

# Yutaka Adachi

## List of Publications by Year in descending order

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docs citations

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#	ARTICLE	IF	CITATIONS
1	Enhancement of H <sub>2</sub> gas sensing properties of ZnO films by Mg alloying. Surfaces and Interfaces, 2022, 28, 101597.	3.0	1
2	Magnetism from Co and Eu implanted into ZnO. Journal of Magnetism and Magnetic Materials, 2021, 527, 167741.	2.3	4
3	Ethanol Gas Sensing by a Zn-Terminated ZnO(0001) Bulk Single-Crystalline Substrate. ACS Omega, 2020, 5, 21104-21112.	3.5	14
4	Excitonic stimulated emission from $Mg_{1-x}Zn_xO$ . Physical Review B, 2017, 96, .	3.2	3
5	Proximity coupling of superconducting nanograins with fractal distributions. Physical Review B, 2020, 101, .	3.2	2
6	Polarity dependent gas sensing properties of ZnO thin films. Thin Solid Films, 2019, 685, 238-244.	1.8	10
7	Purely excitonic lasing in ZnO microcrystals: Temperature-induced transition between exciton-exciton and exciton-electron scattering. Physical Review B, 2017, 96, .	3.2	28
8	Correlation Between High Gas Sensitivity and Dopant Structure in W-doped ZnO. Physical Review Applied, 2017, 7, .	3.8	15
9	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
10	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
11	Floating zone growth and magnetic properties of Y <sub>2</sub> C two-dimensional electride. Journal of Crystal Growth, 2016, 454, 15-18.	1.5	16
12	Gas sensing properties of $c$ -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
13	Electric field and temperature dependence of dielectric permittivity in strontium titanate investigated by a photoemission study on Pt/SrTiO <sub>3</sub> :Nb junctions. Applied Physics Letters, 2015, 106, .	3.3	12
14	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
15	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
16	Surface segregation of W doped in ZnO thin films. Surface Science, 2014, 625, 1-6.	1.9	8
17	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
18	Electrical and optical properties of W-doped ZnO films grown on (11-20) sapphire substrates using pulsed laser deposition. Journal of the Ceramic Society of Japan, 2014, 122, 908-913.	1.1	9

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19	Electrical properties of scandium nitride epitaxial films grown on (100) magnesium oxide substrates by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	30
20	Polarity control of intrinsic ZnO films using substrate bias. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	15
21	Influence of crystal polarity on Mg incorporation in ZnO. <i>Physica Status Solidi (B): Basic Research</i> , 2013, 250, 2122-2125.	1.5	11
22	Crystal Polarity and Electrical Properties of Heavily Doped ZnO Films. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1494, 133-138.	0.1	3
23	Polarity-dependent photoemission spectra of wurtzite-type zinc oxide. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	32
24	Observation and simulation of hard x ray photoelectron diffraction to determine polarity of polycrystalline zinc oxide films with rotation domains. <i>Journal of Applied Physics</i> , 2012, 111, 033525.	2.5	13
25	Influence of substrate nitridation on GaN and InN growth by plasma-assisted molecular-beam epitaxy. <i>Journal of the Ceramic Society of Japan</i> , 2012, 120, 513-519.	1.1	3
26	Evaluation of zinc self-diffusion at the interface between homoepitaxial ZnO thin films and (0001) ZnO substrates. <i>Solid State Communications</i> , 2012, 152, 1917-1920.	1.9	3
27	Fabricating transparent waveguide for wireless communication. <i>Thin Solid Films</i> , 2012, 520, 3835-3838.	1.8	0
28	Polarity of heavily doped ZnO films grown on sapphire and SiO <sub>2</sub> glass substrates by pulsed laser deposition. <i>Thin Solid Films</i> , 2011, 519, 5875-5881.	1.8	29
29	Simultaneous Diffusion of Oxygen Tracer and Lithium Impurity in Aluminum Doped Zinc Oxide. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 125501.	1.5	3
30	Defects in ZnO transparent conductors studied by capacitance transients at ZnO/Si interface. <i>Applied Physics Letters</i> , 2011, 98, 082101.	3.3	18
31	Simultaneous Diffusion of Oxygen Tracer and Lithium Impurity in Aluminum Doped Zinc Oxide. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 125501.	1.5	5
32	Effect of post-annealing on structural and optical properties, and elemental distribution in heavy Eu-implanted ZnO thin films. <i>Journal of the Ceramic Society of Japan</i> , 2010, 118, 1087-1089.	1.1	3
33	Investigation on buffer layer for InN growth by molecular beam epitaxy. <i>Journal of the Ceramic Society of Japan</i> , 2010, 118, 152-156.	1.1	1
34	Ion implantation and diffusion behavior of silver in zinc oxide. <i>Journal of the Ceramic Society of Japan</i> , 2010, 118, 217-219.	1.1	12
35	Oxygen tracer diffusion in magnesium-doped ZnO ceramics. <i>Journal of the Ceramic Society of Japan</i> , 2010, 118, 362-365.	1.1	10
36	Nitrogen isotopic effect in Ga <sup>15</sup> N epilayers grown by plasma-assisted molecular-beam epitaxy. <i>Scripta Materialia</i> , 2010, 62, 516-519.	5.2	1

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37	Preparation and characterization of Zn <sup>18</sup> O/Zn <sup>16</sup> O isotope heterostructure thin films. Journal of the European Ceramic Society, 2010, 30, 423-428.	5.7	3
38	Synthesizing SnO <sub>2</sub> thin films and characterizing sensing performances. Sensors and Actuators B: Chemical, 2010, 150, 99-104.	7.8	39
39	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
40	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
41	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
42	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
43	Polarity-dependent photoemission spectra of wurtzite-type zinc oxide. Applied Physics Letters, 2009, 94, .	3.3	31
44	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
45	Zinc Self-Diffusion in Isotopic Heterostructured Zinc Oxide Thin Films. Key Engineering Materials, 2009, 421-422, 193-196.	0.4	2
46	Redistributing Unintentional Defects Induced by Heavy Ion Implantation in ZnO Ceramics. Key Engineering Materials, 2009, 421-422, 201-204.	0.4	0
47	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
48	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
49	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
50	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
51	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
52	InN Growth by Plasma-Assisted Molecular Beam Epitaxy with Indium Monolayer Insertion. Crystal Growth and Design, 2008, 8, 1073-1077.	3.0	7
53	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
54	Photoluminescence and x-ray diffraction measurements of InN epilayers grown with varying In <sup>x</sup> N <sup>1-x</sup> ratio by plasma-assisted molecular-beam epitaxy. Applied Physics Letters, 2008, 92, 211910.	3.3	5

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55	Change in polarity of zinc oxide films grown on sapphire substrates without insertion of any buffer layer. <i>Journal of Materials Research</i> , 2008, 23, 3269-3272.	2.6	29
56	Impurity Contamination and Diffusion during Annealing in Implanted ZnO. <i>Key Engineering Materials</i> , 2008, 388, 23-26.	0.4	4
57	Hard x-ray photoemission spectroscopy in wurtzite-type zinc magnesium oxide solid-solution films grown by pulsed-laser deposition. <i>Applied Physics Letters</i> , 2008, 92, 232108.	3.3	14
58	Effects of Film Orientation on Ferroelectric and Piezoelectric Properties of Lanthanoid-Substituted Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> Thin Films. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 686-690.	1.5	2
59	Structural and magnetic properties of Mn-ion implanted ZnO films. <i>Journal of Applied Physics</i> , 2007, 102, 014905.	2.5	51
60	Growth of KNbO <sub>3</sub> Films by Solid-State Diffusion Technique. <i>Ferroelectrics</i> , 2007, 357, 185-190.	0.6	1
61	Lowered stimulated emission threshold of zinc oxide by hydrogen doping with pulsed argon-hydrogen plasma. <i>Journal of Crystal Growth</i> , 2007, 306, 316-320.	1.5	38
62	Structures and properties of (Zn,Mg)O films studied from the aspect of phase equilibria. <i>Journal of Crystal Growth</i> , 2006, 287, 134-138.	1.5	49
63	Defect Structure in (Zn,Mg)O Films Prepared on YSZ Substrate. <i>Key Engineering Materials</i> , 2006, 320, 103-106.	0.4	8
64	Ferroelectric and piezoelectric properties of lanthanoid-substituted Bi <sub>4</sub> Ti <sub>3</sub> O <sub>12</sub> thin films grown on (111)Pt and (100)IrO <sub>2</sub> electrodes. <i>Applied Physics Letters</i> , 2005, 86, 172904.	3.3	29
65	Defect structures in undoped and doped ZnO films studied by solid state diffusion. <i>Materials Research Society Symposia Proceedings</i> , 2004, 829, 178.	0.1	2
66	Oxygen Diffusion in Zinc Oxide Thin Films Deposited by PLD Method. <i>Funtai Oyobi Fumatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy</i> , 2004, 51, 852-858.	0.2	7
67	Preparation of films of the carbonate compound (Ba <sub>x</sub> Sr <sub>1-x</sub> ) <sub>2</sub> Cu <sub>1-y</sub> O <sub>2</sub> (CO <sub>3</sub> ) <sub>1-y</sub> by molecular beam epitaxy. <i>Electronics and Communications in Japan</i> , 2003, 86, 77-83.	0.2	0
68	Basic Examination for Nodulation-Doped (Zn,Mg,Al)O/ZnO. <i>Key Engineering Materials</i> , 2003, 248, 103-106.	0.4	4
69	Effect of Oxygen Source and Buffer Layer on Crystal Structure and Electric Properties of ZnO Films Grown by Pulsed Laser Deposition. <i>Key Engineering Materials</i> , 2003, 248, 83-86.	0.4	5
70	Optical Properties of Heavily Aluminum-Doped Zinc Oxide Thin Films Prepared by Molecular Beam Epitaxy. <i>Key Engineering Materials</i> , 2003, 248, 91-94.	0.4	39
71	Thermal diffusivity of (Ca <sub>x</sub> Sr <sub>1-x</sub> ) <sub>3</sub> Co <sub>4</sub> O <sub>9</sub> thin films using transient grating configuration. <i>Journal of Materials Research</i> , 2003, 18, 2473-2477.	2.6	3
72	Growth condition dependence of morphology and electric properties of ZnO films on sapphire substrates prepared by molecular beam epitaxy. <i>Journal of Applied Physics</i> , 2003, 93, 1961-1965.	2.5	100

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73	Crystallinity of In <sub>2</sub> O <sub>3</sub> (ZnO) <sub>5</sub> films by epitaxial growth with a self-buffer-layer. Journal of Applied Physics, 2002, 92, 2378-2384.	2.5	30
74	Impact of Two-Step Growth upon In <sub>2</sub> O <sub>3</sub> (ZnO) <sub>5</sub> Film Quality. Key Engineering Materials, 2002, 228-229, 167-172.	0.4	2
75	Special Issue Ceramics Integration. Photoluminescence Measurements of ZnO/TbAlO <sub>3</sub> Heterostructures.. Journal of the Ceramic Society of Japan, 2002, 110, 488-490.	1.3	1
76	Anomaly of Thermal Properties in Thin Films of La <sub>1-x</sub> Sr <sub>x</sub> CoO <sub>3</sub> Series Fabricated as Thermoelectric Materials. Materials Research Society Symposia Proceedings, 2002, 730, 1.	0.1	0
77	Preparation of oxycarbonate (Ba <sub>x</sub> Sr <sub>1-x</sub> ) <sub>2</sub> CuO <sub>2</sub> (CO <sub>3</sub> ) epitaxial films by molecular beam epitaxy. Thin Solid Films, 2002, 406, 224-227.	1.8	0
78	Preparation of [Ba <sub>2</sub> CuO <sub>2</sub> (CO <sub>3</sub> ) <sub>m</sub> [ACuO <sub>2</sub> ] <sub>n</sub> (A=Sr,Ca) Films by MBE Technique. Materials Research Society Symposia Proceedings, 2001, 689, 1.	0.1	0
79	Anomaly of Thermal Properties in Thin Films of La <sub>1-x</sub> Sr <sub>x</sub> CoO <sub>3</sub> Series Synthesized with a Combinatorial Processing. Materials Research Society Symposia Proceedings, 2001, 700, 521.	0.1	0
80	Development of a Shape Memory Alloy Damper for Intelligent Bridge Systems. Materials Science Forum, 2000, 327-328, 31-34.	0.3	10
81	MBD Preparation of SrCuO <sub>2</sub> ; Infinite Layer Thin Films. Key Engineering Materials, 1999, 169-170, 163-166.	0.4	1
82	Growth of Thick Zinc Magnesium Oxide by Liquid Phase Epitaxy. Applied Physics Express, 0, 1, 071201.	2.4	9
83	(Mg,Zn)O/ZnO Heterostructures Prepared by Pulsed Laser Deposition. Key Engineering Materials, 0, 388, 3-6.	0.4	1
84	Planarization of Zinc Oxide Surface and Evaluation of Processing Damage. Key Engineering Materials, 0, 485, 215-218.	0.4	5
85	Low-Loss Transmission Characteristics of Transparent Conductive Thin Films in GHz Range. Key Engineering Materials, 0, 485, 207-210.	0.4	1
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