

Ian T Ferguson

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11721831/publications.pdf>

Version: 2024-02-01

67
papers

709
citations

567281

15
h-index

580821

25
g-index

68
all docs

68
docs citations

68
times ranked

870
citing authors

#	ARTICLE	IF	CITATIONS
1	Review "The Current and Emerging Applications of the III-Nitrides. ECS Journal of Solid State Science and Technology, 2017, 6, Q149-Q156.	1.8	72
2	Design and Realization of Wide-Band-Gap (~ 2.67 eV) InGaN p-n Junction Solar Cell. IEEE Electron Device Letters, 2010, 31, 32-34.	3.9	65
3	Thermopower Study of GaN-Based Materials for Next-Generation Thermoelectric Devices and Applications. Journal of Electronic Materials, 2011, 40, 513-517.	2.2	44
4	Composition and temperature dependent optical properties of $\text{Al}_x\text{Ga}_{1-x}\text{N}$ alloy by spectroscopic ellipsometry. Applied Surface Science, 2017, 421, 389-396.	6.1	36
5	The effect of silicon doping in the selected barrier on the electroluminescence of InGa N^{Al} -GaN multiquantum well light emitting diode. Applied Physics Letters, 2007, 90, 031102.	3.3	33
6	Compositional instability in strained InGaN epitaxial layers induced by kinetic effects. Journal of Applied Physics, 2011, 110, .	2.5	32
7	The structural properties of InGaN alloys and the interdependence on the thermoelectric behavior. AIP Advances, 2016, 6, .	1.3	32
8	Correlation of the structural and ferromagnetic properties of $\text{Ga}_{1-x}\text{Mn}_x\text{N}$ grown by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2006, 287, 591-595.	1.5	28
9	Raman scattering study on anisotropic property of wurtzite GaN. Journal of Applied Physics, 2009, 105, 036102.	2.5	28
10	Comparative spectroscopic studies of MOCVD grown AlN films on Al_2O_3 and 6H-SiC . Journal of Alloys and Compounds, 2021, 857, 157487.	5.5	28
11	Strain-stress study of $\text{Al}_x\text{Ga}_{1-x}\text{N}/\text{AlN}$ heterostructures on c-plane sapphire and related optical properties. Scientific Reports, 2019, 9, 10172.	3.3	24
12	InGaN-light emitting diode with high density truncated hexagonal pyramid shaped p-GaN hillocks on the emission surface. Applied Physics Letters, 2006, 89, 251106.	3.3	23
13	Reflective second harmonic generation from ZnO thin films: A study on the Zn-O bonding. Applied Physics Letters, 2007, 90, 161904.	3.3	23
14	Electrical and magnetic properties of $\text{Ga}_{1-x}\text{Gd}_x\text{N}$ grown by metal organic chemical vapor deposition. Journal of Applied Physics, 2011, 110, .	2.5	20
15	Alloying, co-doping, and annealing effects on the magnetic and optical properties of MOCVD-grown $\text{Ga}_{1-x}\text{Mn}_x\text{N}$. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2006, 126, 230-235.	3.5	16
16	Field-effect passivation of metal/ <i>n</i> -GaAs Schottky junction solar cells using atomic layer deposited $\text{Al}_2\text{O}_3/\text{ZnO}$ ultrathin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	2.1	16
17	Metal organic chemical vapor deposition of crack-free GaN-based light emitting diodes on Si (111) using a thin Al_2O_3 interlayer. Applied Physics Letters, 2009, 94, 222105.	3.3	15
18	Comparison of neutron conversion layers for GaN^{Gd} -based scintillators. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 957-959.	0.8	15

#	ARTICLE	IF	CITATIONS
19	Photoluminescence characteristics of InAs self-assembled quantum dots in InGaAs ^x -GaAs quantum well. Journal of Applied Physics, 2007, 101, 126101.	2.5	14
20	A nucleation study of group III-nitride multifunctional nanostructures. Journal of Crystal Growth, 2006, 287, 596-600.	1.5	11
21	Effects of annealing temperature, thickness and substrates on optical properties of m-plane ZnO films studied by photoluminescence and temperature dependent ellipsometry. Journal of Alloys and Compounds, 2020, 848, 156631.	5.5	11
22	Structural and optical properties of (Zn,Mn)O thin films prepared by atomic layer deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, 042408.	2.1	11
23	Mechanism for THz generation from InN micropylramid emitters. Journal of Applied Physics, 2011, 109, 093111.	2.5	10
24	Neutron detection performance of gallium nitride based semiconductors. Scientific Reports, 2019, 9, 17551.	3.3	10
25	Effects of thickness and interlayer on optical properties of AlN films at room and high temperature. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	9
26	Spatial analysis of ZnO thin films prepared by vertically aligned MOCVD. , 2014, , .		7
27	Characterization of undoped and Si-doped bulk GaN fabricated by hydride vapor phase epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 573-576.	0.8	6
28	Structural and optical analyses of Al _x Ga _{1-x} In thin films grown by metal organic chemical vapor deposition. Japanese Journal of Applied Physics, 2015, 54, 02BA05.	1.5	6
29	Growth of patterned InN micropylramids by metalorganic chemical vapor deposition. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1895-1899.	1.8	4
30	Optical absorption dependence on composition and thickness of In _x Ga _{1-x} N (0.05$\leq x \leq 0.22$) grown on GaN/sapphire. Thin Solid Films, 2012, 520, 6807-6812.	1.8	4
31	Room Temperature Ferromagnetism in Gadolinium-doped Gallium Nitride. MRS Advances, 2018, 3, 159-164.	0.9	4
32	Surface and optical properties of indium-rich InGaN layers grown on sapphire by migration-enhanced plasma assisted metal organic chemical vapor deposition. Materials Research Express, 2019, 6, 016407.	1.6	4
33	Enhancement in electrical and optical properties of field-effect passivated GaN blue light emitting diodes. Semiconductor Science and Technology, 2021, 36, 115018.	2.0	4
34	InGaN Light-Emitting Diode With Quasi-Quantum-Dot-Shaped Active Layer Using SiCN Interfacial Layer. IEEE Photonics Technology Letters, 2007, 19, 24-26.	2.5	3
35	Growth and magnetization study of transition metal doped GaN nanostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1740-1742.	0.8	3
36	Utilizing Polarization Induced Band Bending for InGaN Solar Cell Design. Materials Research Society Symposia Proceedings, 2009, 1167, 4.	0.1	3

#	ARTICLE	IF	CITATIONS
37	Thermoelectric Properties of Undoped and Si-doped Bulk GaN. Materials Research Society Symposia Proceedings, 2013, 1558, 1.	0.1	3
38	Thermoelectric Properties of ZnO Thin Films Grown by Metal-Organic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 2015, 1805, 1.	0.1	3
39	MOCVD growth and characterization of 100-mm diameter (Ga _{1-x} Al _x) _{0.5} In _{0.5} P/GaAs epitaxial materials for LED applications. , 1998, 3279, 161.		2
40	Metal Organic Chemical Vapor Deposition Growth of GaN and GaMnN Multifunctional Nanostructures. Materials Research Society Symposia Proceedings, 2005, 901, 1.	0.1	2
41	Transition Metal-Doped ZnO: A Comparison of Optical, Magnetic, and Structural Behavior of Bulk and Thin Films. Materials Research Society Symposia Proceedings, 2006, 957, 1.	0.1	2
42	GaN-Based heterojunction structures for ultraviolet/infrared dual-band detection. , 2009, , .		2
43	Ga _{1-x} Gd _x N-Based Spin Polarized Light Emitting Diode. Materials Research Society Symposia Proceedings, 2011, 1290, 1.	0.1	2
44	GaN-Based Neutron Scintillators with a 6LiF Conversion Layer. Materials Research Society Symposia Proceedings, 2012, 1396, .	0.1	2
45	Investigation of the Optical Properties of InSb Thin Films Grown on GaAs by Temperature-Dependent Spectroscopic Ellipsometry. Journal of Applied Spectroscopy, 2019, 86, 276-282.	0.7	2
46	XPS characterization of Al ₂ O ₃ /ZnO ultrathin films grown by atomic layer deposition. Surface Science Spectra, 2020, 27, 024012.	1.3	2
47	Epitaxial film growth and characterization. Thin Films, 2001, 28, 1-69.	0.1	1
48	Optical and Structural Investigations on Mn-Ion States in MOCVD-grown Ga _{1-x} Mn _x N. Materials Research Society Symposia Proceedings, 2004, 831, 61.	0.1	1
49	A Nucleation Study of GaN Multifunctional Nanostructures. Materials Research Society Symposia Proceedings, 2004, 831, 254.	0.1	1
50	Impact of Manganese incorporation on the structural and magnetic properties of MOCVD-grown Ga _{1-x} Mn _x N. Materials Research Society Symposia Proceedings, 2004, 831, 708.	0.1	1
51	High quality tin zinc oxide/Ag ohmic contacts for UV flip-chip light-emitting diodes. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2133-2136.	0.8	1
52	THE GROWTH AND CHARACTERIZATION OF ROOM TEMPERATURE FERROMAGNETIC WIDEBAND-GAP MATERIALS FOR SPINTRONIC APPLICATIONS. International Journal of High Speed Electronics and Systems, 2006, 16, 515-543.	0.7	1
53	NITRIDE BASED SCHOTTKY-BARRIER PHOTOVOLTAIC DEVICES. Materials Research Society Symposia Proceedings, 2007, 1040, 1.	0.1	1
54	Seebeck and Spin Seebeck effect in Gd-doped GaN thin films for Thermoelectric Devices and Applications. Materials Research Society Symposia Proceedings, 2011, 1329, 1.	0.1	1

#	ARTICLE	IF	CITATIONS
55	X-ray absorption fine structure of ZnO thin film on Si and sapphire grown by MOCVD. , 2016, , .		1
56	Influence of high-temperature AlN intermediate layer on the optical properties of MOCVD grown AlGaIn films. Materials Research Express, 2017, 4, 025903.	1.6	1
57	THE GROWTH AND CHARACTERIZATION OF ROOM TEMPERATURE FERROMAGNETIC WIDEBAND-GAP MATERIALS FOR SPINTRONIC APPLICATIONS. , 2006, , .		1
58	A comparative investigation of the optical properties of polar and semipolar GaN epi-films grown by metalorganic chemical vapor deposition. Semiconductor Science and Technology, 2022, 37, 065021.	2.0	1
59	Optimization of Growth and Activation of Highly Doped p-type GaN for Tunnel Junctions. Materials Research Society Symposia Proceedings, 2004, 831, 132.	0.1	0
60	Development of Dual MQW Region LEDs for General Illumination. Materials Research Society Symposia Proceedings, 2004, 831, 79.	0.1	0
61	Towards a Novel Broadband Spectrally Dynamic Solid State Light Source. Materials Research Society Symposia Proceedings, 2005, 892, 17.	0.1	0
62	Low resistance and highly reflective ohmic contacts top -type GaN using transparent interlayers for flip-chip light emitting diodes. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2207-2210.	0.8	0
63	Comparison of the Incorporation of Various Transition Metals into GaN by MOCVD. Materials Research Society Symposia Proceedings, 2006, 955, 1.	0.1	0
64	Structural and Magnetic Characterization of MOCVD Grown GaMnN and GaFeN Nanostructures. Materials Research Society Symposia Proceedings, 2006, 959, 1.	0.1	0
65	Crystalline Perfection of Epitaxial Structure: Correlations with Composition, Thickness, and Elastic Strain of Epitaxial Layers. Materials Research Society Symposia Proceedings, 2009, 1167, 4.	0.1	0
66	Investigation of Thermoelectric Properties of P-Type GaN Thin Films. Materials Research Society Symposia Proceedings, 2015, 1774, 13-18.	0.1	0
67	Room-temperature thermoelectric properties of GaN thin films grown by metal organic chemical vapor deposition. Wuli Xuebao/Acta Physica Sinica, 2015, 64, 047202.	0.5	0