Fumio Kawamura

List of Publications by Year
in descending order

74	1,592	279798 23	330143 37
papers	citations	h-index	g-index

76	76	76	923
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of carbon additive on increases in the growth rate of 2in GaN single crystals in the Na flux method. Journal of Crystal Growth, 2008, 310, 3946-3949.	1.5	124
2	Promoted nitrogen dissolution due to the addition of Li or Ca to Ga-Na melt; some effects of additives on the growth of GaN single crystals using the sodium flux method. Journal of Crystal Growth, 2005, 284, 91-99.	1.5	85
3	Growth of a Two-Inch GaN Single Crystal Substrate Using the Na Flux Method. Japanese Journal of Applied Physics, 2006, 45, L1136-L1138.	1.5	73
4	Synthesis of rhenium nitride crystals with MoS₂ structure. Applied Physics Letters, 2012, 100, 251910.	3.3	67
5	Growth of GaN single crystals with extremely low dislocation density by two-step dislocation reduction. Journal of Crystal Growth, 2009, 311, 3019-3024.	1.5	66
6	Growth of a Large GaN Single Crystal Using the Liquid Phase Epitaxy (LPE) Technique. Japanese Journal of Applied Physics, 2003, 42, L4-L6.	1.5	65
7	Synthesis of ZnSnN₂ crystals via a highâ€pressure metathesis reaction. Crystal Research and Technology, 2016, 51, 220-224.	1.3	62
8	Novel Liquid Phase Epitaxy (LPE) Growth Method for Growing Large GaN Single Crystals: Introduction of the Flux Film Coated-Liquid Phase Epitaxy (FFC-LPE) Method. Japanese Journal of Applied Physics, 2003, 42, L879-L881.	1.5	52
9	Growth of Bulk GaN and AlN: Progress and Challenges. Proceedings of the IEEE, 2010, 98, 1302-1315.	21.3	52
10	The influences of supersaturation on LPE growth of GaN single crystals using the Na flux method. Journal of Crystal Growth, 2004, 270, 402-408.	1.5	51
11	Drastic Decrease in Dislocations during Liquid Phase Epitaxy Growth of GaN Single Crystals Using Na flux Method without Any Artificial Processes. Japanese Journal of Applied Physics, 2006, 45, 2528-2530.	1.5	46
12	Growth of Transparent, Large Size GaN Single Crystal with Low Dislocations Using Ca-Na Flux System. Japanese Journal of Applied Physics, 2003, 42, L729-L731.	1.5	45
13	Synthesis of Bulk GaN Single Crystals Using Na-Ca Flux. Japanese Journal of Applied Physics, 2002, 41, L1440-L1442.	1.5	40
14	Effects of ammonia gas on threshold pressure and seed growth for bulk GaN single crystals by Na flux method. Journal of Crystal Growth, 2003, 253, 1-5.	1.5	39
15	Synthesis of AlN Grains and Liquid-Phase-Epitaxy (LPE) Growth of AlN Films Using Sn-Ca Mixed Flux. Japanese Journal of Applied Physics, 2005, 44, L488-L490.	1.5	39
16	The effects of Na and some additives on nitrogen dissolution in the Ga-Na system: A growth mechanism of GaN in the Na flux method. Journal of Materials Science: Materials in Electronics, 2005, 16, 29-34.	2.2	37
17	Growth of Bulk GaN Single Crystals Using Li-Na Mixed Flux System. Japanese Journal of Applied Physics, 2003, 42, L565-L567.	1.5	33
18	Chemical etchant dependence of surface structure and morphology on GaN(0001) substrates. Surface Science, 2010, 604, 1247-1253.	1.9	33

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19	Growth of GaN crystals by Na flux LPE method. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1283-1286.	1.8	33
20	Conduction-band effective mass and bandgap of ZnSnN2 earth-abundant solar absorber. Scientific Reports, 2017, 7, 14987.	3.3	33
21	Synthesis of a Novel Rocksaltâ€Type Ternary Nitride Semiconductor MgSnN₂ Using the Metathesis Reaction under High Pressure. European Journal of Inorganic Chemistry, 2020, 2020, 446-451.	2.0	33
22	Vapor-phase epitaxy of high-crystallinity GaN films using Ga2O vapor and NH3. Journal of Crystal Growth, 2010, 312, 676-679.	1.5	32
23	Study of the metastable region in the growth of GaN using the Na flux method. Journal of Crystal Growth, 2009, 311, 4647-4651.	1.5	25
24	Effect of Thermal Convection on Liquid Phase Epitaxy of GaN by Na Flux Method. Japanese Journal of Applied Physics, 2007, 46, 7689.	1.5	22
25	High-pressure synthesis and compressive behavior of tantalum nitrides. Journal of Applied Physics, 2014, 115, 103520.	2.5	21
26	High pressure densification and dielectric properties of perovskite-type oxynitride SrTaO2N. Journal of the European Ceramic Society, 2015, 35, 1191-1197.	5.7	21
27	Fabrication ofa-Plane GaN Substrate Using the Srâ€"Na Flux Liquid Phase Epitaxy Technique. Japanese Journal of Applied Physics, 2007, 46, L103-L106.	1.5	18
28	Synthesis of CaSnN₂ via a High-Pressure Metathesis Reaction and the Properties of II-Sn-N₂ (II = Ca, Mg, Zn) Semiconductors. Inorganic Chemistry, 2021, 60, 1773-1779.	4.0	18
29	Liquid Phase Epitaxy Growth ofm-Plane GaN Substrate Using the Na Flux Method. Japanese Journal of Applied Physics, 2007, 46, L227-L229.	1.5	17
30	Synthesis of GaN Crystal Using Gallium Hydride. Japanese Journal of Applied Physics, 2005, 44, L1-L3.	1.5	16
31	A first-principles study on nitrogen solubility in Na flux toward theoretical search for a novel flux for bulk GaN growth. Journal of Crystal Growth, 2007, 303, 34-36.	1.5	15
32	Synthesis of hexagonal phases of <scp>WN</scp> and W_{2.25}N₃ by highâ€pressure metathesis reaction. Journal of the American Ceramic Society, 2018, 101, 949-956.	3.8	15
33	Global analysis of GaN growth using a solution technique. Journal of Crystal Growth, 2008, 310, 1790-1793.	1.5	14
34	The bandgap of ZnSnN₂ with a disordered-wurtzite structure. Japanese Journal of Applied Physics, 2019, 58, SC1034.	1.5	14
35	Band Gap-Tunable (Mg, Zn)SnN₂ Earth-Abundant Alloys with a Wurtzite Structure. ACS Applied Electronic Materials, 2021, 3, 4934-4942.	4.3	14
36	Homoepitaxial growth of GaN single crystals using gallium hydride. Materials Letters, 2005, 59, 4026-4029.	2.6	13

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37	New developments in crystal growth from solutions: Oxides, proteins, and nitrides. Journal of Crystal Growth, 2008, 310, 1288-1297.	1.5	13
38	Growth of 2Hâ€“SiC single crystals in a Li-based flux. Materials Letters, 2008, 62, 1048-1051.	2.6	12
39	Liquid-phase epitaxy of 2Hâ€“SiC film on a (0001) 4Hâ€“SiC substrate in Liâ€“Si melt. Materials Letters, 2009, 63, 649-651.	2.6	12
40	Composition-Dependent Properties of Wurtzite-Type Mg_{1+<i>x</i>}Sn_{1â€“<i>x</i>}N₂ Epitaxially Grown on GaN(001) Templates. ACS Applied Electronic Materials, 2021, 3, 1341-1349.	4.3	12
41	Impurity effect on ã€ˆ111ã€‰ and ã€ˆ110ã€‰ directions of growing SnO2 single crystals in SnO2â€“Cu2O flux system. Journal of Crystal Growth, 2001, 233, 259-268.	1.5	11
42	A first-principles investigation on the mechanism of nitrogen dissolution in the Na flux method. Journal of Applied Physics, 2007, 101, 066106.	2.5	11
43	Synthesis of ammonia using sodium melt. Scientific Reports, 2017, 7, 11578.	3.3	11
44	Growth of High-Quality CsLiB6O10Crystals from Materials Mixed in Aqueous Solution. Japanese Journal of Applied Physics, 2004, 43, 1073-1075.	1.5	10
45	Effect of Impurity Cations on the Growth and Habits of SnO₂ Crystals in the SnO₂â€Cu₂O Flux System. Journal of the American Ceramic Society, 1999, 82, 774-776.	3.8	10
46	Electron-transport properties of degenerate ZnSnN2 doped with oxygen. BMC Materials, 2020, 2, .	6.8	10
47	Tunability of the bandgap of SnS by variation of the cell volume by alloying with A.E. elements. Scientific Reports, 2022, 12, 7434.	3.3	9
48	Highâ€Quality GaN Crystal Growth Using Fluxâ€Filmâ€Coated LPE with Na Flux. Crystal Research and Technology, 2020, 55, 2000042.	1.3	8
49	Effects of supersaturation and impurity on step advancement on TiO2 (110) faces grown from high-temperature solution. Journal of Crystal Growth, 2001, 233, 517-522.	1.5	7
50	Growth of Thick GaN Films with High Growth Rate Using Sublimation Method under High Pressure. Japanese Journal of Applied Physics, 2004, 43, L486-L488.	1.5	7
51	Rhenium dinitride: Carrier transport in a novel transition metal dinitride layered crystal. APL Materials, 2019, 7, 101103.	5.1	7
52	Habit Modifications of SnO₂ Crystals in SnO₂â€“Cu₂O Flux System in the Presence of Trivalent Impurity Cations. Journal of the American Ceramic Society, 2001, 84, 1341-1346.	3.8	6
53	Synthesis of high-crystallinity cubic-GaN nanoparticles using the Na flux methodâ€”A proposed new usage for a belt-type high-pressure apparatus. Journal of Crystal Growth, 2011, 321, 100-105.	1.5	6
54	Growth of Bulk Nitrides from a Na Flux. , 2015, , 505-533.		6

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55	Crystallization behavior of cubic boron nitride from an amorphous BN precursor via high-pressure, high-temperature treatment with controlled water addition. Journal of the European Ceramic Society, 2016, 36, 3565-3569.	5.7	6
56	Investigations on the growth and morphology of TiO2 in the TiO2â€“Na2B4O7 system with and without impurities using a new LPE method. Journal of Crystal Growth, 2001, 231, 186-193.	1.5	4
57	Optical Property of GaN Single Crystals Grown by Liquid Phase Epitaxy (LPE). Japanese Journal of Applied Physics, 2004, 43, L173-L175.	1.5	4
58	Growth of high-quality large GaN crystal by Na flux LPE method. , 2009, , .		4
59	AFM observation of the SnO2(110) bunching step structure formed in high-temperature LPE growth. Journal of Crystal Growth, 2002, 244, 173-177.	1.5	3
60	Increase in the growth rate of GaN single crystals grown by gallium hydride vapor phase epitaxy method. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1719-1722.	0.8	3
61	Surface Characterization of GaN(0001) Grown by Liquid Phase Epitaxy Using Coaxial Impact-Collision Ion Scattering Spectroscopy. Japanese Journal of Applied Physics, 2008, 47, 7281-7284.	1.5	3
62	Conditions for growth of AlN single crystals in Alâ€“Sn flux. Journal of the American Ceramic Society, 2018, 101, 4876-4879.	3.8	3
63	Examination of Effects of H2Concentration in Reactant Gas on GaN Growth by Gallium Hydride Vapor Phase Epitaxy. Japanese Journal of Applied Physics, 2006, 45, L878-L880.	1.5	2
64	LPE Growth of Bulk GaN Crystal by Alkali-Metal Flux Method. Materials Science Forum, 0, 600-603, 1245-1250.	0.3	2
65	Electron transport properties in degenerate magnesium tin oxynitride (Mg_{1âˆ’<i>x</i>}Sn_{1+<i>x</i>}N_{2âˆ’2<i>y</i>}O_{2<i>y</i>}) with average wurtzite structure. Journal of Applied Physics, 2022, 131, 075302.	2.5	2
66	The effects of growth temperature on the crystallinity of GaN in gallium hydride vapor phase epitaxy method. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1606-1608.	0.8	1
67	Growth of 2H-SiC Single Crystals in a C-Li-Si Ternary Melt System. Materials Science Forum, 0, 600-603, 55-58.	0.3	1
68	Back Cover (Phys. Status Solidi A 6/2010). Physica Status Solidi (A) Applications and Materials Science, 2010, 207, .	1.8	1
69	Synthesis of Scandium Nitride Crystals from Indiumâ€“Scandium Melts. International Journal of Applied Ceramic Technology, 2016, 13, 1134-1138.	2.1	1
70	Development of a flux-film-coated sputtering (FFC-sputtering) method for fabricating c-axis oriented AlN film. AIP Advances, 2020, 10, .	1.3	1
71	Influence of crystallinity on the bulk laser-induced damage threshold in CsLiB/sub 6/O/sub 10/ for high-power UV laser source. , 0, , .		0
72	Growth of a Large GaN Single Crystal Using the Liquid Phase Epitaxy (LPE) Technique. Japanese Journal of Applied Physics, 2003, 42, L208-L208.	1.5	0

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73	Process control and new developments in crystal growth from solution: oxide, organic, protein and nitride. Handai Nanophotonics, 2007, 3, 411-426.	0.0	0
74	Synthesis of a Novel Rocksalt-Type Ternary Nitride Semiconductor MgSnN2 Using the Metathesis Reaction Under High Pressure. European Journal of Inorganic Chemistry, 2020, 2020, 418-418.	2.0	0