Yutaka Adachi

List of Publications by Year
in descending order

86	1,034	471509 17	477307 29
papers	citations	h-index	g-index

87	87	87	1111
all docs	docs citations	times ranked	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	Structural and magnetic properties of Mn-ion implanted ZnO films. Journal of Applied Physics, 2007, 102, 014905.	2.5	51
3	Structures and properties of (Zn,Mg)O films studied from the aspect of phase equilibria. Journal of Crystal Growth, 2006, 287, 134-138.	1.5	49
4	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
5	Synthesizing SnO2 thin films and characterizing sensing performances. Sensors and Actuators B: Chemical, 2010, 150, 99-104.	7.8	39
6	Lowered stimulated emission threshold of zinc oxide by hydrogen doping with pulsed argonâ€“hydrogen plasma. Journal of Crystal Growth, 2007, 306, 316-320.	1.5	38
7	Positive Hall coefficients obtained from contact misplacement on evident n-type ZnO films and crystals. Journal of Materials Research, 2008, 23, 2293-2295.	2.6	35
8	Polarity-dependent photoemission spectra of wurtzite-type zinc oxide. Applied Physics Letters, 2012, 100, .	3.3	32
9	Polarity-dependent photoemission spectra of wurtzite-type zinc oxide. Applied Physics Letters, 2009, 94, .	3.3	31
10	Crystallinity of In2O3(ZnO)5 films by epitaxial growth with a self-buffer-layer. Journal of Applied Physics, 2002, 92, 2378-2384.	2.5	30
11	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
12	Ferroelectric and piezoelectric properties of lanthanoid-substituted Bi4Ti3O12 thin films grown on (111)Pt and (100)IrO2 electrodes. Applied Physics Letters, 2005, 86, 172904.	3.3	29
13	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
14	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
15	Purely excitonic lasing in ZnO microcrystals: Temperature-induced transition between exciton-exciton and exciton-electron scattering. Physical Review B, 2017, 96, .	3.2	28
16	Properties of gallium- and aluminum-doped bulk ZnO obtained from single-crystals grown by liquid phase epitaxy. Journal of Crystal Growth, 2009, 311, 4408-4413.	1.5	24
17	Structure and Electric Properties in Tin-Doped Zinc Oxide Films Synthesized by Pulsed Laser Deposition. Journal of the Electrochemical Society, 2009, 156, H424.	2.9	20
18	Defects in ZnO transparent conductors studied by capacitance transients at ZnO/Si interface. Applied Physics Letters, 2011, 98, 082101.	3.3	18

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19	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
20	Floating zone growth and magnetic properties of Y2C two-dimensional electride. Journal of Crystal Growth, 2016, 454, 15-18.	1.5	16
21	Electronic States in Zinc Magnesium Oxide Alloy Semiconductors: Hard X-ray Photoemission Spectroscopy and Density Functional Theory Calculations. Chemistry of Materials, 2009, 21, 144-150.	6.7	15
22	Polarity control of intrinsic ZnO films using substrate bias. Applied Physics Letters, 2013, 103, .	3.3	15
23	Correlation Between High Gas Sensitivity and Dopant Structure in W-doped ZnO. Physical Review Applied, 2017, 7, .	3.8	15
24	Hard x-ray photoemission spectroscopy in wurtzite-type zinc magnesium oxide solid-solution films grown by pulsed-laser deposition. Applied Physics Letters, 2008, 92, 232108.	3.3	14
25	Ethanol Gas Sensing by a Zn-Terminated ZnO(0001) Bulk Single-Crystalline Substrate. ACS Omega, 2020, 5, 21104-21112.	3.5	14
26	Observation and simulation of hard x ray photoelectron diffraction to determine polarity of polycrystalline zinc oxide films with rotation domains. Journal of Applied Physics, 2012, 111, 033525.	2.5	13
27	Ion implantation and diffusion behavior of silver in zinc oxide. Journal of the Ceramic Society of Japan, 2010, 118, 217-219.	1.1	12
28	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
29	Electric field and temperature dependence of dielectric permittivity in strontium titanate investigated by a photoemission study on Pt/SrTiO3:Nb junctions. Applied Physics Letters, 2015, 106, .	3.3	12
30	Investigations of growth kinetics of pulsed laser deposition of tin oxide films by isotope tracer technique. Journal of Applied Physics, 2010, 108, 104901.	2.5	11
31	Influence of crystal polarity on Mg incorporation in ZnO. Physica Status Solidi (B): Basic Research, 2013, 250, 2122-2125.	1.5	11
32	Development of a Shape Memory Alloy Damper for Intelligent Bridge Systems. Materials Science Forum, 2000, 327-328, 31-34.	0.3	10
33	Formation of compensated defects in zinc magnesium oxides assignable from diffusion coefficients and hard x-ray photoemission. Applied Physics Letters, 2009, 94, .	3.3	10
34	Oxygen tracer diffusion in magnesium-doped ZnO ceramics. Journal of the Ceramic Society of Japan, 2010, 118, 362-365.	1.1	10
35	Polarity dependent gas sensing properties of ZnO thin films. Thin Solid Films, 2019, 685, 238-244.	1.8	10
36	Growth of Thick Zinc Magnesium Oxide by Liquid Phase Epitaxy. Applied Physics Express, 0, 1, 071201.	2.4	9

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37	Growth of Bulky Single Crystalline Films of (Zn,Mg)O Alloy Semiconductors by Liquid Phase Epitaxy. Crystal Growth and Design, 2009, 9, 1219-1224.	3.0	9
38	Electrical and optical properties of W-doped ZnO films grownon (11ar{2}0) sapphire substrates using pulsed laser deposition. Journal of the Ceramic Society of Japan, 2014, 122, 908-913.	1.1	9
39	Defect Structure in (Zn,Mg)O Films Prepared on YSZ Substrate. Key Engineering Materials, 2006, 320, 103-106.	0.4	8
40	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
41	Surface segregation of W doped in ZnO thin films. Surface Science, 2014, 625, 1-6.	1.9	8
42	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
43	InN Growth by Plasma-Assisted Molecular Beam Epitaxy with Indium Monolayer Insertion. Crystal Growth and Design, 2008, 8, 1073-1077.	3.0	7
44	Gas sensing properties of <i>c</i>-axis-oriented Al-incorporated ZnO films epitaxially grown on (11-20) sapphire substrates using pulsed laser deposition. Journal of the Ceramic Society of Japan, 2016, 124, 668-672.	1.1	7
45	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
46	Effect of Oxygen Source and Buffer Layer on Crystal Structure and Electric Properties of ZnO Films Grown by Pulsed Laser Deposition. Key Engineering Materials, 2003, 248, 83-86.	0.4	5
47	Photoluminescence and x-ray diffraction measurements of InN epifilms grown with varying Inâˆ•N ratio by plasma-assisted molecular-beam epitaxy. Applied Physics Letters, 2008, 92, 211910.	3.3	5
48	Planarization of Zinc Oxide Surface and Evaluation of Processing Damage. Key Engineering Materials, 0, 485, 215-218.	0.4	5
49	Evaluation of sensor property for hydrogen and ethanol of zinc-doped tin-dioxide thin films fabricated by rf sputtering. Journal of the Ceramic Society of Japan, 2016, 124, 714-716.	1.1	5
50	Simultaneous Diffusion of Oxygen Tracer and Lithium Impurity in Aluminum Doped Zinc Oxide. Japanese Journal of Applied Physics, 2011, 50, 125501.	1.5	5
51	Basic Examination for Nodulation-Doped (Zn,Mg,Al)O/ZnO. Key Engineering Materials, 2003, 248, 103-106.	0.4	4
52	Impurity Contamination and Diffusion during Annealing in Implanted ZnO. Key Engineering Materials, 2008, 388, 23-26.	0.4	4
53	Magnetism from Co and Eu implanted into ZnO. Journal of Magnetism and Magnetic Materials, 2021, 527, 167741.	2.3	4
54	Thermal diffusivity of (Ca_{1â€“x}Srx)₃Co₄O₉ thin films using transient grating configuration. Journal of Materials Research, 2003, 18, 2473-2477.	2.6	3

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55	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
56	Preparation and characterization of Zn18O/Zn16O isotope heterostructure thin films. Journal of the European Ceramic Society, 2010, 30, 423-428.	5.7	3
57	Simultaneous Diffusion of Oxygen Tracer and Lithium Impurity in Aluminum Doped Zinc Oxide. Japanese Journal of Applied Physics, 2011, 50, 125501.	1.5	3
58	Crystal Polarity and Electrical Properties of Heavily Doped ZnO Films. Materials Research Society Symposia Proceedings, 2012, 1494, 133-138.	0.1	3
59	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
60	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
61	Investigation of charge compensation in indium-doped tin dioxide by hydrogen insertion via annealing under humid conditions. Applied Physics Letters, 2014, 104, .	3.3	3
62	Quantitative secondary ion mass spectrometric analysis of secondary ion polarity in GaN films implanted with oxygen. Japanese Journal of Applied Physics, 2016, 55, 101001.	1.5	3
63	Excitonic stimulated emission from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">M</mml:mi><mml:msub><mml:mi mathvariant="normal">g</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:mi mathvariant="normal">Z</mml:mi><mml:msub><mml:mi mathvariant="normal">n</mml:mi><mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></	3.2	3
64	Impact of Two-Step Growth upon In₂O₃(ZnO)₅ Film Quality. Key Engineering Materials, 2002, 228-229, 167-172.	0.4	2
65	Defect structures in undoped and doped ZnO films studied by solid state diffusion. Materials Research Society Symposia Proceedings, 2004, 829, 178.	0.1	2
66	Effects of Film Orientation on Ferroelectric and Piezoelectric Properties of Lanthanoid-Substituted Bi4Ti3O12Thin Films. Japanese Journal of Applied Physics, 2007, 46, 686-690.	1.5	2
67	Zinc Self-Diffusion in Isotopic Heterostructured Zinc Oxide Thin Films. Key Engineering Materials, 2009, 421-422, 193-196.	0.4	2
68	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
69	Proximity coupling of superconducting nanograins with fractal distributions. Physical Review B, 2020, 101, .	3.2	2
70	MBD Preparation of SrCuO₂ Infinite Layer Thin Films. Key Engineering Materials, 1999, 169-170, 163-166.	0.4	1
71	Special Issue Ceramics Integration. Photoluminescence Measurements of ZnO/TbAlO3 Heterostructures.. Journal of the Ceramic Society of Japan, 2002, 110, 488-490.	1.3	1
72	Growth of KNbO₃Films by Solid-State Diffusion Technique. Ferroelectrics, 2007, 357, 185-190.	0.6	1

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73	(Mg,Zn)O/ZnO Heterostructures Prepared by Pulsed Laser Deposition. Key Engineering Materials, 0, 388, 3-6.	0.4	1
74	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
75	Nitrogen isotopic effect in Ga15N epifilms grown by plasma-assisted molecular-beam epitaxy. Scripta Materialia, 2010, 62, 516-519.	5.2	1
76	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
77	Low-Loss Transmission Characteristics of Transparent Conductive Thin Films in GHz Range. Key Engineering Materials, 0, 485, 207-210.	0.4	1
78	Enhancement of H2 gas sensing properties of ZnO films by Mg alloying. Surfaces and Interfaces, 2022, 28, 101597.	3.0	1
79	Preparation of [Ba2CuO2(CO3)]m[ACuO2]n(A=Sr,Ca) Films by MBE Technique. Materials Research Society Symposia Proceedings, 2001, 689, 1.	0.1	0
80	Anomaly of Thermal Properties in Thin Films of La1-xSrxCoO3 Series Synthesized with a Combinatorial Processing. Materials Research Society Symposia Proceedings, 2001, 700, 521.	0.1	0
81	Anomaly of Thermal Properties in Thin Films of La1-x SrxCoO3 Series Fabricated as Thermoelectric Materials. Materials Research Society Symposia Proceedings, 2002, 730, 1.	0.1	0
82	Preparation of oxycarbonate (BaxSr1-x)2CuO2(CO3) epitaxial films by molecular beam epitaxy. Thin Solid Films, 2002, 406, 224-227.	1.8	0
83	Preparation of films of the carbonate compound (BaxSr1x)2Cu1yO2(CO3)1y by molecular beam epitaxy. Electronics and Communications in Japan, 2003, 86, 77-83.	0.2	0
84	Redistributing Unintentional Defects Induced by Heavy Ion Implantation in ZnO Ceramics. Key Engineering Materials, 2009, 421-422, 201-204.	0.4	0
85	Fabricating transparent waveguide for wireless communication. Thin Solid Films, 2012, 520, 3835-3838.	1.8	0
86	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