Fumio Kawamura

List of Publications by Year
in descending order

74 papers	1,592 citations	279798 23 h-index	330143 37 g-index
76 all docs	76 docs citations	76 times ranked	923 citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	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
5	Band Gap-Tunable (Mg, Zn)SnN₂ Earth-Abundant Alloys with a Wurtzite Structure. ACS Applied Electronic Materials, 2021, 3, 4934-4942.	4.3	14
6	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
7	Highâ€Quality GaN Crystal Growth Using Fluxâ€Filmâ€Coated LPE with Na Flux. Crystal Research and Technology, 2020, 55, 2000042.	1.3	8
8	Electron-transport properties of degenerate ZnSnN2 doped with oxygen. BMC Materials, 2020, 2, .	6.8	10
9	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
10	Development of a flux-film-coated sputtering (FFC-sputtering) method for fabricating c-axis oriented AlN film. AIP Advances, 2020, 10, .	1.3	1
11	Rhenium dinitride: Carrier transport in a novel transition metal dinitride layered crystal. APL Materials, 2019, 7, 101103.	5.1	7
12	The bandgap of ZnSnN₂ with a disordered-wurtzite structure. Japanese Journal of Applied Physics, 2019, 58, SC1034.	1.5	14
13	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
14	Conditions for growth of AlN single crystals in Alâ€“Sn flux. Journal of the American Ceramic Society, 2018, 101, 4876-4879.	3.8	3
15	Synthesis of ammonia using sodium melt. Scientific Reports, 2017, 7, 11578.	3.3	11
16	Conduction-band effective mass and bandgap of ZnSnN2 earth-abundant solar absorber. Scientific Reports, 2017, 7, 14987.	3.3	33
17	Synthesis of ZnSnN₂ crystals via a highâ€pressure metathesis reaction. Crystal Research and Technology, 2016, 51, 220-224.	1.3	62
18	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

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19	Synthesis of Scandium Nitride Crystals from Indiumâ€“Scandium Melts. International Journal of Applied Ceramic Technology, 2016, 13, 1134-1138.	2.1	1
20	High pressure densification and dielectric properties of perovskite-type oxynitride SrTaO2N. Journal of the European Ceramic Society, 2015, 35, 1191-1197.	5.7	21
21	Growth of Bulk Nitrides from a Na Flux. , 2015, , 505-533.		6
22	High-pressure synthesis and compressive behavior of tantalum nitrides. Journal of Applied Physics, 2014, 115, 103520.	2.5	21
23	Synthesis of rhenium nitride crystals with MoS₂ structure. Applied Physics Letters, 2012, 100, 251910.	3.3	67
24	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
25	Growth of Bulk GaN and AlN: Progress and Challenges. Proceedings of the IEEE, 2010, 98, 1302-1315.	21.3	52
26	Vapor-phase epitaxy of high-crystallinity GaN films using Ga2O vapor and NH3. Journal of Crystal Growth, 2010, 312, 676-679.	1.5	32
27	Chemical etchant dependence of surface structure and morphology on GaN(0001) substrates. Surface Science, 2010, 604, 1247-1253.	1.9	33
28	Growth of GaN crystals by Na flux LPE method. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1283-1286.	1.8	33
29	Back Cover (Phys. Status Solidi A 6/2010). Physica Status Solidi (A) Applications and Materials Science, 2010, 207, .	1.8	1
30	Growth of high-quality large GaN crystal by Na flux LPE method. , 2009, , .		4
31	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
32	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
33	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
34	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
35	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
36	Global analysis of GaN growth using a solution technique. Journal of Crystal Growth, 2008, 310, 1790-1793.	1.5	14

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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	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
39	Growth of 2Hâ€"SiC single crystals in a Li-based flux. Materials Letters, 2008, 62, 1048-1051.	2.6	12
40	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
41	Process control and new developments in crystal growth from solution: oxide, organic, protein and nitride. Handai Nanophotonics, 2007, 3, 411-426.	0.0	0
42	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
43	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
44	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
45	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
46	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
47	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
48	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
49	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
50	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
51	Homoepitaxial growth of GaN single crystals using gallium hydride. Materials Letters, 2005, 59, 4026-4029.	2.6	13
52	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
53	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
54	Synthesis of GaN Crystal Using Gallium Hydride. Japanese Journal of Applied Physics, 2005, 44, L1-L3.	1.5	16

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55	Optical Property of GaN Single Crystals Grown by Liquid Phase Epitaxy (LPE). Japanese Journal of Applied Physics, 2004, 43, L173-L175.	1.5	4
56	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
57	Growth of High-Quality CsLiB6O10Crystals from Materials Mixed in Aqueous Solution. Japanese Journal of Applied Physics, 2004, 43, 1073-1075.	1.5	10
58	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
59	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
60	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
61	Growth of Bulk GaN Single Crystals Using Li-Na Mixed Flux System. Japanese Journal of Applied Physics, 2003, 42, L565-L567.	1.5	33
62	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
63	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
64	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
65	Synthesis of Bulk GaN Single Crystals Using Na-Ca Flux. Japanese Journal of Applied Physics, 2002, 41, L1440-L1442.	1.5	40
66	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
67	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
68	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
69	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
70	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
71	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
72	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

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73	LPE Growth of Bulk GaN Crystal by Alkali-Metal Flux Method. Materials Science Forum, 0, 600-603, 1245-1250.	0.3	2
74	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