Toshihiro Miyata

List of Publications by Year
in descending order

61 papers	3,343 citations	117571 34 h-index	138417 58 g-index
61 all docs	61 docs citations	61 times ranked	2917 citing authors

#	Article	IF	Citations
1	Photovoltaic properties of low-damage magnetron-sputtered n-type ZnO thin film/p-type Cu2O sheet heterojunction solar cells. Thin Solid Films, 2020, 697, 137825.	0.8	17
2	Electron Scattering from Disordered Grain Boundaries in Degenerate Polycrystalline Alâ€Ðoped ZnO Thin Films. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1700783.	0.8	3
3	Textured surface structures formed using new techniques on transparent conducting Al-doped zinc oxide films prepared by magnetron sputtering. Thin Solid Films, 2016, 614, 56-61.	0.8	9
4	Efficiency enhancement using a Zn_{1âˆ’} _xGe_x-O thin film as an n-type window layer in Cu₂O-based heterojunction solar cells. Applied Physics Express, 2016, 9, 052301.	1.1	152
5	Efficiency enhanced solar cells with a Cu2O homojunction grown epitaxially on p-Cu2O:Na sheets by electrochemical deposition. MRS Communications, 2016, 6, 416-420.	0.8	11
6	Electrochemically deposited Cu2O thin films on thermally oxidized Cu2O sheets for solar cell applications. Solar Energy Materials and Solar Cells, 2016, 155, 405-410.	3.0	36
7	Cu₂O-based solar cells using oxide semiconductors. Journal of Semiconductors, 2016, 37, 014002.	2.0	50
8	Relationship between the electrical properties of the n-oxide and p-Cu 2 O layers and the photovoltaic properties of Cu 2 O-based heterojunction solar cells. Solar Energy Materials and Solar Cells, 2016, 147, 85-93.	3.0	39
9	Heterojunction solar cell with 6% efficiency based on an n-type aluminumâ€"galliumâ€"oxide thin film and p-type sodium-doped Cu₂O sheet. Applied Physics Express, 2015, 8, 022301.	1.1	157
10	Impact of incorporating sodium into polycrystalline p-type Cu2O for heterojunction solar cell applications. Applied Physics Letters, 2014, 105, .	1.5	50
11	Cu2O-based heterojunction solar cells with an Al-doped ZnO/oxide semiconductor/thermally oxidized Cu2O sheet structure. Solar Energy, 2014, 105, 206-217.	2.9	79
12	Efficiency improvement of Cu2O-based heterojunction solar cells fabricated using thermally oxidized copper sheets. Thin Solid Films, 2014, 559, 105-111.	0.8	38
13	Influence of the kind and content of doped impurities on impurity-doped ZnO transparent electrode applications in thin-film solar cells. Thin Solid Films, 2013, 534, 426-431.	0.8	18
14	High-Efficiency Cu₂O-Based Heterojunction Solar Cells Fabricated Using a Ga₂O₃Thin Film as N-Type Layer. Applied Physics Express, 2013, 6, 044101.	1.1	257
15	The impact of heterojunction formation temperature on obtainable conversion efficiency in n-ZnO/p-Cu2O solar cells. Thin Solid Films, 2013, 528, 72-76.	0.8	70
16	Effect of inserting a thin buffer layer on the efficiency in <i>n</i>-ZnO/<i>p</i>-Cu2O heterojunction solar cells. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, .	0.9	39
17	Impurity-doped ZnO Thin Films Prepared by Physical Deposition Methods Appropriate for Transparent Electrode Applications in Thin-film Solar Cells. IOP Conference Series: Materials Science and Engineering, 2012, 34, 012001.	0.3	16
18	Influence of rapid thermal annealing on surface texture-etched Al-doped ZnO films prepared by various magnetron sputtering methods. Thin Solid Films, 2012, 520, 3803-3807.	0.8	13

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19	High-Efficiency Oxide Solar Cells with ZnO/Cu₂O Heterojunction Fabricated on Thermally Oxidized Cu₂O Sheets. Applied Physics Express, 2011, 4, 062301.	1.1	233
20	Color control of emissions from rare earth-co-doped La2O3:Bi phosphor thin films prepared by magnetron sputtering. Thin Solid Films, 2011, 519, 8095-8099.	0.8	13
21	Preparation of Al-doped ZnO transparent electrodes suitable for thin-film solar cell applications by various types of magnetron sputtering depositions. Thin Solid Films, 2011, 520, 1400-1406.	0.8	93
22	Optical and electrical properties of transparent conducting B-doped ZnO thin films prepared by various deposition methods. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	0.9	12
23	Blue PL and EL emissions from Bi-activated binary oxide thin-film phosphors. Thin Solid Films, 2010, 518, 3067-3070.	0.8	28
24	Improvements of spatial resistivity distribution in transparent conducting Al-doped ZnO thin films deposited by DC magnetron sputtering. Thin Solid Films, 2010, 518, 2984-2987.	0.8	45
25	Comparative study of resistivity characteristics between transparent conducting AZO and GZO thin films for use at high temperatures. Thin Solid Films, 2010, 518, 2937-2940.	0.8	68
26	Effect of target properties on transparent conducting impurity-doped ZnO thin films deposited by DC magnetron sputtering. Thin Solid Films, 2010, 519, 385-390.	0.8	48
27	Effect of inserting a buffer layer on the characteristics of transparent conducting impurity-doped ZnO thin films prepared by dc magnetron sputtering. Thin Solid Films, 2010, 519, 1587-1593.	0.8	34
28	Luminescent characteristics in blue-emitting Bi-activated multicomponent oxide phosphor thin films. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2010, 28, C2B56-C2B61.	0.6	4
29	Resistivity characteristics of transparent conducting impurity-doped ZnO films for use in oxidizing environments at high temperatures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 861-866.	0.9	19
30	Transparent conducting impurity-doped ZnO thin films prepared using oxide targets sintered by millimeter-wave heating. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 1006-1011.	0.9	7
31	Photoluminescent and electroluminescent characteristics of various Bi-activated niobate-based oxide phosphor thin films. Thin Solid Films, 2009, 517, 6054-6057.	0.8	14
32	Effect of spatial relationship between arc plasma and substrate on the properties of transparent conducting Ga-doped ZnO thin films prepared by vacuum arc plasma evaporation. Thin Solid Films, 2009, 517, 6824-6828.	0.8	5
33	PL and EL Characteristics in New Blue Emitting La2O3:Bi Phosphor Thin Films. ECS Transactions, 2009, 16, 39-45.	0.3	9
34	Transparent conducting Si-codoped Al-doped ZnO thin films prepared by magnetron sputtering using Al-doped ZnO powder targets containing SiC. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 1001-1005.	0.9	11
35	Stability of nano-thick transparent conducting oxide films for use in a moist environment. Thin Solid Films, 2008, 516, 1354-1358.	0.8	42
36	Stability in a high humidity environment of TCO thin films deposited at low temperatures. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 255-260.	0.8	35

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37	Present status and future prospects for development of non- or reduced-indium transparent conducting oxide thin films. Thin Solid Films, 2008, 517, 1474-1477.	0.8	181
38	Transparent conducting Al-doped ZnO thin films prepared by magnetron sputtering with dc and rf powers applied in combination. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2007, 25, 1172-1177.	0.9	36
39	Effect of thickness on the stability of transparent conducting impurity-doped ZnO thin films in a high humidity environment. Physica Status Solidi - Rapid Research Letters, 2007, 1, R31-R33.	1.2	68
40	New Transparent Conducting Al-doped ZnO Film Preparation Techniques for Improving Resistivity Distribution in Magnetron Sputtering Deposition. Japanese Journal of Applied Physics, 2006, 45, L409-L412.	0.8	67
41	Effect of ZnO film deposition methods on the photovoltaic properties of ZnOâ€"Cu2O heterojunction devices. Thin Solid Films, 2006, 494, 47-52.	0.8	143
42	Blue-violet phosphate phosphor thin films for EL. Thin Solid Films, 2006, 496, 174-178.	0.8	3
43	P-type semiconducting Cu2Oâ€"NiO thin films prepared by magnetron sputtering. Journal of Materials Science, 2006, 41, 5531-5537.	1.7	18
44	Electrical and optical properties of TCOâ€"Cu2O heterojunction devices. Thin Solid Films, 2004, 469-470, 80-85.	0.8	73
45	Highly transparent and conductive ZnO:Al thin films prepared by vacuum arc plasma evaporation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 1711-1715.	0.9	32
46	High-Efficiency Oxide Heterojunction Solar Cells Using Cu2O Sheets. Japanese Journal of Applied Physics, 2004, 43, L917-L919.	0.8	91
47	Low resistivity polycrystalline ZnO:Al thin films prepared by pulsed laser deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 1757-1762.	0.9	91
48	Preparation of Mn-activated yttrium germanate phosphor thin films for electroluminescent devices. Thin Solid Films, 2003, 425, 35-40.	0.8	7
49	Transparent conducting ZnO thin films deposited by vacuum arc plasma evaporation. Thin Solid Films, 2003, 445, 268-273.	0.8	86
50	Transparent conducting V-co-doped AZO thin films prepared by magnetron sputtering. Thin Solid Films, 2003, 434, 14-19.	0.8	80
51	p-type semiconducting Cu2Oâ€"CoO thin films prepared by magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1336-1341.	0.9	20
52	High-rate deposition of ZnO thin films by vacuum arc plasma evaporation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1404-1408.	0.9	24
53	New transparent conducting thin films using multicomponent oxides composed of ZnO and V2O5 prepared by magnetron sputtering. Thin Solid Films, 2002, 411, 76-81.	0.8	43
54	High rate deposition of transparent conducting oxide thin films by vacuum arc plasma evaporation. Thin Solid Films, 2002, 416, 92-96.	0.8	119

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55	Electrical Conduction Mechanism of Highly Transparent and Conductive ZnO Thin Films. Materials Research Society Symposia Proceedings, 2001, 666, 131.	0.1	47
56	Ozone gas sensors with high sensitivity using Zn2In2O5â€“MgIn2O4 multicomponent oxide thin films. Surface and Coatings Technology, 2000, 126, 219-224.	2.2	14
57	Origin of electrical property distribution on the surface of ZnO:Al films prepared by magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 1584-1589.	0.9	87
58	Stability of transparent conducting oxide films for use at high temperatures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 1822-1826.	0.9	88
59	Mn-Activated CaO-Ga2O3 Phosphors for Thin-Film Electroluminescent Devices. Japanese Journal of Applied Physics, 1997, 36, L1191-L1194.	0.8	39
60	New Materials Consisting of Multicomponent Oxides for Thinâ€Film Gas Sensors. Journal of the Electrochemical Society, 1997, 144, 2432-2436.	1.3	20
61	High-Luminance Green Zn2SiO4:Mn Thin-Film Electroluminescent Devices Using an Insulating BaTiO3Ceramic Sheet. Japanese Journal of Applied Physics, 1991, 30, L117-L119.	0.8	92