

Rujun Sun

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/241797/publications.pdf>

Version: 2024-02-01

44
papers

659
citations

566801

15
h-index

642321

23
g-index

44
all docs

44
docs citations

44
times ranked

780
citing authors

#	ARTICLE	IF	CITATIONS
1	Electronic and ionic conductivity in $\hat{\Gamma}^2$ -Ga ₂ O ₃ single crystals. Journal of Applied Physics, 2022, 131, .	1.1	5
2	Proposal and Simulation of Ga ₂ O ₃ MOSFET With PN Heterojunction Structure for High-Performance E-Mode Operation. IEEE Transactions on Electron Devices, 2022, 69, 3617-3622.	1.6	11
3	Oxygen annealing induced changes in defects within $\hat{\Gamma}^2$ -Ga ₂ O ₃ epitaxial films measured using photoluminescence. Journal Physics D: Applied Physics, 2021, 54, 174004.	1.3	11
4	Optical Characterization of Gallium Oxide $\hat{\Gamma}^2$ and $\hat{\Gamma}^2$ Polymorph Thin-Films Grown on c-Plane Sapphire. Journal of Electronic Materials, 2021, 50, 2990-2998.	1.0	9
5	In Situ Dielectric Al ₂ O ₃ / $\hat{\Gamma}^2$ -Ga ₂ O ₃ Interfaces Grown Using Metal-Organic Chemical Vapor Deposition. Advanced Electronic Materials, 2021, 7, 2100333.	2.6	17
6	Defect states and their electric field-enhanced electron thermal emission in heavily Zr-doped $\hat{\Gamma}^2$ -Ga ₂ O ₃ crystals. Applied Physics Letters, 2020, 117, .	1.5	13
7	Efficient Cu ₂ ZnSn(S _e ,S) ₄ solar cells with 79% fill factor using two-step annealing. Solar Energy Materials and Solar Cells, 2020, 215, 110682.	3.0	7
8	On the origin of red luminescence from iron-doped $\hat{\Gamma}^2$ -Ga ₂ O ₃ bulk crystals. Applied Physics Letters, 2020, 117, .	1.5	26
9	Measurement of Capacitance Using Spread Spectrum Time Domain Reflectometry (SSTDR) and Dictionary Matching. IEEE Sensors Journal, 2020, 20, 10102-10109.	2.4	11
10	Synthesis and Characterization of Large-Area Nanometer-Thin $\hat{\Gamma}^2$ -Ga ₂ O ₃ Films from Oxide Printing of Liquid Metal Gallium. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1901007.	0.8	16
11	Phases formation of Cu ₂ ZnSnS ₄ thin films by sulfurizing stacked precursors by sputtering from Cu Zn and Cu Sn targets. Thin Solid Films, 2019, 690, 137561.	0.8	3
12	Spread Spectrum Time Domain Reflectometry (SSTDR) and Dictionary Matching to Measure Capacitance for PV cells. , 2019, , .		3
13	The effects of annealing temperature on CIGSeS solar cells by sputtering from quaternary target with H ₂ S post annealing. Applied Surface Science, 2019, 473, 848-854.	3.1	8
14	An investigation on the relationship between open circuit voltage and grain size for CZTSSe thin film solar cells fabricated by selenization of sputtered precursors. Journal of Alloys and Compounds, 2019, 773, 689-697.	2.8	30
15	10.3%-efficient submicron-thick Cu(In,Ga)Se ₂ solar cells with absorber fabricated by sputtering In ₂ Se ₃ , CuGaSe ₂ and Cu ₂ Se targets. Applied Surface Science, 2018, 442, 308-312.	3.1	7
16	Beyond 10% efficient CZTSSe thin-film solar cells fabricated by a two-step CdS deposition process. Solar Energy Materials and Solar Cells, 2018, 180, 19-24.	3.0	26
17	An investigation on performance enhancement for KF post deposition treated CIGS solar cells fabricated by sputtering CIGS quaternary targets. Vacuum, 2018, 151, 233-236.	1.6	13
18	Ga ₂ Se ₃ treatment of Cu-rich CIGS thin films to fabricate Cu-poor CIGS thin films with large grains and U-shaped Ga distribution. Vacuum, 2018, 152, 184-187.	1.6	8

#	ARTICLE	IF	CITATIONS
19	Effects of selenium atmosphere on grain growth for CZTSe absorbers fabricated by selenization of as-sputtered precursors. <i>Journal of Alloys and Compounds</i> , 2018, 755, 224-230.	2.8	18
20	An investigation on phase transition for as-sputtered Cu ₂ ZnSnSe ₄ absorbers during selenization. <i>Solar Energy</i> , 2018, 164, 58-64.	2.9	13
21	Beyond 11% efficient Cu ₂ ZnSn(S _x Se _{4-x}) thin film solar cells by cadmium alloying. <i>Solar Energy Materials and Solar Cells</i> , 2018, 174, 494-498.	3.0	75
22	Cu ₂ ZnSnS _x Se _{4-x} solar cells with 9.6% efficiency via selenizing Cu-Zn-Sn-S precursor sputtered from a quaternary target. <i>Solar Energy Materials and Solar Cells</i> , 2018, 174, 42-49.	3.0	29
23	Two-stage method to enhance the grain size of Cu(In,Ga)Se ₂ absorbers based on sputtering quaternary Cu(In,Ga)Se ₂ target. <i>Materials Letters</i> , 2018, 212, 165-167.	1.3	6
24	Study on how the content of selenium in the precursors influences the properties of CuInSe ₂ thin films. <i>Applied Surface Science</i> , 2018, 434, 452-455.	3.1	3
25	Fabrication of wide band-gap CuGaSe ₂ solar cells for tandem device applications by sputtering from a ternary target and post selenization treatment. <i>Materials Letters</i> , 2018, 230, 128-131.	1.3	8
26	Pre-deposition of CdS layers to improve the diode quality of CZTSSe solar cells. <i>Materials Letters</i> , 2018, 229, 372-374.	1.3	3
27	The effects of selenium content on Cu(InGa)Se ₂ thin film solar cells by sputtering from quaternary target with Se-free post annealing. <i>Vacuum</i> , 2017, 137, 205-208.	1.6	16
28	Multi-layer strategy to enhance the grain size of CIGS thin film fabricating by single quaternary CIGS target. <i>Journal of Alloys and Compounds</i> , 2017, 710, 172-176.	2.8	19
29	Sb ₂ S ₃ thin films prepared by vulcanizing evaporated metallic precursors. <i>Materials Letters</i> , 2017, 208, 58-61.	1.3	31
30	The effects of annealing temperature on CIGS solar cells by sputtering from quaternary target with Se-free post annealing. <i>Applied Surface Science</i> , 2017, 413, 175-180.	3.1	25
31	Eliminating the excess Cu x Se phase in Cu-rich Cu(In,Ga)Se ₂ by In ₂ Se ₃ treatment. <i>Journal of Alloys and Compounds</i> , 2017, 709, 31-35.	2.8	9
32	Investigation on Sb-doped induced Cu(InGa)Se ₂ films grain growth by sputtering process with Se-free annealing. <i>Solar Energy</i> , 2017, 157, 1074-1081.	2.9	9
33	Fabricating Cu(In,Ga)Se ₂ (CIGS) thin films with large grains based on the quaternary CIGS targets. <i>Vacuum</i> , 2017, 146, 282-286.	1.6	6
34	A study on mechanisms of Sb-doping induced grain growth for Cu(InGa)Se ₂ absorbers deposited from quaternary targets. <i>Journal of Alloys and Compounds</i> , 2017, 727, 572-578.	2.8	4
35	High-sulfur Cu ₂ ZnSn(S _x Se _{4-x}) films by sulfurizing as-deposited CZTSe film: The evolutions of phase, crystallinity and S/(S+Se) ratio. <i>Journal of Alloys and Compounds</i> , 2017, 695, 3139-3145.	2.8	22
36	Cu(In,Ga)Se ₂ solar cells fabricated by sputtering from copper-poor and selenium-rich ceramic target with selenium-free post treatment. <i>Materials Letters</i> , 2016, 184, 69-72.	1.3	7

#	ARTICLE	IF	CITATIONS
37	Cu ₂ ZnSnS ₄ ceramic target: Determination of sintering temperature by TG&DSC. <i>Ceramics International</i> , 2016, 42, 9630-9635.	2.3	9
38	Effects of selenization on phase transition and S/(S+Se) ratios of as-deposited Cu ₂ ZnSnS ₄ absorbers sputtered by a quaternary target. <i>Materials Letters</i> , 2016, 164, 140-143.	1.3	18
39	Influences of Na on sintering of Cu(In,Ga)Se ₂ quaternary ceramic targets. <i>Journal of Alloys and Compounds</i> , 2015, 636, 335-340.	2.8	12
40	Annealing treatment of Cu(In,Ga)Se ₂ absorbers prepared by sputtering a quaternary target for 13.5% conversion efficiency device. <i>Solar Energy</i> , 2015, 118, 375-383.	2.9	24
41	Cu(In,Ga)Se ₂ solar cell with 16.7% active-area efficiency achieved by sputtering from a quaternary target. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2015, 212, 1774-1778.	0.8	38
42	Fabrication of Se-rich Cu(In _{1-x} Ga _x)Se ₂ quaternary ceramic target. <i>Vacuum</i> , 2015, 119, 15-18.	1.6	11
43	Influences of CuO phase on electrical and optical performance of Cu ₂ O films prepared by middle frequency magnetron sputtering. <i>Applied Surface Science</i> , 2015, 359, 36-40.	3.1	13
44	Study on the performance of Tungsten&Titanium alloy film as a diffusion barrier for iron in a flexible CIGS solar cell. <i>Solar Energy</i> , 2015, 120, 357-362.	2.9	7