

Eleftherios Iliopoulos

List of Publications by Year in descending order

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84
papers

1,960
citations

201658

27
h-index

276858

41
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85
all docs

85
docs citations

85
times ranked

2069
citing authors

#	ARTICLE	IF	CITATIONS
1	Scaling of phonon frequencies and electron binding energies with interatomic distances in $\text{In}_x\text{Ga}_{1-x}\text{N}$. Journal of Applied Physics, 2021, 130, 205706.	2.5	1
2	Tuning carrier localization in In-rich InGaN alloys: Correlations between growth kinetics and optical properties. Journal of Applied Physics, 2020, 127, .	2.5	7
3	Transparent p-type NiO:Al thin films as room temperature hydrogen and methane gas sensors. Materials Science in Semiconductor Processing, 2020, 109, 104922.	4.0	24
4	Polarization-Engineered InGaN/GaN Solar Cells: Realistic Expectations for Single Heterojunctions. IEEE Journal of Photovoltaics, 2018, 8, 118-124.	2.5	18
5	Optical properties of InGaN thin films in the entire composition range. Journal of Applied Physics, 2018, 123, .	2.5	37
6	Evolution of stratification in high-alloy content InGaN epilayers grown on (0001) AlN. Materials Science and Technology, 2018, 34, 1565-1574.	1.6	6
7	Effect of rapid thermal annealing on polycrystalline InGaN thin films deposited on fused silica substrates. Thin Solid Films, 2016, 611, 46-51.	1.8	10
8	Simulation of the EXAFS and Raman spectra of $\text{In}_x\text{Ga}_{1-x}\text{N}$ utilizing the equation of motion routine of FEFF8.. Journal of Physics: Conference Series, 2016, 712, 012126.	0.4	3
9	Understanding the effects of Si (111) nitridation on the spontaneous growth and properties of GaN nanowires. Journal of Crystal Growth, 2016, 442, 8-13.	1.5	19
10	Molecular beam epitaxy of thick InGaN(0001) films: Effects of substrate temperature on structural and electronic properties. Journal of Crystal Growth, 2016, 437, 20-25.	1.5	25
11	Förster resonant energy transfer from an inorganic quantum well to a molecular material: Unexplored aspects, losses, and implications to applications. Journal of Chemical Physics, 2015, 143, 214701.	3.0	5
12	Defects, strain relaxation, and compositional grading in high indium content InGaN epilayers grown by molecular beam epitaxy. Journal of Applied Physics, 2015, 118, .	2.5	45
13	Structure and strain variation in InGaN interlayers grown by PAMBE at low substrate temperatures. Physica Status Solidi (B): Basic Research, 2015, 252, 1155-1162.	1.5	4
14	Raman and photoluminescence mapping of $\text{In}_x\text{Ga}_{1-x}\text{N}$ ($x=0.4$) at high pressure: Optical determination of composition and stress. Applied Physics Letters, 2014, 105, .	3.3	3
15	Electronic and interface properties of polyfluorene films on GaN for hybrid optoelectronic applications. Applied Physics Letters, 2013, 102, .	3.3	10
16	All-dielectric GaN microcavity: Strong coupling and lasing at room temperature. Applied Physics Letters, 2013, 102, 101113.	3.3	52
17	GaN quantum-dots integrated in the gate dielectric of metal-oxide-semiconductor structures for charge-storage applications. Applied Physics Letters, 2013, 102, .	3.3	13
18	Quantum dots for memory applications. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1490-1504.	1.8	24

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19	GaN quantum dots as charge storage elements for memory devices. Materials Research Society Symposia Proceedings, 2012, 1430, 125.	0.1	1
20	Determination of the carrier density dependent electron effective mass in InN using infrared and Raman spectra. Physica Status Solidi (B): Basic Research, 2012, 249, 1235-1240.	1.5	6
21	Determination of dislocation densities in InN. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 997-1000.	0.8	0
22	Structural characterization of InN epilayers grown on r-plane sapphire by plasma-assisted MBE. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 534-537.	0.8	4
23	Monolithic integration of nitride-based transistor with Light Emitting Diode for sensing applications. Microelectronic Engineering, 2012, 90, 33-36.	2.4	20
24	Bragg polariton luminescence from a GaN membrane embedded in all dielectric microcavity. Applied Physics Letters, 2011, 98, 221101.	3.3	10
25	Influence of high electron concentration on band gap and effective electron mass of InN. Physica Status Solidi (B): Basic Research, 2011, 248, 1172-1175.	1.5	5
26	Longitudinal polar optical phonons in InN/GaN single and double heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1620-1624.	0.8	4
27	Superconductivity in MBE grown InN. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1637-1640.	0.8	1
28	Comparison of Fe and Si doping of GaN: An EXAFS and Raman study. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 723-726.	3.5	10
29	LP MOCVD growth of InAlN/GaN HEMT heterostructure: comparison of sapphire, bulk SiC and composite SiC/SiC substrates for HEMT device applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 1317-1324.	0.8	6
30	Epitaxial growth, electrical and optical properties of a-plane InN on r-plane sapphire. Journal of Applied Physics, 2010, 107, .	2.5	19
31	Direct immobilization of enzymes in GaN and InN nanocolumns: The urease case study. Applied Physics Letters, 2009, 95, 113701.	3.3	11
32	Mechanism of compositional modulations in epitaxial InAlN films grown by molecular beam epitaxy. Applied Physics Letters, 2009, 95, .	3.3	48
33	Resonantly enhanced selective photochemical etching of GaN. Applied Physics Letters, 2009, 94, 173505.	3.3	21
34	High electron mobility transistors based on the AlN/GaN heterojunction. Microelectronic Engineering, 2009, 86, 1071-1073.	2.4	29
35	Spontaneous growth of III-nitride nanowires on Si by molecular beam epitaxy. Microelectronic Engineering, 2009, 86, 812-815.	2.4	13
36	Effect of AlN interlayers in the structure of GaN-on-Si grown by plasma-assisted MBE. Journal of Crystal Growth, 2009, 311, 2010-2015.	1.5	8

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37	InN films and nanostructures grown on Si (111) by RF-MBE. Journal of Crystal Growth, 2009, 311, 2058-2062.	1.5	22
38	Strain relaxation in AlN/GaN heterostructures grown by molecular beam epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2569-2572.	1.8	10
39	Effect of composition on the bonding environment of In in InAlN and InGaN epilayers. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2593-2597.	1.8	5
40	Selective photochemical etching of GaN films and laser lift-off for microcavity fabrication. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 2509-2512.	1.8	9
41	Electron Microscopy Characterization of a Graded AlN/GaN Multilayer Grown by Plasma-Assisted MBE. Springer Proceedings in Physics, 2008, , 66-68.	0.2	0
42	Bowing of the band gap pressure coefficient in $\text{In}_x\text{Ga}_{1-x}\text{N}$ alloys. Journal of Applied Physics, 2008, 103, 033514.	2.5	53
43	Energy bandgap bowing of InAlN alloys studied by spectroscopic ellipsometry. Applied Physics Letters, 2008, 92, .	3.3	87
44	Surface electronic properties of undoped InAlN alloys. Applied Physics Letters, 2008, 92, 172105.	3.3	17
45	Temporal evolution of effects of ultrafast carrier dynamics in $\text{In}_{0.33}\text{Ga}_{0.67}\text{N}$: above and near the bandgap. Semiconductor Science and Technology, 2007, 22, 158-162.	2.0	5
46	Femtosecond carrier dynamics of $\text{In}_x\text{Ga}_{1-x}\text{N}$ thin films grown on GaN (0001): Effect of carrier-defect scattering. Journal of Applied Physics, 2007, 102, 073104.	2.5	7
47	The effect of nitrogen on the properties of zinc nitride thin films and their conversion into p-ZnO:N films. Thin Solid Films, 2007, 515, 8573-8576.	1.8	31
48	AlGaIn/GaN high electron mobility transistor sensor sensitive to ammonium ions. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 2059-2063.	1.8	29
49	Analysis of biaxial strain in InN(0001) epilayers grown by molecular beam epitaxy. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1996-1999.	1.8	2
50	Growth Optimization of an Electron Confining InN/GaN Quantum Well Heterostructure. Journal of Electronic Materials, 2007, 36, 373-378.	2.2	20
51	Thermal oxidation of n-type ZnN films made by sputtering from a zinc nitride target, and their conversion into p-type films. Superlattices and Microstructures, 2007, 42, 55-61.	3.1	42
52	Biaxial strain and lattice constants of InN (0001) films grown by plasma-assisted molecular beam epitaxy. Applied Physics Letters, 2006, 88, 191918.	3.3	58
53	Energy gaps and bowing parameters of InAlGaIn ternary and quaternary alloys. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1866-1869.	0.8	30
54	InN quantum dots grown on GaN (0001) by molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3983-3987.	0.8	5

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55	InGaN(0001) alloys grown in the entire composition range by plasma assisted molecular beam epitaxy. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006, 203, 102-105.	1.8	46
56	Self-regulating mechanism of InN growth on GaN(0001) by molecular beam epitaxy; from nanostructures to films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006, 203, 1686-1690.	1.8	7
57	Raman and transmission electron microscopy characterization of InN samples grown on GaN/Al ₂ O ₃ by molecular beam epitaxy. <i>Physica Status Solidi (B): Basic Research</i> , 2006, 243, 1588-1593.	1.5	7
58	Properties of Si-doped GaN and AlGaIn/GaN heterostructures grown by RF-MBE on high resistivity Fe-doped GaN. <i>Superlattices and Microstructures</i> , 2006, 40, 313-319.	3.1	10
59	Structural properties of 10Å ¹ / ₄ m thick InN grown on sapphire (0001). <i>Superlattices and Microstructures</i> , 2006, 40, 246-252.	3.1	32
60	Optical emission spectroscopy during fabrication of indium-tin-oxynitride films by RF-sputtering. <i>Applied Surface Science</i> , 2006, 253, 405-408.	6.1	11
61	Ultrafast carrier dynamics in In _x Ga _{1-x} N (0001) epilayers: Effects of high fluence excitation. <i>Applied Physics Letters</i> , 2006, 88, 121128.	3.3	10
62	Active nitrogen species dependence on radiofrequency plasma source operating parameters and their role in GaN growth. <i>Journal of Crystal Growth</i> , 2005, 278, 426-430.	1.5	68
63	Correlation between nucleation, morphology and residual strain of InN grown on Ga-face GaN (0001). <i>Journal of Crystal Growth</i> , 2005, 278, 367-372.	1.5	13
64	Interfacial structure of MBE grown InN on GaN. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2005, 202, 777-780.	1.8	10
65	Atomic simulations and HRTEM observations of a ¹ / ₂ 18 tilt grain boundary in GaN. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2005, 202, 799-803.	1.8	2
66	Response to anions of AlGaIn/GaN high-electron-mobility transistors. <i>Applied Physics Letters</i> , 2005, 87, 253507.	3.3	28
67	Heteroepitaxial growth of In-face InN on GaN (0001) by plasma-assisted molecular-beam epitaxy. <i>Journal of Applied Physics</i> , 2005, 97, 113520.	2.5	88
68	Physical model of InN growth on Ga-face GaN (0001) by molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2005, 86, 133104.	3.3	44
69	Misfit accommodation of compact and columnar InN epilayers grown on Ga-face GaN (0001) by molecular-beam epitaxy. <i>Applied Physics Letters</i> , 2005, 86, 151905.	3.3	38
70	The role of nucleation temperature in In-face InN-on-GaN(0001) growth by plasma-assisted molecular beam epitaxy. <i>Superlattices and Microstructures</i> , 2004, 36, 497-507.	3.1	33
71	Complex ordering in ternary wurtzite nitride alloys. <i>Journal of Physics and Chemistry of Solids</i> , 2003, 64, 1525-1532.	4.0	16
72	Surface degradation of In _x Ga _{1-x} N thin films by sputter-anneal processing: A scanning photoemission microscope study. <i>Journal of Applied Physics</i> , 2003, 94, 5820-5825.	2.5	4

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73	High reflectivity and crack-free AlGaIn/AlN ultraviolet distributed Bragg reflectors. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2002, 20, 1229.	1.6	36
74	Growth kinetics of AlGaIn films by plasma-assisted molecular-beam epitaxy. Applied Physics Letters, 2002, 81, 295-297.	3.3	100
75	Epitaxial growth and self-organized superlattice structures in AlGaIn films grown by plasma assisted molecular beam epitaxy. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 87, 227-236.	3.5	21
76	Growth and device applications of III-nitrides by MBE. Journal of Crystal Growth, 2001, 227-228, 13-20.	1.5	47
77	Chemical ordering in AlGaIn alloys grown by molecular beam epitaxy. Applied Physics Letters, 2001, 78, 463-465.	3.3	62
78	MBE Growth of GaN using NH ₃ and Plasma Sources. Materials Research Society Symposia Proceedings, 2000, 639, 6561.	0.1	1
79	Epitaxial growth of gallium nitride thin films on A-Plane sapphire by molecular beam epitaxy. Journal of Applied Physics, 1999, 85, 3582-3589.	2.5	66
80	Distributed Bragg reflectors based on AlIn/GaN multilayers. Applied Physics Letters, 1999, 74, 1036-1038.	3.3	81
81	Broadening of near-band-gap photoluminescence in n-GaN films. Applied Physics Letters, 1998, 73, 375-377.	3.3	98
82	Optical properties of GaN grown over SiO ₂ on SiC substrates by molecular beam epitaxy. Applied Physics Letters, 1998, 72, 244-245.	3.3	18
83	Phase Separation and Atomic Ordering in AlGaInN Alloys. Materials Research Society Symposia Proceedings, 1997, 482, 277.	0.1	3
84	Near Band Gap Photoluminescence Broadening In n-GaN Films. Materials Research Society Symposia Proceedings, 1997, 482, 690.	0.1	4