

# Ahmad Shuhaimi

## List of Publications by Year in descending order

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100  
papers

1,167  
citations

535685

17  
h-index

488211

31  
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102  
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102  
docs citations

102  
times ranked

1628  
citing authors

#	ARTICLE	IF	CITATIONS
1	Magnesium doped semipolar (11 $\bar{2}2$ ) p-type gallium nitride: Impact of dopant concentration variants towards grain size distributions and crystalline quality. <i>Thin Solid Films</i> , 2022, 741, 139003.	0.8	3
2	Effect of Flux Rate Variation at Fixed V/III Ratio on Semi-Polar (112 $\bar{2}$ ) GaN: Crystal Quality and Surface Morphology Study. <i>Crystals</i> , 2022, 12, 247.	1.0	2
3	Non-Polar Gallium Nitride for Photodetection Applications: A Systematic Review. <i>Coatings</i> , 2022, 12, 275.	1.2	13
4	Improved performance of InGaN/GaN LED by optimizing the properties of the bulk and interface of ITO on p-GaN. <i>Applied Surface Science</i> , 2021, 540, 148406.	3.1	5
5	The effect of Multi Quantum Well growth regime transition on MQW/p-GaN structure and light emitting diode (LED) performance. <i>Materials Science in Semiconductor Processing</i> , 2021, 121, 105431.	1.9	5
6	Disilane doping of semi-polar (11-22) n-GaN: The impact of terrace-like evolution toward the enhancement of the electrical properties. <i>Thin Solid Films</i> , 2021, 720, 138489.	0.8	1
7	The crystallographic quality and band-edge transition of as-deposited PLE AlN films via metal organic chemical vapor deposition. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 3211-3221.	1.1	2
8	Diminishing the Induced Strain and Oxygen Incorporation on Aluminium Nitride Films Deposited Using Pulsed Atomic-Layer Epitaxy Techniques at Standard Pressure MOCVD. <i>Journal of Electronic Materials</i> , 2021, 50, 2313-2322.	1.0	5
9	Impact of crystallinity towards the performance of semi-polar (11 $\bar{2}2$ ) GaN UV photodetector. <i>Materials Letters</i> , 2021, 286, 129244.	1.3	9
10	Effect of indium pre-flow on wavelength shift and crystal structure of deep green light emitting diodes. <i>Optical Materials Express</i> , 2021, 11, 926.	1.6	4
11	Impact of sandwiched strain periodic multilayer AlN/GaN on strain and crystalline quality of a-plane GaN. <i>Scientific Reports</i> , 2021, 11, 9724.	1.6	3
12	Enhanced indium adsorption and surface evolution of semi-polar (11 $\bar{2}2$ ) LED via a strain periodic alternating superlattice (SPAS-L). <i>Materials Today Communications</i> , 2021, 27, 102441.	0.9	2
13	Structural and mechanical properties of a-axis AlN thin films growth using reactive RF magnetron sputtering plasma. <i>Microelectronics International</i> , 2021, 38, 99-104.	0.4	0
14	Effect of nucleation layer thickness on reducing dislocation density in AlN layer for AlGaIn-based UVC LED. <i>Microelectronics International</i> , 2021, 38, 113-118.	0.4	1
15	The optimization of n-type and p-type m-plane GaN grown on m-plane sapphire substrate by metal organic chemical vapor deposition. <i>Materials Science in Semiconductor Processing</i> , 2021, 131, 105836.	1.9	10
16	Improvement of c-axis (002) AlN crystal plane by temperature assisted HiPIMS technique. <i>Microelectronics International</i> , 2021, 38, 86-92.	0.4	1
17	Luminescence and Crystalline Properties of InGaIn-based LED on Si Substrate with AlN/GaN Superlattice Structure. <i>Journal of Physical Science</i> , 2021, 32, 1-11.	0.5	1
18	Electronic surface, optical and electrical properties of p $\bar{2}2$ GaN activated via in-situ MOCVD and ex-situ thermal annealing in InGaIn/GaN LED. <i>Materials Science in Semiconductor Processing</i> , 2020, 106, 104757.	1.9	0

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19	Positioning of periodic AlN/GaN multilayers: Effect on crystalline quality of a-plane GaN. <i>Materials Science in Semiconductor Processing</i> , 2020, 105, 104700.	1.9	15
20	Poly(3-hexylthiophene-2,5-diyl) regioregular (P3HT) thin film as saturable absorber for passively Q-switched and mode-locked Erbium-doped fiber laser. <i>Optical Fiber Technology</i> , 2020, 54, 102073.	1.4	17
21	Indium tin oxide coated D-shape fiber as saturable absorber for passively Q-switched erbium-doped fiber laser. <i>Optics and Laser Technology</i> , 2020, 124, 105998.	2.2	23
22	Alq 3 saturable absorber for generating Q-switched pulses in erbium-doped fiber laser. <i>Microwave and Optical Technology Letters</i> , 2020, 62, 1028-1032.	0.9	1
23	Influence of post-ammonia annealing temperature on e-beam evaporation deposited GaN layer on patterned sapphire substrate. <i>Superlattices and Microstructures</i> , 2020, 148, 106722.	1.4	1
24	Indium Tin Oxide Coated D-Shape Fiber as a Saturable Absorber for Generating a Dark Pulse Mode-Locked Laser*. <i>Chinese Physics Letters</i> , 2020, 37, 054202.	1.3	24
25	MEH-PPV organic material as saturable absorber for Q-switching and mode-locking applications. <i>Journal of Modern Optics</i> , 2020, 67, 746-753.	0.6	5
26	Growth of semi-polar $\langle 11\bar{1}2 \rangle$ GaN on m-plane sapphire via in-situ ammonia treatment. <i>Vacuum</i> , 2020, 174, 109208.	1.6	9
27	In-Situ Multiple Ammonia Treatment (I-SMAT) method. <i>Vacuum</i> , 2020, 174, 109208.	1.4	15
28	Mode-locked erbium-doped fiber laser via evanescent field interaction with indium tin oxide. <i>Optical Fiber Technology</i> , 2020, 55, 102124.	1.4	15
28	Crystal quality and surface structure tuning of semi-polar $\langle 11\bar{1}2 \rangle$ GaN on m-plane sapphire via in-situ multiple ammonia treatment. <i>Thin Solid Films</i> , 2020, 697, 137817.	0.8	12
29	Agglomeration enhancement of AlN surface diffusion fluxes on a $(0001)$ -sapphire substrate grown by pulsed atomic-layer epitaxy techniques via MOCVD. <i>CrystEngComm</i> , 2020, 22, 3309-3321.	1.3	7
30	Anodization voltage effect on physical properties of anodic TiO <sub>2</sub> nanotube arrays film. <i>AIP Conference Proceedings</i> , 2020, , .	0.3	0
31	Impact of a Strained Periodic Multilayer on the Surface and Crystal Quality of a Semipolar $\langle 11\bar{1}2 \rangle$ GaN Template. <i>Crystal Growth and Design</i> , 2019, 19, 6092-6099.	1.4	9
32	Effects of pulse cycle number on the quality of pulsed atomic-layer epitaxy AlN films grown via metal organic chemical vapor deposition. <i>Japanese Journal of Applied Physics</i> , 2019, 58, SC1037.	0.8	8
33	Surface and optical characteristics of polycrystalline GaN layer with different pores profile of porous GaAs/GaAs substrate. <i>Materials Research Express</i> , 2019, 6, 085906.	0.8	0
34	Solution-Processable Vertical Organic Light-Emitting Transistors (VOLETs) with Directly Deposited Silver Nanowires Intermediate Source Electrode. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 6995-7003.	0.9	6
35	Fabrication of In <sub>x</sub> Ga <sub>1-x</sub> N/GaN Multi-Quantum well Structure for Green Light Emitting Diode on Patterned Sapphire Substrate by Metal Organic Chemical Vapour Deposition. <i>Solid State Phenomena</i> , 2019, 290, 147-152.	0.3	1
36	In-situ tuning of Sn doped In <sub>2</sub> O <sub>3</sub> (ITO) films properties by controlling deposition Argon/Oxygen flow. <i>Applied Surface Science</i> , 2019, 479, 1220-1225.	3.1	17

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37	Ammonia flux tailoring on the quality of AlN epilayers grown by pulsed atomic-layer epitaxy techniques on (0 0 0 1)-oriented sapphire substrates via MOCVD. CrystEngComm, 2019, 21, 2009-2017.	1.3	21
38	Improving Material Quality of Polycrystalline GaN by Manipulating the Etching Time of a Porous AlN Template. Journal of Electronic Materials, 2019, 48, 3547-3553.	1.0	1
39	Effect of the Bias Voltage on the Polycrystalline a-axis Oriented AlN Thin Films by RF Sputtering. , 2019, , .		0
40	Enhancement of optical transmittance and electrical resistivity of post-annealed ITO thin films RF sputtered on Si. Applied Surface Science, 2018, 443, 544-547.	3.1	80
41	Thermally Resistive Electrospun Composite Membranes for Low-Grade Thermal Energy Harvesting. Macromolecular Materials and Engineering, 2018, 303, 1700482.	1.7	6
42	Effect of thermal interaction between bulk GaN substrates and corral sapphire on blue light emission InGaN/GaN multi-quantum wells by MOCVD. Superlattices and Microstructures, 2018, 119, 157-165.	1.4	3
43	Effect of low NH <sub>3</sub> flux towards high quality semi-polar (11-22) GaN on m-plane sapphire via MOCVD. Superlattices and Microstructures, 2018, 117, 207-214.	1.4	20
44	Metal organic chemical vapor deposition of m-plane GaN epi-layer using a three-step approach towards enhanced surface morphology. Thin Solid Films, 2018, 667, 48-54.	0.8	5
45	Standard pressure deposition of crack-free AlN buffer layer grown on c-plane sapphire by PALE technique via MOCVD. Superlattices and Microstructures, 2018, 120, 319-326.	1.4	10
46	Embedded AlN/GaN multi-layer for enhanced crystal quality and surface morphology of semi-polar (11-22) GaN on m-plane sapphire. Materials Science in Semiconductor Processing, 2018, 86, 1-7.	1.9	14
47	Effect of working power and pressure on plasma properties during the deposition of TiN films in reactive magnetron sputtering plasma measured using Langmuir probe measurement. Journal of Physics: Conference Series, 2018, 995, 012068.	0.3	1
48	Observation of saturation transfer characteristics in solution processed vertical organic field-effect transistors (VOFETs) with high leakage current. Current Applied Physics, 2018, 18, 1415-1421.	1.1	12
49	Correlation between indium content in monolithic InGaN/GaN multi quantum well structures on photoelectrochemical activity for water splitting. Journal of Alloys and Compounds, 2017, 706, 629-636.	2.8	16
50	Optimization of poly(vinylidene fluoride) membranes for enhanced power density of thermally driven electrochemical cells. Journal of Materials Science, 2017, 52, 10353-10363.	1.7	11
51	Fabrications of Nanocomposite Gold-Polymer Metamaterials Consisting of Periodic Microcavities with Tunable Optical Properties. Optik, 2017, 150, 54-61.	1.4	1
52	Development of atmospheric pressure plasma needle jet for sterilization applications. AIP Conference Proceedings, 2017, , .	0.3	2
53	Nitrogen emission in reactive magnetron sputtering plasmas during the deposition of titanium nitride thin film. AIP Conference Proceedings, 2017, , .	0.3	0
54	Synthesis and characterization of InN nanocrystals on glass substrate by plasma assisted reactive evaporation. AIP Conference Proceedings, 2017, , .	0.3	0

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55	Fabrication of nanostructured Al-doped ZnO thin film for methane sensing applications. AIP Conference Proceedings, 2016, , .	0.3	0
56	Effect of nitridation surface treatment on silicon (1 1 1) substrate for the growth of high quality single-crystalline GaN hetero-epitaxy layer by MOCVD. Applied Surface Science, 2016, 362, 572-576.	3.1	25
57	High figure of merit of the post-annealed Ti/Al/ITO transparent conductive contacts sputter deposited on n-GaN. Journal of Alloys and Compounds, 2016, 681, 186-190.	2.8	9
58	First-principles calculation of structural, optoelectronic properties of the cubic Al Ga In1 N quaternary alloys matching on AlN substrate, within modified Becke&#x2013;Johnson (mBJ) exchange potential. Optik, 2016, 127, 11577-11587.	1.4	5
59	High Thermal Gradient in Thermo-electrochemical Cells by Insertion of a Poly(Vinylidene Fluoride) Membrane. Scientific Reports, 2016, 6, 29328.	1.6	33
60	Effect of Sn dopant concentration on structural and electrical properties of ZnO nanostructures based methane gas sensor. , 2015, , .		0
61	Structural ordering, morphology and optical properties of amorphous Al In1&#x2013;N thin films grown by plasma-assisted dual source reactive evaporation. Journal of Alloys and Compounds, 2015, 632, 741-747.	2.8	17
62	Investigation of the electrochemical behavior of indium nitride thin films by plasma-assisted reactive evaporation. RSC Advances, 2015, 5, 17325-17335.	1.7	27
63	One-pot sol&#x2013;gel synthesis of reduced graphene oxide uniformly decorated zinc oxide nanoparticles in starch environment for highly efficient photodegradation of Methylene Blue. RSC Advances, 2015, 5, 21888-21896.	1.7	116
64	Effect of using two-step thermal annealing with different ambient gas on Mg activation and crystalline quality in GaN. Superlattices and Microstructures, 2015, 82, 592-598.	1.4	8
65	Crystalline quality assessment, photocurrent response and optical properties of reduced graphene oxide uniformly decorated zinc oxide nanoparticles based on the graphene oxide concentration. RSC Advances, 2015, 5, 53117-53128.	1.7	40
66	Modeling and simulation of metal organic halide vapor phase epitaxy (MOVPE) growth chamber. Microsystem Technologies, 2015, 21, 309-318.	1.2	0
67	Nanocolumnar zinc oxide as a transparent conductive oxide film for a blue InGaN-based light emitting diode. Ceramics International, 2015, 41, 913-920.	2.3	9
68	Improved optoelectronics properties of ITO-based transparent conductive electrodes with the insertion of Ag/Ni under-layer. Applied Surface Science, 2014, 315, 387-391.	3.1	12
69	Plasma-assisted hot filament chemical vapor deposition of AlN thin films on ZnO buffer layer: toward highly c-axis-oriented, uniform, insulative films. Applied Physics A: Materials Science and Processing, 2014, 117, 2217-2224.	1.1	24
70	Effect of Substrate Temperature on Structural and Morphological Properties of Indium Tin Oxide Nanocolumns Using RF Magnetron Sputtering. Advanced Materials Research, 2014, 895, 12-16.	0.3	1
71	Structural and Optical Properties of Nickel (Ni)/indium Tin Oxide (ITO) Thin-Films Deposited by RF Magnetron Sputtering. Advanced Materials Research, 2014, 895, 181-185.	0.3	1
72	The effect of sputtering pressure on structural, optical and electrical properties of indium tin oxide nanocolumns prepared by radio frequency (RF) magnetron sputtering. Superlattices and Microstructures, 2014, 72, 140-147.	1.4	15

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73	Synthesis and characterization of ZnO NPs/reduced graphene oxide nanocomposite prepared in gelatin medium as highly efficient photo-degradation of MB. <i>Ceramics International</i> , 2014, 40, 10217-10221.	2.3	131
74	Effects of graphene oxide concentration on optical properties of ZnO/RGO nanocomposites and their application to photocurrent generation. <i>Journal of Applied Physics</i> , 2014, 116, .	1.1	132
75	Numerical estimation of self-sputtering effect in ionized physical vapor deposition system. , 2014, , .		0
76	Effects of Growth Temperature on the Structural Properties of Zinc Oxide Nanograins Deposited by RF Magnetron Sputtering. <i>Advanced Materials Research</i> , 2014, 895, 500-504.	0.3	0
77	Nanostructured Al-doped ZnO-based gas sensor prepared using sol-gel spin-coating method. , 2014, , .		3
78	Structural, optical and electrical characterization of ITO, ITO/Ag and ITO/Ni transparent conductive electrodes. <i>Applied Surface Science</i> , 2014, 288, 599-603.	3.1	33
79	Effect of annealing on structural, optical, and electrical properties of nickel (Ni)/indium tin oxide (ITO) nanostructures prepared by RF magnetron sputtering. <i>Superlattices and Microstructures</i> , 2014, 70, 82-90.	1.4	22
80	InGaN-based multi-quantum well light-emitting diode structure with the insertion of superlattices under-layer. <i>Superlattices and Microstructures</i> , 2013, 60, 201-207.	1.4	4
81	Study of Annealed Nickel (Ni)/Indium Tin Oxide (ITO) Nanostructures Prepared by RF Magnetron Sputtering. <i>Advanced Materials Research</i> , 2013, 832, 695-699.	0.3	3
82	Effects of Pressure Dependence on Nanocolumnar Zinc Oxide Deposited by RF Magnetron Sputtering. <i>Advanced Materials Research</i> , 2013, 832, 787-791.	0.3	3
83	Influence of Substrate Temperature on Morphological and Electrical Properties of Indium Tin Oxide Nanocolumns Prepared by RF Magnetron Sputtering. <i>Advanced Materials Research</i> , 2013, 832, 281-285.	0.3	0
84	A Study on the Seebeck Effect of 3,4,9,10-Perylenetetracarboxylic Dianhydride (PTCDA) as a Novel N-Type Material in a Thermoelectric Device. <i>Advanced Materials Research</i> , 2013, 667, 165-171.	0.3	0
85	Influence of RF Magnetron Sputtering Pressure on the Structural, Optical, and Morphological Properties of Indium Tin Oxide Nanocolumns. <i>Advanced Materials Research</i> , 2013, 832, 276-280.	0.3	0
86	Effect of Annealing on Surface of Nickel (Ni)/Indium Tin Oxide (ITO) Nanostructures Measured by Atomic Force Microscopy (AFM). <i>Advanced Materials Research</i> , 2013, 832, 51-55.	0.3	0
87	PEDOT:PSS Thin Film as Transparent Electrode in ITO-Free Organic Solar Cell. <i>Advanced Materials Research</i> , 2012, 501, 252-256.	0.3	5
88	Structural properties of InGaN-based light-emitting diode epitaxial growth on Si (111) with AlN/InGaN buffer layer. , 2012, , .		0
89	Electronic properties and electrical characteristics of modified PEDOT:PSS as a buffer layer in organic solar cell. , 2012, , .		0
90	InGaN-based blue LED grown on Si(111) substrate. , 2011, , .		0

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91	Effect of AlGaIn-GaN Strained-Layer Superlattices Underlayer to InGaN-based Multi-Quantum Wells Grown on Si(111) Substrate by MOCVD. , 2011, , .		1
92	Effect of Al <sub>0.06</sub> Ga <sub>0.94</sub> N/GaN Strained-Layer Superlattices Cladding Underlayer to InGaN-Based Multi-Quantum Well Grown on Si(111) Substrate with AlN/GaN Intermediate Layer. Japanese Journal of Applied Physics, 2010, 49, 021002.	0.8	6
93	High performance InGaN LEDs on Si (100) substrates grown by MOCVD. Journal Physics D: Applied Physics, 2010, 43, 354008.	1.3	25
94	Growth of InGaN-based laser diode structure on silicon (111) substrate. Journal of Physics: Conference Series, 2009, 152, 012007.	0.3	6
95	Electrical and Optical Characterization of Mg Doping in GaN. Advanced Materials Research, 0, 620, 453-457.	0.3	1
96	Compositional and Structural Characterization of Heterostructure InGaN-Based Light-Emitting Diode by High Resolution X-Ray Diffraction. Advanced Materials Research, 0, 620, 22-27.	0.3	4
97	Effects of Oxygen Gas Composition on Nanocolumnar Zinc Oxide Properties Deposited by RF Magnetron Sputtering. Advanced Materials Research, 0, 832, 783-786.	0.3	0
98	Characterization of ITO/Ag and ITO/Ni Bi-Layer Transparent Conductive Electrodes. Advanced Materials Research, 0, 1024, 75-78.	0.3	1
99	Post-Annealing Effects on ITO Thin Films RF Sputtered at Different Thicknesses on Si and Glass. Advanced Materials Research, 0, 925, 411-415.	0.3	3
100	Structural and Optical Properties of Nickel-Doped Zinc Oxide Thin Film on Nickel Seed Layer Deposited by RF Magnetron Sputtering Technique. Advanced Materials Research, 0, 895, 3-7.	0.3	2