

# Masashi Yoshimura

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9616135/publications.pdf>

Version: 2024-02-01

121  
papers

2,123  
citations

201674

27  
h-index

276875

41  
g-index

128  
all docs

128  
docs citations

128  
times ranked

943  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of additional N <sub>2</sub> O gas on the suppression of polycrystal formation and high-rate GaN crystal growth by OVPE method. <i>Journal of Crystal Growth</i> , 2022, 581, 126495.	1.5	2
2	Stable 10,000-hour operation of 20-W deep ultraviolet laser generation at 266-nm. <i>Optics Express</i> , 2022, 30, 11797.	3.4	5
3	Influence of oxygen-related defects on the electronic structure of GaN. <i>Japanese Journal of Applied Physics</i> , 2022, 61, 061004.	1.5	1
4	DUV coherent light emission from ultracompact microcavity wavelength conversion device. <i>Optics Express</i> , 2022, 30, 18628.	3.4	3
5	Anisotropic complex refractive index of $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> bulk and epilayer evaluated by terahertz time-domain spectroscopy. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	45
6	Investigations on the electric-dipole allowed 4f <sub>25d</sub> $\hat{\Gamma}^1$ 4f <sub>3</sub> broadband emission of Nd <sup>3+</sup> -doped 20Al(PO <sub>3</sub> ) <sub>3</sub> -80LiF glass for potential VUV scintillator application. <i>Journal of Alloys and Compounds</i> , 2021, 856, 158096.	5.5	6
7	Growth Enhancement of Organic Nonlinear Optical Crystals by Femtosecond Laser Ablation. <i>Journal of Physical Chemistry C</i> , 2021, 125, 8391-8397.	3.1	5
8	Growth of a High Quality GaN Wafer from Point Seeds by the Na-Flux Method. , 2021, , .		0
9	Floral design GaN crystals: low-resistive and low-dislocation-density growth by oxide vapor phase epitaxy. <i>Japanese Journal of Applied Physics</i> , 2021, 60, 095501.	1.5	4
10	Multicolor imaging of calcium-binding proteins in human kidney stones for elucidating the effects of proteins on crystal growth. <i>Scientific Reports</i> , 2021, 11, 16841.	3.3	5
11	Terahertz time-domain ellipsometry with high precision for the evaluation of GaN crystals with carrier densities up to 10 <sup>20</sup> cm <sup>-3</sup> . <i>Scientific Reports</i> , 2021, 11, 18129.	3.3	37
12	Growth of Acetaminophen Polymorphic Crystals and Solution-Mediated Phase Transition from Trihydrate to Form II in Agarose Gel. <i>Crystals</i> , 2021, 11, 1069.	2.2	1
13	Study of Generation and Detection of Continuous Terahertz Wave Using Chaotic Multi-mode Semiconductor Laser. , 2021, , .		0
14	Terahertz time-domain spectroscopy of wide-bandgap semiconductors GaN and $\hat{\Gamma}^2$ -Ga <sub>2</sub> O <sub>3</sub> . , 2021, , .		0
15	Fabrication of a 1.5-inch freestanding GaN substrate by selective dissolution of sapphire using Li after the Na-flux growth. <i>Journal of Crystal Growth</i> , 2020, 533, 125462.	1.5	2
16	Intergrowth of two aspirin polymorphism observed with Raman spectroscopy. <i>Journal of Crystal Growth</i> , 2020, 532, 125430.	1.5	8
17	Growth of GaN layers using Ga <sub>2</sub> O vapor synthesized from Ga <sub>2</sub> O <sub>3</sub> and carbon. <i>Journal of Crystal Growth</i> , 2020, 535, 125524.	1.5	3
18	Microflow system promotes acetaminophen crystal nucleation. <i>Engineering in Life Sciences</i> , 2020, 20, 395-401.	3.6	3

#	ARTICLE	IF	CITATIONS
19	Absolute surface energies of oxygen-adsorbed GaN surfaces. Journal of Crystal Growth, 2020, 549, 125868.	1.5	10
20	Influence of GaN/sapphire contact area on bowing of GaN wafer grown by the Na-flux method with a sapphire dissolution process. Japanese Journal of Applied Physics, 2020, 59, 025505.	1.5	2
21	Fabrication of GaN crystals with low threading dislocation density and low resistivity by thin flux growth in the Na-flux point seed technique. Japanese Journal of Applied Physics, 2020, 59, 035501.	1.5	2
22	Temperature dependence of nitrogen dissolution on Na flux growth. Journal of Crystal Growth, 2020, 535, 125549.	1.5	3
23	Growth of GaN single crystals with high transparency by the Li-added Na-flux method. Journal of Crystal Growth, 2020, 535, 125478.	1.5	5
24	High-power DUV picosecond pulse laser with a gain-switched-LD-seeded MOPA and large CLBO crystal. Optics Letters, 2020, 45, 2351.	3.3	20
25	Extreme reduction of on-resistance in vertical GaN p-n diodes by low dislocation density and high carrier concentration GaN wafers fabricated using oxide vapor phase epitaxy method. Applied Physics Express, 2020, 13, 071010.	2.4	14
26	Anomalous dislocation annihilation behavior observed in a GaN crystal grown on point seeds by the Na-flux method. Applied Physics Express, 2020, 13, 085510.	2.4	7
27	High-rate OVPE-GaN growth by the suppression of polycrystal formation with additional H <sub>2</sub> O vapor in a high-temperature condition. Applied Physics Express, 2020, 13, 095504.	2.4	2
28	High surface laser-induced damage threshold of SrB <sub>4</sub> O <sub>7</sub> single crystals under 266-nm (DUV) laser irradiation. Optics Express, 2020, 28, 29239.	3.4	8
29	Electrical properties of $\eta$ -Ga <sub>2</sub> O <sub>3</sub> homoepitaxial layer measured by terahertz time-domain spectroscopy. , 2020, , .		0
30	Effect of methane additive on GaN growth using the OVPE method. Japanese Journal of Applied Physics, 2019, 58, SC1021.	1.5	7
31	Development of a 2-inch GaN wafer by using the oxide vapor phase epitaxy method. Japanese Journal of Applied Physics, 2019, 58, SC1043.	1.5	26
32	Low resistive and low dislocation GaN wafer produced by OVPE method. , 2019, , .		0
33	Recent progress of Na-flux method for GaN crystal growth. Japanese Journal of Applied Physics, 2019, 58, SC0803.	1.5	48
34	Growth of large and high quality CsLiB <sub>6</sub> O <sub>10</sub> crystals from self-flux solutions for high resistance against UV laser-induced degradation. Applied Physics Express, 2019, 12, 075501.	2.4	7
35	Promotion of lateral growth of GaN crystals on point seeds by extraction of substrates from melt in the Na-flux method. Applied Physics Express, 2019, 12, 045508.	2.4	33
36	Large-scale crystallization of acetaminophen trihydrate by a novel stirring technique. Applied Physics Express, 2019, 12, 045503.	2.4	6

#	ARTICLE	IF	CITATIONS
37	Crystallization of aspirin form II by femtosecond laser irradiation. Applied Physics Express, 2019, 12, 015507.	2.4	15
38	Development of Polymorphic Control Technology for Pharmaceutical Compounds. , 2019, , 269-291.		2
39	Quantized conductance observed during sintering of silver nanoparticles by intense terahertz pulses. Applied Physics Letters, 2018, 112, 163102.	3.3	17
40	Improvement of metastable crystal of acetaminophen via control of crystal growth rate. Applied Physics Express, 2018, 11, 035501.	2.4	9
41	Terahertz Pump-Terahertz Probe Spectroscopy of Multilayer Graphene. , 2018, , .		1
42	Third harmonic generation from InSb excited by Free Electron Laser. , 2018, , .		5
43	Properties of Terahertz Wave Emission from Nano-porous Gold Excited by Femtosecond Laser Pulses. , 2018, , .		0
44	Growth of high-quality transparent SrB <sub>4</sub> O <sub>7</sub> single crystals with high degradation resistance for DUV laser application. Applied Physics Express, 2018, 11, 125501.	2.4	8
45	First-principles study of polar, nonpolar, and semipolar GaN surfaces during oxide vapor phase epitaxy growth. Japanese Journal of Applied Physics, 2018, 57, 115504.	1.5	2
46	Atomic-Scale Imaging of Surface and Hydration Structures of Stable and Metastable Acetaminophen Crystals by Frequency Modulation Atomic Force Microscopy. Journal of Physical Chemistry C, 2018, 122, 21983-21990.	3.1	4
47	Growth of high-quality metastable crystal of acetaminophen using solution-mediated phase transformation at low supersaturation. Journal of Crystal Growth, 2018, 502, 76-82.	1.5	12
48	Enhancement of lateral growth of the GaN crystal with extremely low dislocation density during the Na-flux growth on a point seed. Journal of Crystal Growth, 2017, 468, 827-830.	1.5	13
49	Increase in the growth rate of GaN crystals by using gaseous methane in the Na flux method. Japanese Journal of Applied Physics, 2017, 56, 055502.	1.5	9
50	Optical damage assessment and recovery investigation of hydrogen-ion and deuterium-ion plasma-irradiated bulk ZnO single crystals. Journal of Applied Physics, 2017, 121, .	2.5	7
51	Homoepitaxial Hydride Vapor Phase Epitaxy Growth on GaN Wafers Manufactured by the Na-Flux Method. Crystal Growth and Design, 2017, 17, 3806-3811.	3.0	45
52	First-principles study of the surface phase diagrams of GaN(0001) and (000 $\bar{1}$ ) under oxide vapor phase epitaxy growth conditions. Physica Status Solidi (B): Basic Research, 2017, 254, 1600706.	1.5	4
53	Strong yellow emission of high-conductivity bulk ZnO single crystals irradiated with high-power gyrotron beam. Applied Physics Letters, 2017, 111, .	3.3	42
54	Effect of flux composition ratio on the coalescence growth of GaN crystals by the Na-flux method. Optical Materials, 2017, 65, 38-41.	3.6	5

#	ARTICLE	IF	CITATIONS
55	Crystallization of acetaminophen form II by plastic-ball-assisted ultrasonic irradiation. Applied Physics Express, 2017, 10, 025501.	2.4	11
56	Metastable crystal growth of acetaminophen using solution-mediated phase transformation. Applied Physics Express, 2017, 10, 015501.	2.4	14
57	Picosecond high-power 355-nm UV generation in CsLiB <sub>6</sub> O <sub>10</sub> crystal. Optics Express, 2016, 24, 30465.	3.4	17
58	Optical transmittance investigation of 1-keV ion-irradiated sapphire crystals as potential VUV to NIR window materials of fusion reactors. AIP Advances, 2016, 6, .	1.3	1
59	Dependence of polarity inversion on V/III ratio in $\alpha$ -GaN growth by oxide vapor phase epitaxy. Japanese Journal of Applied Physics, 2016, 55, 05FA11.	1.5	4
60	Crack-free GaN substrates grown by the Na-flux method with a sapphire dissolution technique. Applied Physics Express, 2016, 9, 071002.	2.4	6
61	Promotion of protein crystal growth by actively switching crystal growth mode via femtosecond laser ablation. Nature Photonics, 2016, 10, 723-726.	31.4	40
62	A crystallization technique for obtaining large protein crystals with increased mechanical stability using agarose gel combined with a stirring technique. Journal of Crystal Growth, 2016, 452, 172-178.	1.5	9
63	First-principles investigation of the GaN growth process in carbon-added Na-flux method. Physica Status Solidi (B): Basic Research, 2015, 252, 1084-1088.	1.5	9
64	Selective crystallization of metastable phase of acetaminophen by ultrasonic irradiation. Applied Physics Express, 2015, 8, 065501.	2.4	31
65	Homoepitaxial growth of GaN crystals by Na-flux dipping method. Japanese Journal of Applied Physics, 2015, 54, 105501.	1.5	13
66	Development of protein seed crystals reinforced with high-strength hydrogels. CrystEngComm, 2015, 17, 8064-8071.	2.6	10
67	Dramatic reduction of dislocations on a GaN point seed crystal by coalescence of bunched steps during Na-flux growth. Journal of Crystal Growth, 2015, 427, 87-93.	1.5	42
68	Homoepitaxial growth of a-plane GaN layers by reaction between Ga <sub>2</sub> O vapor and NH <sub>3</sub> gas. Japanese Journal of Applied Physics, 2015, 54, 065501.	1.5	2
69	Selective crystallization of the metastable phase of indomethacin at the interface of liquid/air bubble induced by femtosecond laser irradiation. Applied Physics Express, 2015, 8, 045501.	2.4	26
70	Development of High-Quality Nonlinear Optical Crystal CsLiB <sub>6</sub> O <sub>10</sub> and Its Application to High-Power Picosecond Deep-Ultraviolet Pulse Generation. The Review of Laser Engineering, 2015, 43, 23.	0.0	1
71	Ultraviolet laser-induced degradation of CsLiB <sub>6</sub> O <sub>10</sub> and $\beta$ -BaB <sub>2</sub> O <sub>4</sub> . Optical Materials Express, 2014, 4, 559.	3.0	40
72	Fabrication of low-curvature 2 in. GaN wafers by Na-flux coalescence growth technique. Applied Physics Express, 2014, 7, 035503.	2.4	65

#	ARTICLE	IF	CITATIONS
73	Growth of bulk GaN crystals by the Na-flux point seed technique. Japanese Journal of Applied Physics, 2014, 53, 05FA06.	1.5	25
74	Effect of H <sub>2</sub> carrier gas on the physical properties of a GaN layer grown using Ga <sub>2</sub> O vapor and NH <sub>3</sub> . Journal of Crystal Growth, 2014, 392, 1-4.	1.5	13
75	Effect of Gelâ€™Solution Interface on Femtosecond Laser-Induced Nucleation of Protein. Crystal Growth and Design, 2013, 13, 1491-1496.	3.0	13
76	Terahertz Comb Spectroscopy Traceable to Microwave Frequency Standard. IEEE Transactions on Terahertz Science and Technology, 2013, 3, 322-330.	3.1	39
77	Al Doping of CsLiB <sub>6</sub> O <sub>10</sub> for High Resistance to Ultraviolet-Induced Degradation. Applied Physics Express, 2013, 6, 022701.	2.4	19
78	High Temperature Growth of Non-polar a-Plane GaN Film Grown Using Gallium-Oxide as Ga Source. Japanese Journal of Applied Physics, 2013, 52, 025503.	1.5	7
79	Impurity and Defect Control of Nonlinear Optical Crystal CsLiB <sub>6</sub> O <sub>10</sub> for Improving Ultraviolet Laser-Induced Damage Tolerance. The Review of Laser Engineering, 2013, 41, 830.	0.0	2
80	Coalescence Growth of Dislocation-Free GaN Crystals by the Na-Flux Method. Applied Physics Express, 2012, 5, 095501.	2.4	29
81	High-Temperature Growth of GaN Single Crystals Using Li-Added Na-Flux Method. Japanese Journal of Applied Physics, 2012, 51, 121002.	1.5	3
82	Centimeter-Sized Bulk GaN Single Crystals Grown by the Na-Flux Method with a Necking Technique. Crystal Growth and Design, 2012, 12, 3799-3805.	3.0	46
83	Growth of Prismatic GaN Single Crystals with High Transparency on Small GaN Seed Crystals by Caâ€™Li-Added Na Flux Method. Applied Physics Express, 2012, 5, 025503.	2.4	20
84	Vapor-phase epitaxial growth of GaN films using Ga <sub>2</sub> O vapor and NH <sub>3</sub> . Journal of Crystal Growth, 2012, 350, 56-59.	1.5	21
85	High-Temperature Growth of GaN Single Crystals Using Li-Added Na-Flux Method. Japanese Journal of Applied Physics, 2012, 51, 121002.	1.5	14
86	Terahertz Generation and Optical Properties of Lithium Ternary Chalcogenide Crystals. Journal of Infrared, Millimeter, and Terahertz Waves, 2011, 32, 426-433.	2.2	5
87	Growth of GaN films with low oxygen concentration using Ga <sub>2</sub> O vapor and NH <sub>3</sub> . Journal of Crystal Growth, 2011, 327, 89-93.	1.5	14
88	Vapor-phase epitaxy of high-crystallinity GaN films using Ga <sub>2</sub> O vapor and NH <sub>3</sub> . Journal of Crystal Growth, 2010, 312, 676-679.	1.5	32
89	Growth of Large GaN Single Crystals on High-Quality GaN Seed by Carbon-Added Na Flux Method. Applied Physics Express, 2010, 3, 075501.	2.4	57
90	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

#	ARTICLE	IF	CITATIONS
91	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
92	Effect of water impurity in CsLiB <sub>6</sub> O <sub>10</sub> crystals on bulk laser-induced damage threshold and transmittance in the ultraviolet region. Applied Optics, 2009, 48, 1658.	2.1	24
93	Organic Crystals for Terahertz Time Domain Spectroscopy Source. The Review of Laser Engineering, 2009, 37, 355-360.	0.0	0
94	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
95	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
96	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
97	Continuous-wave all-solid-state 244 nm deep-ultraviolet laser source by fourth-harmonic generation of an optically pumped semiconductor laser using CsLiB <sub>6</sub> O <sub>10</sub> in an external resonator. Optics Letters, 2008, 33, 1705.	3.3	80
98	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
99	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
100	Protein Crystallization Using Short Pulse Laser. The Review of Laser Engineering, 2006, 34, 135-138.	0.0	0
101	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
102	Femtosecond Laser-Induced Crystallization of 4-(Dimethylamino)-N-methyl-4-stilbazolium Tosylate. Crystal Growth and Design, 2005, 5, 861-863.	3.0	58
103	Development of High-Sensitive Electro-Optic Sensor Using DAST Crystals. The Review of Laser Engineering, 2005, 33, 389-394.	0.0	0
104	Improvement in UV Optical Properties of CsLiB <sub>6</sub> O <sub>10</sub> by Reducing Water Molecules in the Crystal. Japanese Journal of Applied Physics, 2005, 44, L699-L700.	1.5	12
105	Growth of High-Quality CsLiB <sub>6</sub> O <sub>10</sub> Crystals from Materials Mixed in Aqueous Solution. Japanese Journal of Applied Physics, 2004, 43, 1073-1075.	1.5	10
106	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
107	Monolithic Wavelength Converter for Ultraviolet Light Using GdYCOB Crystal. The Review of Laser Engineering, 2004, 32, 812-817.	0.0	1
108	Progress in the growth of a CsLiB <sub>6</sub> O <sub>10</sub> crystal and its application to ultraviolet light generation. Optical Materials, 2003, 23, 343-351.	3.6	71

#	ARTICLE	IF	CITATIONS
109	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
110	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
111	Application of a Stirring Method to Micro-Scale and Vapor Diffusion Protein Crystallization. Japanese Journal of Applied Physics, 2003, 42, L314-L315.	1.5	30
112	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
113	DEVELOPMENT OF NEW NLO BORATE CRYSTALS. Journal of Nonlinear Optical Physics and Materials, 2001, 10, 249-263.	1.8	12
114	UV laser generation in GdYCOB crystal. Electrical Engineering in Japan (English Translation of Denki) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 0.4	0.4	0
115	Report on CLEO/QELS 2001. The Review of Laser Engineering, 2001, 29, 532-548.	0.0	0
116	Harmonic Generation of Nd:YAG Laser in GdxY1-xCa4O(BO3)3 Crystal (GdYCOB).. The Review of Laser Engineering, 1999, 27, 519-524.	0.0	0
117	Growth of KLN fiber crystals and its application for blue-violet light geration. Optical Review, 1994, 1, 241-242.	2.0	1
118	Growth of Nonlinear-Optical Crystals for Laser-Frequency Conversion. , 0, , 445-459.		0
119	Suppression of newly generated threading dislocations at the regrowth interface of a GaN crystal by growth rate control in the Na-flux method. Japanese Journal of Applied Physics, 0, , .	1.5	1
120	Bulk laser-induced damage resistance of SrB<sub>4</sub>O<sub>7</sub> single crystals under 266-nm DUV laser irradiation. Japanese Journal of Applied Physics, 0, , .	1.5	0
121	Kyropoulos growth of a 300-g SrB<sub>4</sub>O<sub>7</sub> single crystal using a twin-type stirring blade. Japanese Journal of Applied Physics, 0, , .	1.5	0