## Takeshi Ohgaki

List of Publications by Year in descending order

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73 papers 1,060 citations

471509 17 h-index 434195 31 g-index

74 all docs

74 docs citations

74 times ranked 1082 citing authors

#	Article	IF	CITATIONS
1	Growth condition dependence of morphology and electric properties of ZnO films on sapphire substrates prepared by molecular beam epitaxy. Journal of Applied Physics, 2003, 93, 1961-1965.	2.5	100
2	Isothermal Capacitance Transient Spectroscopy for Deep Levels in Co- and Mn-doped ZnO Single Crystals. Journal of Materials Research, 2002, 17, 1529-1535.	2.6	65
3	Electric Properties of Zinc Oxide Epitaxial Films Grown by Ion-Beam Sputtering with Oxygen-Radical Irradiation. Japanese Journal of Applied Physics, 1999, 38, 3682-3688.	1.5	63
4	Band-edge emission of undoped and doped ZnO single crystals at room temperature. Journal of Applied Physics, 2002, 91, 3658-3663.	2.5	55
5	Structural and magnetic properties of Mn-ion implanted ZnO films. Journal of Applied Physics, 2007, 102, 014905.	2.5	51
6	Synthesis of ZnO Bicrystals Doped with Co or Mn and Their Electrical Properties. Japanese Journal of Applied Physics, 1999, 38, 5028-5032.	1.5	48
7	Optical Properties of Heavily Aluminum-Doped Zinc Oxide Thin Films Prepared by Molecular Beam Epitaxy. Key Engineering Materials, 2003, 248, 91-94.	0.4	39
8	Synthesizing SnO2 thin films and characterizing sensing performances. Sensors and Actuators B: Chemical, 2010, 150, 99-104.	7.8	39
9	Synthesis of zinc oxide varistors with a breakdown voltage of three volts using an intergranular glass phase in the bismuth–boron–oxide system. Applied Physics Letters, 2003, 83, 4857-4859.	3.3	38
10	Lowered stimulated emission threshold of zinc oxide by hydrogen doping with pulsed argon–hydrogen plasma. Journal of Crystal Growth, 2007, 306, 316-320.	1.5	38
11	Positive Hall coefficients obtained from contact misplacement on evident <i>n</i> -type ZnO films and crystals. Journal of Materials Research, 2008, 23, 2293-2295.	2.6	35
12	Polarity-dependent photoemission spectra of wurtzite-type zinc oxide. Applied Physics Letters, 2012, 100, .	3.3	32
13	Electrical properties of scandium nitride epitaxial films grown on (100) magnesium oxide substrates by molecular beam epitaxy. Journal of Applied Physics, 2013, 114, .	2.5	30
14	Eu-Doped CaAl[sub 2]Si[sub 2]O[sub 8] Nanocrystalline Phosphors Crystallized from the CaO–Al[sub 2]O[sub 3]–SiO[sub 2] Glass System. Journal of the Electrochemical Society, 2007, 154, J163.	2.9	29
15	Change in polarity of zinc oxide films grown on sapphire substrates without insertion of any buffer layer. Journal of Materials Research, 2008, 23, 3269-3272.	2.6	29
16	Polarity of heavily doped ZnO films grown on sapphire and SiO2 glass substrates by pulsed laser deposition. Thin Solid Films, 2011, 519, 5875-5881.	1.8	29
17	Lowering of stimulated emission threshold of zinc oxide by doping with thermally diffused aluminum supplied from sapphire substrate. Journal of Applied Physics, 2006, 100, 023524.	2.5	28
18	Development of ZnO-based surface plasmon resonance gas sensor and analysis of UV irradiation effect on NO2 desorption from ZnO thin films. Journal of the Ceramic Society of Japan, 2010, 118, 193-196.	1.1	18

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19	Structure and properties of GaN films grown on single crystalline ZnO substrates by molecular beam epitaxy. Journal of Crystal Growth, 2005, 275, e1143-e1148.	1.5	17
20	Role of Crystalline Polarity in Interfacial Properties of Zinc Oxide Varistors. Japanese Journal of Applied Physics, 2007, 46, L1042-L1044.	1.5	17
21	Effect of crystalline polarity on microstructure and optoelectronic properties of gallium-doped zinc oxide films deposited onto glass substrates. Thin Solid Films, 2014, 552, 56-61.	1.8	17
22	Molecular beam epitaxy growth of indium nitride films on c-face zinc oxide substrates. Journal of Crystal Growth, 2006, 292, 33-39.	1.5	14
23	Ethanol Gas Sensing by a Zn-Terminated ZnO(0001) Bulk Single-Crystalline Substrate. ACS Omega, 2020, 5, 21104-21112.	3.5	14
24	SIMS analysis of impurities and nitrogen isotopes in gallium nitride thin films. Applied Surface Science, 2006, 252, 7265-7268.	6.1	13
25	Ion implantation and diffusion behavior of silver in zinc oxide. Journal of the Ceramic Society of Japan, 2010, 118, 217-219.	1.1	12
26	Hydrogen in tin dioxide films and bulk ceramics: An attempt to identify the most hidden impurity. Applied Physics Letters, 2014, 104, 042110.	3.3	12
27	Preparation of Pd–Pt Co-Loaded TiO <sub>2</sub> Thin Films by Sol-Gel Method for Hydrogen Gas Sensing. Journal of the Electrochemical Society, 2012, 159, B845-B849.	2.9	11
28	Luminescence Property and Phase-Separation Texture of Phase-Separated Glasses and Glass-Ceramics in Mn-Doped ZnO-SiO2 System. Journal of the Ceramic Society of Japan, 2007, 115, 201-204.	1.3	10
29	Oxygen tracer diffusion in magnesium-doped ZnO ceramics. Journal of the Ceramic Society of Japan, 2010, 118, 362-365.	1.1	10
30	Interfacial Structure of GaN and InN Thin Films Grown on ZnO Substrates. Key Engineering Materials, 2006, 301, 79-82.	0.4	8
31	Defect Structure in (Zn,Mg)O Films Prepared on YSZ Substrate. Key Engineering Materials, 2006, 320, 103-106.	0.4	8
32	Oxygen diffusion in zinc-oxide thin films prepared by pulsed-laser deposition. Journal of the Ceramic Society of Japan, 2009, 117, 666-670.	1.1	8
33	Characterization of zinc oxide single crystals for epitaxial wafer applications. Materials Research Society Symposia Proceedings, 2003, 799, 245.	0.1	7
34	Oxygen Diffusion in Zinc Oxide Thin Films Deposited by PLD Method. Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2004, 51, 852-858.	0.2	7
35	Heteroepitaxial growth and electric properties of (110)-oriented scandium nitride films. Journal of Crystal Growth, 2017, 476, 12-16.	1.5	7

Structure and Electron Mobility of ScN Films Grown on α-Al2O3(1

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#	Article	IF	Citations
37	Photocatalytic Machining of Organic Polymer Surface by Use of Porous Titania Micro Wire. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2006, 19, 111-116.	0.3	6
38	Periodic supply of indium as surfactant for N-polar InN growth by plasma-assisted molecular-beam epitaxy. Applied Physics Letters, 2009, 95, .	3.3	6
39	Photoluminescence and x-ray diffraction measurements of InN epifilms grown with varying Inâ <sup>•</sup> N ratio by plasma-assisted molecular-beam epitaxy. Applied Physics Letters, 2008, 92, 211910.	3.3	5
40	Synthesis and Characterization of ZnO/Glass/ZnO Structures Showing Highly Nonlinear Current-Voltage Characteristics. Materials Transactions, 2009, 50, 1060-1066.	1.2	5
41	Electrical resistance response of a ZnO single-crystalline substrate to trace ethanol under pulsed air jet irradiation. Vacuum, 2020, 179, 109526.	3.5	5
42	Simultaneous Diffusion of Oxygen Tracer and Lithium Impurity in Aluminum Doped Zinc Oxide. Japanese Journal of Applied Physics, 2011, 50, 125501.	1.5	5
43	Polarity reversal of resistance response to trace H2 gas in the air between asymmetrically shaped electrodes on rutile-TiO2 single crystal. Journal of Applied Physics, 2022, 131, .	2.5	5
44	Cathodoluminescence Spectra of Mn or Co Doped ZnO Single Crystals. Key Engineering Materials, 1999, 157-158, 227-234.	0.4	4
45	Impurity Contamination and Diffusion during Annealing in Implanted ZnO. Key Engineering Materials, 2008, 388, 23-26.	0.4	4
46	Interface structure and polarity of GaN/ZnO heterostructure. Journal of the Ceramic Society of Japan, 2009, 117, 475-481.	1.1	4
47	Oxygen Diffusion in Zinc Oxide Single Crystals. Key Engineering Materials, 1998, 157-158, 221-226.	0.4	3
48	Electrical and Optical Properties of Zinc Oxide Thin Films and Heavily Aluminum-doped Zinc Oxide Thin Films Prepared by Molecular Beam Epitaxy. Materials Research Society Symposia Proceedings, 2002, 744, 1.	0.1	3
49	Crystallinity and Polarity of Indium Nitride Films Grown on the c-face of Zinc Oxide. Journal of the Ceramic Society of Japan, 2007, 115, 414-418.	1.3	3
50	Magnetic properties of phase separated Fe <sub>3</sub> O <sub>4</sub> -TiO <sub>2</sub> -SiO <sub>2</sub> glasses prepared from a two-liquids immiscible melt. Journal of Physics: Conference Series, 2008, 106, 012010.	0.4	3
51	Magnetic properties of phase separated glasses and glass ceramics in Co <sub>3</sub> O <sub>4</sub> -TiO <sub>2</sub> -SiO <sub>2</sub> system. Journal of Physics: Conference Series, 2008, 106, 012009.	0.4	3
52	Effect of post-annealing on structural and optical properties, and elemental distribution in heavy Eu-implanted ZnO thin films. Journal of the Ceramic Society of Japan, 2010, 118, 1087-1089.	1.1	3
53	Simultaneous Diffusion of Oxygen Tracer and Lithium Impurity in Aluminum Doped Zinc Oxide. Japanese Journal of Applied Physics, 2011, 50, 125501.	1.5	3
54	Influence of substrate nitridation on GaN and InN growth by plasma-assisted molecular-beam epitaxy. Journal of the Ceramic Society of Japan, 2012, 120, 513-519.	1.1	3

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55	Evaluation of zinc self-diffusion at the interface between homoepitaxial ZnO thin films and (0001) ZnO substrates. Solid State Communications, 2012, 152, 1917-1920.	1.9	3
56	Preparation of gold nanoparticle-loaded silica gels and their localized surface plasmon resonance sensing properties. Journal of Sol-Gel Science and Technology, 2014, 71, 1-7.	2.4	3
57	Defect structures in undoped and doped ZnO films studied by solid state diffusion. Materials Research Society Symposia Proceedings, 2004, 829, 178.	0.1	2
58	Zinc Self-Diffusion in Isotopic Heterostructured Zinc Oxide Thin Films. Key Engineering Materials, 2009, 421-422, 193-196.	0.4	2
59	Relationship between Aluminum and Lithium and Annealing for Reducing Lithium Contamination in Aluminum-Implanted Zinc Oxide. Key Engineering Materials, 2010, 445, 205-208.	0.4	2
60	Ultraviolet light emission properties of ZnO single crystals. , 1998, , 61-64.		1
61	Effect of Buffer Layers on Electric Property of ZnO Thin Films. Key Engineering Materials, 2001, 216, 73-76.	0.4	1
62	Effect of Doping on Luminescence Properties of ZnO. Key Engineering Materials, 2002, 228-229, 173-178.	0.4	1
63	Photocatalytic machining of organic molecular layer on a Si wafer surface by use of a porous TiO2 micro wire. Journal of the Ceramic Society of Japan, 2008, 116, 341-344.	1.1	1
64	Electrical Properties of Pt/Nb-Doped SrTiO <sub>3</sub> Schottky Junctions. Key Engineering Materials, 0, 421-422, 463-466.	0.4	1
65	Growth and characterization of isotopic <sup>nat</sup> Ga <sup>15</sup> N by molecularâ€beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S707.	0.8	1
66	Investigation on buffer layer for InN growth by molecular beam epitaxy. Journal of the Ceramic Society of Japan, 2010, 118, 152-156.	1.1	1
67	Nitrogen isotopic effect in Ga15N epifilms grown by plasma-assisted molecular-beam epitaxy. Scripta Materialia, 2010, 62, 516-519.	5.2	1
68	Correlation between film thickness and zinc defect distribution along the growth direction in an isotopic multilayer ZnO thin film grown by pulsed laser deposition analyzed using the internal diffusion method. Solid State Communications, 2010, 150, 2118-2121.	1.9	1
69	Development of a flux-film-coated sputtering (FFC-sputtering) method for fabricating c-axis oriented AIN film. AIP Advances, 2020, 10, .	1.3	1
70	Effect of Al-Doping into Zinc Oxide Films Prepared by Pulsed Laser Deposition Method with Various Oxidation Assists. Key Engineering Materials, 2006, 301, 75-78.	0.4	0
71	Growth and characterization of isotopic $<$ sup $>$ nat $<$ /sup $>$ Ga $<$ sup $>$ 15 $<$ /sup $>$ N by molecular-beam epitaxy. Proceedings of SPIE, 2009, , .	0.8	0
72	Oxygen Tracer Diffusion in A-Axis Oriented ZnO Thin Films Grown on (01-12) Sapphire by Pulsed Laser Deposition. Key Engineering Materials, 0, 566, 266-270.	0.4	0

#	Article	IF	CITATIONS
73	Crystal planeâ€dependent ethanol gas sensing of ZnO studied by lowâ€energy He + ion scattering combined with pulsed jet technique. Surface and Interface Analysis, 2021, 53, 747-753.	1.8	O