Dae-Ho Son

List of Publications by Year
in descending order

21	1,070	687363 13	713466 21
papers	citations	h-index	g-index

22	22	22	925
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A band-gap-graded CZTSSe solar cell with 12.3% efficiency. Journal of Materials Chemistry A, 2016, 4, 10151-10158.	10.3	260
2	Effect of solid-H₂S gas reactions on CZTSSe thin film growth and photovoltaic properties of a 12.62% efficiency device. Journal of Materials Chemistry A, 2019, 7, 25279-25289.	10.3	229
3	Flexible Cu2ZnSn(S,Se)4 solar cells with over 10% efficiency and methods of enlarging the cell area. Nature Communications, 2019, 10, 2959.	12.8	100
4	Effects of the compositional ratio distribution with sulfurization temperatures in the absorber layer on the defect and surface electrical characteristics of Cu₂ZnSnS₄ solar cells. Progress in Photovoltaics: Research and Applications, 2015, 23, 1771-1784.	8.1	64
5	Surface potential on grain boundaries and intragrains of highly efficient Cu2ZnSn(S,Se)4 thin-films grown by two-step sputtering process. Solar Energy Materials and Solar Cells, 2014, 127, 129-135.	6.2	63
6	Growth and Device Characteristics of CZTSSe Thin-Film Solar Cells with 8.03% Efficiency. Chemistry of Materials, 2015, 27, 5180-5188.	6.7	63
7	Void and secondary phase formation mechanisms of CZTSSe using Sn/Cu/Zn/Mo stacked elemental precursors. Nano Energy, 2019, 59, 399-411.	16.0	61
8	Effect of Cuâ€“Snâ€“Se Liquid Phase on Grain Growth and Efficiency of CZTSSe Solar Cells. Advanced Energy Materials, 2020, 10, 1903173.	19.5	37
9	Sodium Effects on the Diffusion, Phase, and Defect Characteristics of Kesterite Solar Cells and Flexible Cu₂ZnSn(S,Se)₄ with Greater than 11% Efficiency. Advanced Functional Materials, 2021, 31, 2102238.	14.9	36
10	Precursor designs for Cu2ZnSn(S,Se)4 thin-film solar cells. Nano Energy, 2017, 35, 52-61.	16.0	32
11	Flexible high-efficiency CZTSSe solar cells on stainless steel substrates. Journal of Materials Chemistry A, 2019, 7, 24891-24899.	10.3	27
12	Secondary Phase Formation Mechanism in the Mo-Back Contact Region during Sulfo-Selenization Using a Metal Precursor: Effect of Wettability between a Liquid Metal and Substrate on Secondary Phase Formation. ACS Applied Materials & Interfaces, 2019, 11, 23160-23167.	8.0	23
13	Influence of precursor sulfur content on film formation and the properties of sulfurized Cu₂ZnSnS₄ thin films for solar cells. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 946-951.	1.8	20
14	Nanoscale investigation of surface potential distribution of Cu2ZnSn(S,Se)4 thin films grown with additional NaF layers. Nano Convergence, 2014, 1, .	12.1	12
15	Effects of S and Se contents on the physical and photovoltaic properties of Cu₂ZnSn(S_X, Se_{1â”X})₄ thin films: achieving a PCE of 9.47%. Journal of Materials Chemistry A, 2019, 7, 22986-22995.	10.3	12
16	Self-Alignment of Bottom CZTSSe by Patterning of an Al2O3 Intermediate Layer. Nanomaterials, 2020, 10, 43.	4.1	7
17	Effect of ZnO Layer Thickness on Efficiency of Cu(In,Ga)Se₂Thin-film Solar Cells. Molecular Crystals and Liquid Crystals, 2012, 565, 52-58.	0.9	5
18	Effect of Al2O3 Dot Patterning on CZTSSe Solar Cell Characteristics. Nanomaterials, 2020, 10, 1874.	4.1	4

#	Article	IF	Citations
19	CZTSSe Formation Mechanism Using a Cu/Zn/SnS Stacked Precursor: Origin of Triple CZTSSe Layer Formation. ACS Applied Materials & Interfaces, 2020, 12, 46037-46044.	8.0	4
20	Effect of Metal-Precursor Stacking Order on Volume-Defect Formation in CZTSSe Thin Film: Formation Mechanism of Blisters and Nanopores. ACS Applied Materials & Interfaces, 2022, 14, 30649-30657.	8.0	4
21			