

# Hiroyuki Nishinaka

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8080369/publications.pdf>

Version: 2024-02-01

48

papers

1,741

citations

331670

21

h-index

276875

41

g-index

48

all docs

48

docs citations

48

times ranked

1513

citing authors

#	ARTICLE	IF	CITATIONS
1	Carrier concentration dependence of band gap shift in n-type ZnO:Al films. <i>Journal of Applied Physics</i> , 2007, 101, 083705.	2.5	380
2	ZnO-based thin films synthesized by atmospheric pressure mist chemical vapor deposition. <i>Journal of Crystal Growth</i> , 2007, 299, 1-10.	1.5	160
3	Growth of Crystalline Zinc Oxide Thin Films by Fine-Channel-Mist Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 4669.	1.5	109
4	Carrier concentration induced band-gap shift in Al-doped $Zn_{1-x}MgxO$ thin films. <i>Applied Physics Letters</i> , 2006, 89, 262107.	3.3	103
5	Linear-Source Ultrasonic Spray Chemical Vapor Deposition Method for Fabrication of ZnMgO Films and Ultraviolet Photodetectors. <i>Japanese Journal of Applied Physics</i> , 2006, 45, L857-L859.	1.5	87
6	Heteroepitaxial growth of $\mu\text{-Ga}_{2}\text{O}_{3}$ thin films on cubic (111) MgO and (111) yttria-stabilized zirconia substrates by mist chemical vapor deposition. <i>Japanese Journal of Applied Physics</i> , 2016, 55, 1202BC.	1.5	84
7	Stoichiometric control for heteroepitaxial growth of smooth $\mu\text{-Ga}_{2}\text{O}_{3}$ thin films on $\langle i\rangle c\langle /i\rangle$ -plane AlN templates by mist chemical vapor deposition. <i>Japanese Journal of Applied Physics</i> , 2017, 56, 078004.	1.5	68
8	Low-Temperature Growth of ZnO Thin Films by Linear Source Ultrasonic Spray Chemical Vapor Deposition. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 6811-6813.	1.5	65
9	Epitaxial growth of $\pm\text{-Ga}_2\text{O}_3$ thin films on a-, m-, and r-plane sapphire substrates by mist chemical vapor deposition using $\pm\text{-Fe}_2\text{O}_3$ buffer layers. <i>Materials Letters</i> , 2017, 205, 28-31.	2.6	63
10	Microstructures and rotational domains in orthorhombic $\mu\text{-Ga}_{2}\text{O}_{3}$ thin films. <i>Japanese Journal of Applied Physics</i> , 2018, 57, 115601.	1.5	61
11	Heteroepitaxial growth of $\mu\text{-}(Al_{x}Ga_{1-x})_2O_3$ alloy films on $\langle i\rangle c\langle /i\rangle$ -plane AlN templates by mist chemical vapor deposition. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	59
12	Incorporation of indium into $\mu$ -gallium oxide epitaxial thin films grown $\langle i\rangle \text{via} \langle /i\rangle$ mist chemical vapour deposition for bandgap engineering. <i>CrystEngComm</i> , 2018, 20, 1882-1888.	2.6	54
13	Heteroepitaxial growth of single-phase $\mu\text{-Ga}_{2}\text{O}_{3}$ thin films on $\langle i\rangle c\langle /i\rangle$ -plane sapphire by mist chemical vapor deposition using a NiO buffer layer. <i>CrystEngComm</i> , 2018, 20, 6236-6242.	2.6	38
14	Growth characteristics of single-crystalline ZnMgO layers by ultrasonic spray assisted mist CVD technique. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 1460-1463.	1.5	37
15	Rapid homoepitaxial growth of (010) $\mu\text{-Ga}_2\text{O}_3$ thin films via mist chemical vapor deposition. <i>Materials Science in Semiconductor Processing</i> , 2021, 128, 105732.	4.0	35
16	Use of mist chemical vapor deposition to impart ferroelectric properties to $\mu\text{-Ga}_2\text{O}_3$ thin films on SnO <sub>2</sub> /c-sapphire substrates. <i>Materials Letters</i> , 2018, 232, 47-50.	2.6	26
17	Mist Chemical Vapor Deposition of Single-Phase Metastable Rhombohedral Indium Tin Oxide Epitaxial Thin Films with High Electrical Conductivity and Transparency on Various $\pm\text{-Al}_{2}\text{O}_{3}$ Substrates. <i>Crystal Growth and Design</i> , 2018, 18, 4022-4028.	3.0	24
18	Single-Domain and Atomically Flat Surface of $\mu\text{-Ga}_{2}\text{O}_{3}$ Thin Films on FZ-Grown $\mu\text{-GaFeO}_3$ Substrates via Step-Flow Growth Mode. <i>ACS Omega</i> , 2020, 5, 29585-29592.	3.5	24

#	ARTICLE	IF	CITATIONS
19	Step-flow growth of homoepitaxial ZnO thin films by ultrasonic spray-assisted MOVPE. <i>Journal of Crystal Growth</i> , 2008, 310, 5007-5010.	1.5	23
20	Growth and characterization of F-doped $\text{Ga}_2\text{O}_3$ thin films with low electrical resistivity. <i>Thin Solid Films</i> , 2019, 682, 18-23.	1.8	23
21	Thermodynamically metastable $\text{Ga}_2\text{O}_3$ -, $\text{Ga}_2\text{O}_3\text{-}$ (or $\text{Ga}_2\text{O}_3\text{-}$ ), and $\text{Ga}_2\text{O}_3$ : From material growth to device applications. <i>APL Materials</i> , 2022, 10, .	5.1	23
22	Solution-based mist CVD technique for $\text{CH}_3\text{NH}_3\text{Pb}(\text{Br})_3$ T <sub>j</sub> ETQq0 0 0 rgBT /Overlock 10 Tf 50 Applied Physics, 2016, 55, 100308.	1.5	21
23	Phase control of $\text{Ga}_2\text{O}_3$ - and $\text{Ga}_2\text{O}_3$ epitaxial growth on $\text{LiNbO}_3$ and $\text{LiTaO}_3$ substrates using $\text{Fe}_2\text{O}_3$ buffer layers. <i>AIP Advances</i> , 2020, 10, .	1.3	18
24	PEDOT:PSS/GaAs <sub>1-x</sub> Bi <sub>x</sub> organicâ€“inorganic solar cells. <i>Japanese Journal of Applied Physics</i> , 2019, 58, 060907.	1.5	16
25	van der Waals epitaxy of ferroelectric $\text{Ga}_2\text{O}_3$ -gallium oxide thin film on flexible synthetic mica. <i>Japanese Journal of Applied Physics</i> , 2020, 59, 025503.	1.5	15
26	Impact of a small change in growth temperature on the tail states of GaAsBi. <i>Journal of Applied Physics</i> , 2019, 126, 045702.	2.5	14
27	Epitaxial growth of $\text{Al}_x\text{Ga}_{1-x}\text{O}_3$ alloy thin films on spinel substrates via mist chemical vapor deposition. <i>Journal of Alloys and Compounds</i> , 2021, 851, 156927.	5.5	14
28	Plan-view TEM observation of a single-domain $\text{Ga}_2\text{O}_3$ thin film grown on $\text{GaFeO}_3$ substrate using $\text{GaCl}_3$ precursor by mist chemical vapor deposition. <i>Japanese Journal of Applied Physics</i> , 2022, 61, 018002.	1.5	14
29	Deep levels and carrier capture kinetics in n-GaAsBi alloys investigated by deep level transient spectroscopy. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 345109.	2.8	11
30	Epitaxial Growth of Bendable Cubic NiO and In <sub>2</sub> O <sub>3</sub> Thin Films on Synthetic Mica for p- and n-type Wide-Bandgap Semiconductor Oxides. <i>MRS Advances</i> , 2020, 5, 1671-1679.	0.9	9
31	Junction properties of nitrogen-doped ZnO thin films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008, 5, 3088-3090.	0.8	8
32	Fabrication of a GaAs/GaNAsBi solar cell and its performance improvement by thermal annealing. <i>Semiconductor Science and Technology</i> , 2021, 36, 095020.	2.0	7
33	Alloying In <sub>2</sub> O <sub>3</sub> and Ga <sub>2</sub> O <sub>3</sub> on AlN templates for deep-ultraviolet transparent conductive films by mist chemical vapor deposition. <i>Japanese Journal of Applied Physics</i> , 2022, 61, SC1037.	1.5	6
34	Improving the photovoltaic properties of GaAs/GaAsBi pin diodes by inserting a compositionally graded layer at the hetero-interface. <i>Semiconductor Science and Technology</i> , 2022, 37, 065016.	2.0	6
35	Heteroepitaxial growth of $\text{Ga}_2\text{O}_3$ thin films on cubic (111) GGG substrates by mist chemical vapor deposition. , 2017, ,.	5	
36	A preliminary study on mist CVD-derived ferroelectric Hf <sub>1-x</sub> Zr <sub>x</sub> O <sub>2</sub> films featuring its possibility of suitable operation for non-volatile analog memory. <i>Japanese Journal of Applied Physics</i> , 2020, 59, SPPB09.	1.5	5

#	ARTICLE	IF	CITATIONS
37	Observing the microstructure of a (001) $\hat{\mu}$ -Ga <sub>2</sub> O <sub>3</sub> thin film grown on a ( $\hat{\alpha}$ '201) $\hat{\mu}$ -Ga <sub>2</sub> O <sub>3</sub> substrate using automated crystal orientation mapping transmission electron microscopy. CrystEngComm, 2022, 24, 3239-3245.	2.6	5
38	Determination of Zn-containing sites in $\hat{i}$ -Ga <sub>2</sub> O <sub>3</sub> film grown through mist chemical vapor deposition via X-ray absorption spectroscopy. Japanese Journal of Applied Physics, 2020, 59, 070909.	1.5	4
39	Epitaxial growth of metastable c-plane rhombohedral indium tin oxide using mist chemical vapor deposition. Materials Science in Semiconductor Processing, 2022, 147, 106689.	4.0	4
40	Growth of indium-incorporated $\hat{\mu}$ -Ga <sub>2</sub> O <sub>3</sub> thin film lattice-matched to the $\hat{\mu}$ -GaFeO <sub>3</sub> substrate. Materials Letters: X, 2022, 14, 100149.	0.7	4
41	Mist Deposition Technique as a Green Chemical Route for Synthesizing Oxide and Organic Thin Films. Materials Research Society Symposia Proceedings, 2009, 1220, 4061.	0.1	3
42	Mist chemical vapor deposition study of 20 and 100 nm thick undoped ferroelectric hafnium oxide films on n+-Si(100) substrates. Japanese Journal of Applied Physics, 2019, 58, SLLB10.	1.5	2
43	Growth of Metastable $\hat{\pm}$ -Ga <sub>2</sub> O <sub>3</sub> Epitaxial Thin Film on Flexible Synthetic Mica by Insertion $\hat{\pm}$ -Fe <sub>2</sub> O <sub>3</sub> Buffer Layer. Zairyo/Journal of the Society of Materials Science, Japan, 2021, 70, 738-744.	0.2	2
44	Fabrication OF ZnO and ZnMgO Thin Films and UV Photodetectors by Mist Chemical Vapor Deposition Method. Materials Research Society Symposia Proceedings, 2006, 957, 1.	0.1	1
45	Mist Chemical Vapor Deposition 2. Springer Series in Materials Science, 2020, , 243-255.	0.6	1
46	Ultrasonic spray assisted Mist-CVD method for high-quality crystalline and amorphous oxide semiconductors growth. Materials Research Society Symposia Proceedings, 2008, 1113, 1.	0.1	0
47	Microstructures of $\varepsilon$ -Ga <sub>2</sub> O <sub>3</sub> thin film on (100) TiO <sub>2</sub> substrate by mist chemical vapor deposition.. , 2019, , .	0	
48	Investigation of deep level defects in n-type GaAsBi. , 2022, , .	0	