

Rachmat Adhi Wibowo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6991555/publications.pdf>

Version: 2024-02-01

42
papers

918
citations

567281

15
h-index

454955

30
g-index

42
all docs

42
docs citations

42
times ranked

1142
citing authors

#	ARTICLE	IF	CITATIONS
1	Single step preparation of quaternary thin films by RF magnetron sputtering from binary chalcogenide targets. <i>Journal of Physics and Chemistry of Solids</i> , 2007, 68, 1908-1913.	4.0	151
2	Pulsed laser deposition of quaternary $\text{Cu}_2\text{ZnSnSe}_4$ thin films. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007, 204, 3373-3379.	1.8	135
3	Highly transparent and conductive indium-doped zinc oxide films deposited at low substrate temperature by spray pyrolysis from water-based solutions. <i>Journal of Materials Science</i> , 2017, 52, 8591-8602.	3.7	57
4	$\text{Cu}_2\text{ZnSn}(\text{S},\text{Se})_4$ solar cells processed by rapid thermal processing of stacked elemental layer precursors. <i>Thin Solid Films</i> , 2013, 535, 5-9.	1.8	49
5	All-oxide solar cells based on electrodeposited Cu_2O absorber and atomic layer deposited ZnMgO on precious-metal-free electrode. <i>Solar Energy Materials and Solar Cells</i> , 2017, 161, 449-459.	6.2	43
6	Nanocrystalline Ga_2O_3 films deposited by spray pyrolysis from water-based solutions on glass and TCO substrates. <i>Journal of Materials Chemistry C</i> , 2019, 7, 69-77.	5.5	43
7	Properties of Al-doped ZnO thin film sputtered from powder compacted target. <i>Materials Letters</i> , 2006, 60, 1931-1935.	2.6	41
8	Comparison of chemical bath-deposited ZnO films doped with Al, Ga and In. <i>Journal of Materials Science</i> , 2017, 52, 9410-9423.	3.7	35
9	Synthesis of $\text{Cu}_2\text{ZnSnSe}_4$ compound powders by solid state reaction using elemental powders. <i>Journal of Physics and Chemistry of Solids</i> , 2010, 71, 1702-1706.	4.0	34
10	Polymer interlayers on flexible PET substrates enabling ultra-high performance, ITO-free dielectric/metal/dielectric transparent electrode. <i>Materials and Design</i> , 2019, 168, 107663.	7.0	33
11	Intermetallic compounds dynamic formation during annealing of stacked elemental layers and its influences on the crystallization of $\text{Cu}_2\text{ZnSnSe}_4$ films. <i>Materials Chemistry and Physics</i> , 2013, 142, 311-317.	4.0	28
12	A study of kesterite $\text{Cu}_2\text{ZnSn}(\text{Se},\text{S})_4$ formation from sputtered Cu-Zn-Sn metal precursors by rapid thermal processing sulfo-selenization of the metal thin films. <i>Thin Solid Films</i> , 2013, 535, 57-61.	1.8	28
13	Solution-processed all-oxide solar cell based on electrodeposited Cu_2O and ZnMgO by spray pyrolysis. <i>Journal of Materials Science</i> , 2018, 53, 12231-12243.	3.7	28
14	Properties of transparent and conductive $\text{Al:ZnO}/\text{Au}/\text{Al:ZnO}$ multilayers on flexible PET substrates. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2015, 200, 84-92.	3.5	27
15	Crystallization of $\text{Cu}_2\text{ZnSnSe}_4$ compound by solid state reaction using elemental powders. <i>Materials Chemistry and Physics</i> , 2010, 124, 1006-1010.	4.0	24
16	Formation of Cu_2SnSe_3 from stacked elemental layers investigated by combined in situ X-ray diffraction and differential scanning calorimetry techniques. <i>Journal of Alloys and Compounds</i> , 2014, 588, 254-258.	5.5	17
17	Influence of the acetic acid concentration on the growth of zinc oxide thin films prepared by spray pyrolysis of aqueous solutions. <i>Thin Solid Films</i> , 2015, 594, 238-244.	1.8	16
18	Influence of the aqueous solution composition on the morphology of $\text{Zn}_{1-x}\text{Mg}_x\text{O}$ films deposited by spray pyrolysis. <i>Journal of Materials Chemistry C</i> , 2019, 7, 3889-3900.	5.5	16

#	ARTICLE	IF	CITATIONS
19	Band gap engineering of RF-sputtered CuInZnSe ₂ thin films for indium-reduced thin-film solar cell application. <i>Solar Energy Materials and Solar Cells</i> , 2009, 93, 941-944.	6.2	13
20	Optimization of growth parameters for growth of high quality heteroepitaxial 3C-SiC films at 1200°C. <i>Thin Solid Films</i> , 2015, 577, 88-93.	1.8	12
21	Galvanostatically-electrodeposited Cu-Zn-Sn multilayers as precursors for crystallising kesterite Cu ₂ ZnSnS ₄ thin films. <i>Thin Solid Films</i> , 2015, 582, 239-244.	1.8	10
22	Powder-to-film approach for fabricating critical raw material-free kesterite Cu ₂ ZnSn(S,Se) ₄ thin film photovoltaic: A review. <i>Solar Energy</i> , 2018, 176, 157-169.	6.1	10
23	Fast sputter deposition of MoOx/metal/MoOx transparent electrodes on glass and PET substrates. <i>Journal of Materials Science</i> , 2021, 56, 9047-9064.	3.7	10
24	Real-time investigations on the formation of Cu(In,Ga)(S,Se) ₂ while annealing Cu-In-Ga precursors with different sulphur-selenium mixtures. <i>Thin Solid Films</i> , 2013, 535, 112-117.	1.8	8
25	The formation mechanism of secondary phases in Cu ₂ ZnSnSe ₄ absorber layer. <i>Thin Solid Films</i> , 2015, 582, 245-248.	1.8	8
26	Rapid Processing of In-Doped ZnO by Spray Pyrolysis from Environment-Friendly Precursor Solutions. <i>Coatings</i> , 2019, 9, 245.	2.6	7
27	Growth and Properties of Stannite-Quaternary Cu ₂ ZnSnSe ₄ Thin Films Prepared by Selenization of Sputtered Binary Compound Precursors. <i>Advanced Materials Research</i> , 2007, 29-30, 79-82.	0.3	5
28	All-solution-processed transparent front contact for monograin layer kesterite solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2019, 27, 547-555.	8.1	5
29	Low-Temperature-Processed Transparent Electrodes Based on Compact and Mesoporous Titanium Oxide Layers for Flexible Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2022, 5, 5318-5330.	5.1	5
30	Growth of Cu(In _{1-x} Al _x)Se ₂ Thin Films by Atmospheric Pressure Selenization of Sputtered Precursors. <i>Solid State Phenomena</i> , 2007, 124-126, 931-934.	0.3	4
31	Design and implementation of an ultrathin dielectric/metal/dielectric transparent electrode for Cu ₂ ZnSnS ₄ thin-film photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , 2021, 230, 111247.	6.2	3
32	Flexible Transparent Heater Fabricated from Spray-Coated In:ZnO/Ag-NWs/In:ZnO Multilayers on Polyimide Foil. <i>Nanomaterials</i> , 2022, 12, 316.	4.1	3
33	Optimising The Parameters For The Synthesis Of CuIn-Nanoparticles By Chemical Reduction Method For Chalcopyrite Thin Film Precursors. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1538, 203-208.	0.1	2
34	Investigation of Deposition Parameters Dependence on Sputtered Cu ₂ ZnSnSe ₄ Thin Films Properties. <i>Advanced Materials Research</i> , 0, 1125, 143-147.	0.3	2
35	Dynamic interplay of alkali cations and a natural organic binder in the microstructural evolution of Cu ₂ ZnSnS ₄ thin films prepared from Cu ₂ ZnSnS ₄ powder-containing inks. <i>RSC Advances</i> , 2019, 9, 28670-28677.	3.6	2
36	Transparent electrodes based on molybdenum-titanium oxide with increased water stability for use as hole-transport/hole-injection components. <i>Journal of Materials Science</i> , 2022, 57, 8752-8766.	3.7	2

#	ARTICLE	IF	CITATIONS
37	Highly c-Axis Oriented Al-Doped ZnO Thin Films Grown in Premixed H ₂ /Ar Sputtering Gas. <i>Advanced Materials Research</i> , 2007, 29-30, 215-218.	0.3	1
38	Synthesis of Cu(In _{0.75} Al _{0.25})Se ₂ Thin Films from Binary Selenides Powder Compacted Targets by Sputtering and Selenization. <i>Solid State Phenomena</i> , 0, 135, 99-102.	0.3	1
39	Preparation and characterization of sputtered CuInSe ₂ thin films using a single target composed of a mixture CuSe and InSe binary selenides powders. <i>Optoelectronic and Microelectronic Materials and Devices (COMMAD), Conference on</i> , 2008, , .	0.0	0
40	EFFECTS OF DEPOSITION PARAMETERS AND OXYGEN ADDITION ON PROPERTIES OF SPUTTERED INDIUM TIN OXIDE FILMS. <i>MAKARA of Technology Series</i> , 2013, 16, .	0.0	0
41	Cu ₂ ZnSnSe ₄ Thin Films Preparation by Pulsed Laser Deposition Using Powder Compacted Target. <i>Journal of the Korean Institute of Surface Engineering</i> , 2011, 44, 185-189.	0.1	0
42	Material investigation on magnetron sputtered TiO _{2-x} alternative buffer layers for CIGSe absorber produced in an industrial roll-to-roll hybrid sputter co-evaporation process. , 2020, , .		0