Boleslaw Åucznik

List of Publications by Year
in descending order

62	1,473	279798 23	330143 37
papers	citations	h-index	g-index

62	62	62	1249
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Carbon and Manganese in Semi-Insulating Bulk GaN Crystals. Materials, 2022, 15, 2379.	2.9	9
2	Indentation Response of Calcium Aluminoborosilicate Glasses Subjected to Humid Aging and Hot Compression. Materials, 2021, 14, 3450.	2.9	1
3	Structural Analysis of Low Defect Ammonothermally Grown GaN Wafers by Borrmann Effect X-ray Topography. Materials, 2021, 14, 5472.	2.9	17
4	Growth of bulk GaN crystals. Journal of Applied Physics, 2020, 128, .	2.5	76
5	High Pressure Processing of Ion Implanted GaN. Electronics (Switzerland), 2020, 9, 1380.	3.1	36
6	Iron and manganese as dopants used in the crystallization of highly resistive HVPE-GaN on native seeds. Japanese Journal of Applied Physics, 2019, 58, SC1047.	1.5	23
7	Homoepitaxial growth by halide vapor phase epitaxy of semi-polar GaN on ammonothermal seeds. Japanese Journal of Applied Physics, 2019, 58, SC1030.	1.5	8
8	Electrical characterization of HVPE GaN containing different concentrations of carbon dopants. Semiconductor Science and Technology, 2018, 33, 125024.	2.0	7
9	Doping in bulk HVPE-GaN grown on native seeds â€“ highly conductive and semi-insulating crystals. Journal of Crystal Growth, 2018, 499, 1-7.	1.5	28
10	Crystallization of semi-insulating HVPE-GaN with solid iron as a source of dopants. Journal of Crystal Growth, 2017, 475, 121-126.	1.5	13
11	Highly resistive C-doped hydride vapor phase epitaxy-GaN grown on ammonothermally crystallized GaN seeds. Applied Physics Express, 2017, 10, 011003.	2.4	59
12	Crystal growth of HVPE-GaN doped with germanium. Journal of Crystal Growth, 2017, 480, 102-107.	1.5	26
13	(Invited) Growth and Characterization of Bulk HVPE-GaN â€“ Pathway to Highly Conductive and Semi-Insulating GaN Substrates. ECS Transactions, 2017, 80, 991-1003.	0.5	3
14	HVPE-GaN growth on GaN-based advanced substrates by Smart CutTM. , 2016, , .		0
15	HVPE-GaN growth on GaN-based Advanced Substrates by Smart Cutâ„¢. Journal of Crystal Growth, 2016, 456, 73-79.	1.5	9
16	Homoepitaxial growth of HVPE-GaN doped with Si. Journal of Crystal Growth, 2016, 456, 91-96.	1.5	29
17	Growth of HVPE-GaN on native seeds â€“ numerical simulation based on experimental results. Journal of Crystal Growth, 2016, 456, 86-90.	1.5	9
18	Challenges and future perspectives in HVPE-GaN growth on ammonothermal GaN seeds. Semiconductor Science and Technology, 2016, 31, 093002.	2.0	116

#	Article	IF	Citations
19	Influence of edge-grown HVPE GaN on the structural quality of c-plane oriented HVPE-GaN grown on ammonothermal GaN substrates. Journal of Crystal Growth, 2016, 456, 80-85.	1.5	18
20	Examination of defects and the seed's critical thickness in HVPEâ€GaN growth on ammonothermal GaN seed. Physica Status Solidi (B): Basic Research, 2015, 252, 1172-1179.	1.5	26
21	Homoepitaxial HVPE GaN growth on non- and semi-polar seeds. Proceedings of SPIE, 2015, , .	0.8	4
22	Preparation of free-standing GaN substrates from GaN layers crystallized by hydride vapor phase epitaxy on ammonothermal GaN seeds. Japanese Journal of Applied Physics, 2014, 53, 05FA04.	1.5	21
23	HVPE-GaN grown on MOCVD-GaN/sapphire template and ammonothermal GaN seeds: Comparison of structural, optical, and electrical properties. Journal of Crystal Growth, 2014, 394, 55-60.	1.5	44
24	Examination of growth rate during hydride vapor phase epitaxy of GaN on ammonothermal GaN seeds. Journal of Crystal Growth, 2014, 407, 52-57.	1.5	21
25	Measurements of strain in AlGaN/GaN HEMT structures grown by plasma assisted molecular beam epitaxy. Journal of Crystal Growth, 2014, 401, 355-358.	1.5	2
26	HVPE-GaN growth on misoriented ammonothermal GaN seeds. Journal of Crystal Growth, 2014, 403, 32-37.	1.5	15
27	Homoepitaxial HVPE-GaN growth on non-polar and semi-polar seeds. Journal of Crystal Growth, 2014, 403, 48-54.	1.5	31
28	Role and influence of impurities on GaN crystal grown from liquid solution under high nitrogen pressure in multi-feed-seed configuration. Proceedings of SPIE, 2013, , .	0.8	6
29	Preparation of Free-Standing GaN Substrates from Thick GaN Layers Crystallized by Hydride Vapor Phase Epitaxy on Ammonothermally Grown GaN Seeds. Applied Physics Express, 2013, 6, 075504.	2.4	51
30	HVPE-GaN growth on ammonothermal GaN crystals. Proceedings of SPIE, 2013, , .	0.8	10
31	Structural and Chemical Characterization of Al(Ga)N/GaN Quantum Well Structures Grown by Plasma Assisted Molecular Beam Epitaxy. Solid State Phenomena, 2012, 186, 70-73.	0.3	1
32	Characterization of the Nonpolar GaN Substrate Obtained by Multistep Regrowth by Hydride Vapor Phase Epitaxy. Applied Physics Express, 2012, 5, 011001.	2.4	6
33	Multi feed seed (MFS) high pressure crystallization of 1â€“2in GaN. Journal of Crystal Growth, 2012, 350, 5-10.	1.5	31
34	High nitrogen pressure solution growth of GaN in multi feedâ€seed configuration. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 453-456.	0.8	6
35	C-plane bowing in free standing GaN crystals grown by HVPE on GaN-sapphire substrates with photolithographically patterned Ti masks. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2117-2119.	0.8	10
36	Electron spin resonance and Rashba field in GaN-based materials. Physica B: Condensed Matter, 2011, 406, 2548-2554.	2.7	11

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37	Properties of metal-insulator transition and electron spin relaxation in GaN:Si. Physical Review B, 2011, 83, .	3.2	34
38	Doping-Induced Contrast in the Refractive Index for GaInN/GaN Structures at Telecommunication Wavelengths. Applied Physics Express, 2009, 2, 111001.	2.4	6
39	Bulk GaN crystals and wafers grown by HVPE without intentional doping. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S297-S300.	0.8	11
40	Carrier recombination under one-photon and two-photon excitation in GaN epilayers. Micron, 2009, 40, 118-121.	2.2	2
41	Liquid phase epitaxy of GaN on MOCVD GaN/sapphire and HVPE freeâ€standing substrates under high nitrogen pressure. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1539-1542.	0.8	1
42	GaN crystallization by the high-pressure solution growth method on HVPE bulk seed. Journal of Crystal Growth, 2008, 310, 3924-3933.	1.5	35
43	Nonradiative recombination at threading dislocations in n-type GaN: Studied by cathodoluminescence and defect selective etching. Applied Physics Letters, 2008, 92, .	3.3	74
44	Adsorption and dissolution of nitrogen in lithiumâ€"QM DFT investigation. Journal of Crystal Growth, 2007, 304, 299-309.	1.5	0
45	High pressureâ€"high temperature seeded growth of GaN on 1 in sapphire/GaN templates: Analysis of convective transport. Journal of Crystal Growth, 2007, 307, 259-267.	1.5	21
46	The influence of free-carrier concentration on the PEC etching of GaN: A calibration with Raman spectroscopy. Journal of Crystal Growth, 2007, 307, 298-301.	1.5	33
47	Crystallization of GaN by HVPE on pressure grown seeds. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1654-1657.	1.8	7
48	Etching, Raman and PL study of thick HVPE-grown GaN. Materials Science in Semiconductor Processing, 2006, 9, 175-179.	4.0	14
49	Carrier recombination and diffusion in GaN revealed by transient luminescence under one-photon and two-photon excitations. Applied Physics Letters, 2006, 89, 172119.	3.3	18
50	Defects in GaN single crystals and homoepitaxial structures. Journal of Crystal Growth, 2005, 281, 135-142.	1.5	26
51	Effect of growth polarity on vacancy defect and impurity incorporation in dislocation-free GaN. Applied Physics Letters, 2005, 86, 031915.	3.3	96
52	Thick GaN layers grown by hydride vapor-phase epitaxy: hetero- versus homo-epitaxy. Journal of Crystal Growth, 2003, 255, 241-249.	1.5	24
53	Polarity dependent properties of GaN layers grown by hydride vapor phase epitaxy on GaN bulk crystals. Physica Status Solidi (B): Basic Research, 2003, 240, 289-292.	1.5	22
54	High-nitrogen-pressure growth of GaN single crystals: doping and physical properties. Journal of Physics Condensed Matter, 2001, 13, 8881-8890.	1.8	29

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55	Observation of Ga vacancies and negative ions in undoped and Mg-doped GaN bulk crystals. Physica B: Condensed Matter, 1999, 273-274, 33-38.	2.7	23
56	Lattice parameters of GaN single crystals, homoepitaxial layers and heteroepitaxial layers on sapphire. Journal of Alloys and Compounds, 1999, 286, 271-275.	5.5	21
57	The influence of Mg doping on the formation of Ga vacancies and negative ions in GaN bulk crystals. Applied Physics Letters, 1999, 75, 2441-2443.	3.3	77
58	Thermal properties of indium nitride. Journal of Physics and Chemistry of Solids, 1998, 59, 289-295.	4.0	110
59	GaN Single Crystals Grown by High Pressure Solution Method.. Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu, 1998, 7, 760-762.	0.0	2
60	DTA determination of the high-pressure-high-temperature phase diagram of CdSe. Semiconductor Science and Technology, 1992, 7, 994-998.	2.0	3
61	High pressure, high temperature them determination of triple point in CdSe. High Pressure Research, 1992, 10, 420-423.	1.2	0
62	Nonpolar GaN Quasi-Wafers Sliced from Bulk GaN Crystals Grown by High-Pressure Solution and HVPE Methods. , 0, , 53-71.		1