, , .		0
51	Evolution of Junction Temperature and Heating Effects in UV AlGaIn Nanowires LEDs. , 2018, , .		0