

CITATION REPORT

List of articles citing

Cu₂Sn_{1-x}GexS₃(x= 0.17) Thin-Film Solar Cells with High Conversion Efficiency of 6.0%

DOI: 10.7567/apex.6.045501

Applied Physics Express, 2013, 6, 045501.

Source: <https://exaly.com/paper-pdf/55990912/citation-report.pdf>

Version: 2024-04-10

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
127	Evaluation of photovoltaic materials within the Cu-Sn-S family. 2013 , 103, 253902		106
126	Sulfurization temperature dependences of photovoltaic properties in Cu ₂ SnS ₃ -based thin-film solar cells. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 05FW13	1.4	63
125	Hydrazine processed Cu ₂ SnS ₃ thin film and their application for photovoltaic devices. 2014 , 7, 37-45		49
124	Structural and electronic modification of photovoltaic SnS by alloying. 2014 , 115, 113507		27
123	Comparison of Cu ₂ SnS ₃ and CuSbS ₂ as potential solar cell absorbers. 2014 ,		4
122	Fabrication of Cu ₂ GeS ₃ -based thin film solar cells by sulfurization of Cu/Ge stacked precursors. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 05FW10	1.4	32
121	Control of Doping in Cu ₂ SnS ₃ through Defects and Alloying. <i>Chemistry of Materials</i> , 2014 , 26, 4951-4959	9.6	119
120	Fabrication of Cu ₂ SnS ₃ solar cells by screen-printing and high-pressure sintering process. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 05FW01	1.4	39
119	Crystallographic and optical properties of narrow band gap Cu ₂ GeSe ₃ and Cu ₂ (Sn _{1-x} Ge _x)Se ₃ solid solution. <i>Japanese Journal of Applied Physics</i> , 2014 , 53, 05FW06	1.4	4
118	Optical characterization of solution prepared Cu ₂ SnS ₃ for photovoltaic applications. 2015 , 1771, 151-156		6
117	Effects of Disorder on Carrier Transport in Cu ₂ SnS ₃ . 2015 , 4,		63
116	Improvement of red light response of Cu ₂ Sn _{1-x} Ge _x S ₃ solar cells by optimization of CdS buffer layers. 2015 , 118, 154502		7
115	Annealing temperature dependence of photovoltaic properties of solar cells containing Cu ₂ SnS ₃ thin films produced by co-evaporation. 2015 , 252, 1239-1243		58
114	Effects of Sulfurization Pressure on the Conversion Efficiency of Cosputtered Cu ₂ ZnSnS ₄ Thin Film Solar Cells. 2015 , 2015, 1-7		12
113	Influence of Ge composition in the Cu ₂ Sn _{1-x} Ge _x S ₃ thin-film photovoltaic absorber prepared by sulfurization of laminated metallic precursor. 2015 , 140, 312-319		25
112	Narrow-bandgap Cu ₂ Sn _{1-x} Ge _x Se ₃ thin film solar cells. 2015 , 158, 205-207		15
111	Growth of Cu ₂ SnS ₃ thin films by a two-stage process: structural, microstructural and optical properties. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 5946-5951	2.1	7

110	Effect of sulfurization temperature on properties of Cu ₂ SnS ₃ thin films and solar cells prepared by sulfurization of stacked metallic precursors. 2015 , 38, 171-176		41
109	Strategic review of secondary phases, defects and defect-complexes in kesterite CZTSSe solar cells. 2015 , 8, 3134-3159		351
108	CuSbSe ₂ photovoltaic devices with 3% efficiency. <i>Applied Physics Express</i> , 2015 , 8, 082301	2.4	67
107	First-principles study of electronic structure of CuSbS ₂ and CuSbSe ₂ photovoltaic semiconductors. <i>Thin Solid Films</i> , 2015 , 582, 401-407	2.2	32
106	Influence of different S/Se ratio on the properties of Cu ₂ Sn(S _x Se _{1-x}) ₃ thin films fabricated by annealing stacked metal precursors. <i>Journal of Materials Science: Materials in Electronics</i> , 2015 , 26, 6723-6729	2.1	13
105	Solvothermal synthesis of Cu ₂ Zn(Sn _{1-x} Gex) ₄ S ₄ and Cu ₂ (Sn _{1-x} Gex) ₃ S ₃ nanoparticles with tunable band gap energies. 2015 , 640, 75-81		10
104	Co-electroplated Kesterite Bifacial Thin-Film Solar Cells: A Study of Sulfurization Temperature. 2015 , 7, 10414-28		27
103	Wurtzite Cu ₂ TeS ₃ Nanocrystals: Phase- and Shape-Controlled Colloidal Synthesis. 2015 , 10, 1468-73		10
102	First-principles calculation of Cu ₂ SnS ₃ and related compounds. 2015 , 252, 1230-1234		34
101	Synthesis and optimized sulfurization time of Cu ₂ SnS ₃ thin films obtained from stacked metallic precursors for solar cell application. 2015 , 160, 468-471		28
100	Donor-acceptor pair recombination luminescence from monoclinic Cu ₂ SnS ₃ thin film. 2015 , 107, 032101		24
99	Fabrication of Cu ₂ SnS ₃ thin-film solar cells with power conversion efficiency of over 4%. <i>Japanese Journal of Applied Physics</i> , 2015 , 54, 08KC06	1.4	102
98	Energy level diagram around Ge-rich grain boundaries in Cu ₂ Sn _{1-x} GexS ₃ (CTGS) thin-film solar cells. 2015 , 134, 1-4		20
97	Metal sulfide precursor aqueous solutions for fabrication of Cu ₂ ZnSn(S,Se) ₄ thin film solar cells. 2015 , 17, 1269-1275		60
96	Influence of composition and annealing on the characteristics of Cu ₂ SnS ₃ thin films grown by cosputtering at room temperature. <i>Thin Solid Films</i> , 2015 , 582, 229-232	2.2	38
95	Self-regulated growth and tunable properties of CuSbS ₂ solar absorbers. 2015 , 132, 499-506		97
94	Exciton luminescence from Cu ₂ SnS ₃ bulk crystals. 2016 , 108, 092107		25
93	A review of defects and disorder in multinary tetrahedrally bonded semiconductors. 2016 , 31, 123004		56

92	Study on the synthesis and formation mechanism of flower-like Cu ₃ SbS ₄ particles via microwave irradiation. 2016 , 679, 218-224		20
91	Colloidal Wurtzite Cu ₂ SnS ₃ (CTS) Nanocrystals and Their Applications in Solar Cells. <i>Chemistry of Materials</i> , 2016 , 28, 3308-3317	9.6	60
90	Structural characterization of Cu ₂ SnS ₃ and Cu ₂ (Sn,Ge)S ₃ compounds. 2016 , 682, 489-494		11
89	Development of Cu ₂ SnS ₃ (CTS) thin film solar cells by physical techniques: A status review. 2016 , 153, 84-107		109
88	Understanding quaternary compound Cu ₂ ZnSnSe ₄ synthesis by microscopic scale analyses at an identical location. 2016 , 4, 4626-4629		3
87	Ligand-free nano-grain Cu ₂ SnS ₃ as a potential cathode alternative for both cobalt and iodine redox electrolyte dye-sensitized solar cells. 2016 , 4, 14865-14876		17
86	Effect of ultrasonically generated water vapor treatment on the Cu ₂ ZnSnS ₄ /CdS heterojunction-based photovoltaic cells. 2016 , 157, 765-776		8
85	Wide bandgap Cu ₂ ZnSnS ₄ fabricated on transparent conductive oxide-coated substrates for top-cells of multi-junction solar cells. 2016 , 689, 713-717		11
84	Comparative study of the structural and optical properties of Cu ₂ SnX ₃ and Cu ₂ ZnSnX ₄ (X = S, Se) thin films and optoelectronic devices. 2016 , 3, 116411		4
83	Cu ₂ Sn _{1-x} GexS ₃ solar cells fabricated with a graded bandgap structure. <i>Applied Physics Express</i> , 2016 , 9, 072301	2.4	54
82	Accelerated development of CuSbS ₂ thin film photovoltaic device prototypes. 2016 , 24, 929-939		61
81	Synthesis of compositionally controllable Cu(SnGe)S nanocrystals with tunable band gaps. 2016 , 18, 161		2
80	Growth and properties of co-evaporated Cu ₂ SnS ₃ thin films for solar cell applications. 2016 , 131, 22-27		17
79	Solution-processed Cu ₂ SnS ₃ thin film solar cells. 2016 , 6, 58786-58795		25
78	Study on the preheating duration of Cu ₂ SnS ₃ thin films using RF magnetron sputtering technique for photovoltaics. 2016 , 665, 69-75		30
77	Solvothermal approach to synthesize wurtzite structure Cu ₂ SnS ₃ nanocrystals and their application to fabricate Cu ₂ ZnSn(S,Se) ₄ thin film. 2016 , 658, 1020-1024		9
76	Spark plasma sintering of Cu ₂ SnS ₃ powders synthesized by mechanical alloying. 2016 , 164, 165-168		10
75	Strong quantum confinement effect in Cu ₄ SnS ₄ quantum dots synthesized via an improved hydrothermal approach. 2016 , 672, 204-211		18

74	Enhanced thermoelectric properties of earth-abundant Cu ₂ SnS ₃ via In doping effect. 2016 , 672, 558-563		49
73	Ge-incorporated Cu ₂ ZnSnSe ₄ thin-film solar cells with efficiency greater than 10%. 2016 , 144, 488-492		80
72	Cu ₂ SnS ₃ solar cells fabricated by chemical bath deposition—annealing of SnS/Cu stacked layers. 2016 , 144, 281-288		56
71	Fabrication of sputtered deposited Cu ₂ SnS ₃ (CTS) thin film solar cell with power conversion efficiency of 2.39 %. 2017 , 701, 901-908		39
70	Defect Engineering in Multinary Earth-Abundant Chalcogenide Photovoltaic Materials. 2017 , 7, 1602366		150
69	Growth of Cu ₂ GeS ₃ bulk single crystals by chemical vapor transport with iodine. 2017 , 194, 16-19		16
68	Brief review of emerging photovoltaic absorbers. 2017 , 4, 8-15		45
67	First-principles study of defect formation in the photovoltaic semiconductors Cu ₂ GeS ₃ and Cu ₂ ZnGeS ₄ for comparison with Cu ₂ SnS ₃ , Cu ₂ ZnSnS ₄ , and CuInSe ₂ . <i>Japanese Journal of Applied Physics</i> , 2017 , 56, 04CS08	1.4	8
66	Influence of Cu/(Ge + Sn) composition ratio on photovoltaic performances of Cu ₂ Sn _{1-x} Ge _x S ₃ solar cell. <i>Solar Energy</i> , 2017 , 149, 341-346	6.8	10
65	Effect of Cd content and sulfurization on structures and properties of Cd doped Cu ₂ SnS ₃ thin films. 2017 , 721, 92-99		10
64	Solution processed single-phase Cu ₂ SnS ₃ films: structure and photovoltaic performance. 2017 , 1, 899-906		25
63	Exploring the electronic and optical properties of Cu ₂ Sn _{1-x} Ge _x S ₃ and Cu ₂ Sn _{1-x} Si _x S ₃ (x = 0, 0.5, and 1). 2017 , 254, 1700111		6
62	Fabrication of Cu ₂ MSnS ₄ (M = Co ²⁺ , Ni ²⁺) nanocrystal thin films and their application in photodetectors. 2017 , 41, 685-691		16
61	Fabrication of (Cu,Ag) ₂ SnS ₃ thin films by sulfurization for solar cells. <i>Thin Solid Films</i> , 2017 , 642, 8-13	2.2	7
60	Electrodeposition of germanium-containing precursors for Cu ₂ (Sn,Ge)S ₃ thin film solar cells. 2017 , 251, 651-659		4
59	Bandgap engineering of Cu ₂ Sn(S,Se) ₃ semiconductor nanocrystals and their applications in thin film solar cells. 2017 , 728, 322-327		10
58	Boosting efficiency and stability of a Cu ₂ ZnSnS ₄ photocathode by alloying Ge and increasing sulfur pressure simultaneously. 2017 , 41, 18-26		32
57	Phase stability of the Cu-Sn-S system and optimal growth conditions for earth-abundant Cu ₂ SnS ₃ solar materials. <i>Solar Energy</i> , 2017 , 155, 745-757	6.8	25

56	Effects of Ge substitution on morphology and electrical properties of Cu ₂ Sn(S,Se) ₃ bulk at a fixed Se/[Se+S] composition. 2017 , 255, 1-7		6
55	Barium disilicide as a promising thin-film photovoltaic absorber: structural, electronic, and defect properties. 2017 , 5, 25293-25302		49
54	Fabrication of Cu ₂ SnS ₃ thin films by ethanol-ammonium solution process by doctor-blade technique. 2017 , 13, 478-482		4
53	Direct solution coating of pure-phase Cu ₂ SnS ₃ thin films without sulfurization. <i>Journal of Materials Science: Materials in Electronics</i> , 2017 , 28, 3481-3486	2.1	11
52	Reaction chemistry of group IV containing copper chalcogenide semiconductors Cu ₂ MX ₃ (M=Fe, Sn, Ge and X=S, Se). 2017 , 695, 1307-1316		11
51	High open-circuit voltage of ternary Cu ₂ GeS ₃ thin film solar cells from combustion synthesized Cu-Ge alloy. 2017 , 160, 319-327		23
50	Insights into the thermoelectric properties of the Cu ₂ Ge(S _{1-x} Se _x) ₃ solid solutions. 2017 , 4, 12349-12359		4
49	Deposition and characterization of spray pyrolysed p-type Cu ₂ SnS ₃ thin film for potential absorber layer of solar cell. 2018 , 538, 8-12		15
48	A comparative investigation of secondary phases and MoSe ₂ in Cu ₂ ZnSnSe ₄ solar cells: Effect of Zn/Sn ratio. 2018 , 743, 249-257		12
47	Development of antimony sulfide/belenide Sb ₂ (S, Se) ₃ -based solar cells. 2018 , 27, 713-721		100
46	Review on earth-abundant and environmentally benign Cu ₂ SnX ₄ (X = S, Se) nanoparticles by chemical synthesis for sustainable solar energy conversion. 2018 , 60, 19-52		29
45	Performance assessment of Cu ₂ SnS ₃ (CTS) based thin film solar cells by AMPS-1D. 2018 , 18, 79-89		27
44	High pressure Raman scattering of a co-evaporated Cu ₂ SnSe ₃ thin film. <i>Thin Solid Films</i> , 2018 , 647, 9-12	2.2	5
43	A hybrid functional study of native point defects in CuSnS: implications for reducing carrier recombination. 2017 , 20, 256-261		11
42	Influence of Ge Incorporation from GeSe ₂ Vapor on the Properties of Cu ₂ ZnSn(S,Se) ₄ Material and Solar Cells. <i>Coatings</i> , 2018 , 8, 304	2.9	2
41	Photoluminescence characterization of Cu ₂ Sn _{1-x} GexS ₃ bulk single crystals. 2018 , 8, 095323		4
40	Characterization of Crystalline Cu ₂ SnS ₃ Synthesized via Low Temperature Solvothermal Method. 2018 , 780, 62-66		1
39	Optical properties and electronic structures of Cu ₂ SnS ₃ , Cu ₂ GeS ₃ , and their solid solution Cu ₂ (Ge,Sn)S ₃ . <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RC20	1.4	9

38	Identifying Short-Range Disorder in Crystalline Bulk Cu ₂ SnS ₃ Phases: A Solid-State Nuclear Magnetic Resonance Spectroscopic Investigation. <i>Chemistry of Materials</i> , 2018 , 30, 6624-6635	9.6	9
37	Cu ₂ Sn _{1-x} GexS ₃ thin film solar cells fabricated from sputtered precursors: Effects of soft-annealing process. 2018 , 85, 160-167		1
36	First-principles studies on the interface between light-absorbing layer and Mo back electrode in Cu(In,Ga)Se ₂ , Cu ₂ ZnSn(S,Se) ₄ , and Cu ₂ SnS ₃ solar cells. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RC17	1.4	6
35	Aqueous-Solution-Based Approach Towards Carbon-Free Sb S Films for High Efficiency Solar Cells. 2018 , 11, 3208-3214		12
34	Temperature-dependent Raman spectroscopy of Cu ₂ Sn _{1-x} Ge _x S ₃ thin films. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RC12	1.4	2
33	Sulfurization temperature dependent physical properties of Cu ₂ SnS ₃ films grown by a two-stage process. 2018 , 86, 164-172		15
32	Effect of sodium addition on Cu ₂ SnS ₃ thin-film solar cells fabricated on alkali-free glass substrates. <i>Japanese Journal of Applied Physics</i> , 2018 , 57, 08RC11	1.4	5
31	Effect of sulfurization time on the performance of monoclinic Cu ₂ SnS ₃ solar cells. <i>Solar Energy</i> , 2019 , 188, 209-217	6.8	11
30	Preparation of (Cu,Ag) ₂ SnS ₃ Thin-Film Solar Cells by Sulfurizing Metal Precursors Featuring Various Ag Contents. 2019 , 216, 1800872		1
29	The versatility of copper tin sulfide. 2019 , 7, 17118-17182		29
28	Review on Cu ₂ SnS ₃ , Cu ₃ SnS ₄ , and Cu ₄ SnS ₄ thin films and their photovoltaic performance. 2019 , 76, 39-74		42
27	Antimony induced crystal growth for large-grained Cu ₂ SnS ₃ thin films for photovoltaics. <i>Journal of Power Sources</i> , 2019 , 426, 84-92	8.9	9
26	Structural, electronic and optical properties of pulsed laser deposited Cu ₂ SnS ₃ photo absorber thin films: A combined experimental and computational study. <i>Thin Solid Films</i> , 2019 , 677, 62-67	2.2	7
25	Characterization of a co-evaporated Cu ₂ SnS ₃ thin-film solar cell. <i>Thin Solid Films</i> , 2019 , 669, 351-354	2.2	11
24	Fabrication of a Cu ₂ Sn _{1-x} GexS ₃ thin film by the sol-gel sulfurization method. <i>Japanese Journal of Applied Physics</i> , 2020 , 59, SCCB14	1.4	
23	Cu-Sn-S system: Vibrational properties and coexistence of the Cu ₂ SnS ₃ , Cu ₃ SnS ₄ and Cu ₄ SnS ₄ compounds. <i>Scripta Materialia</i> , 2020 , 186, 180-184	5.6	10
22	Copper-based ternary metal sulfide nanocrystals embedded in graphene oxide as photocatalyst in water treatment. 2020 , 51-113		1
21	Simple one-pot synthesis of Cu ₄ SnS ₄ nanoplates and temperature-induced phase transformation mechanism. <i>CrystEngComm</i> , 2020 , 22, 1220-1229	3.3	4

20	Production and characterization of Cu ₂ SnS ₃ films for solar cell applications: The effect of the sulfurization temperature on CuS secondary phase. <i>Solar Energy</i> , 2021 , 214, 179-188	6.8	3
19	Ternary CuSnS: Synthesis, Structure, Photoelectrochemical Activity, and Heterojunction Band Offset and Alignment. <i>Chemistry of Materials</i> , 2021 , 33, 1983-1993	9.6	6
18	Phase transformation in Cu ₂ SnS ₃ (CTS) thin films through pre-treatment in sulfur atmosphere. <i>Journal of Materials Science: Materials in Electronics</i> , 2021 , 32, 10018-10027	2.1	3
17	Progress in Thin Film Solar Cell and Advanced Technologies for Performance Improvement. 2021 ,		1
16	Numerical Insights into the Influence of Electrical Properties of n-CdS Buffer Layer on the Performance of SLG/Mo/p-Absorber/n-CdS/n-ZnO/Ag Configured Thin Film Photovoltaic Devices. <i>Coatings</i> , 2021 , 11, 52	2.9	5
15	Cu ₂ (Sn _{1-x} Ge _x)S ₃ solar cells prepared via co-evaporation and annealing in germanium sulfide and sulfur vapor. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2017 , 14, 1600193		5
14	Effect of sulfurization process on the properties of solution-processed Cu ₂ SnS ₃ thin film solar cells. <i>Journal of Materials Science: Materials in Electronics</i> , 2019 , 30, 17947-17955	2.1	1
13	Advances in low-cost and nontoxic materials based solar cell devices. <i>Journal of Physics: Conference Series</i> , 2021 , 2070, 012043	0.3	0
12	Improved Jsc by Increasing the Absorber Layer Thickness of Monoclinic-Dominated Cu ₂ SnS ₃ Thin Film Solar Cells Fabricated on Flexible Mo Foil. <i>Solar Rrl</i> ,	7.1	1
11	Copper-based kesterite thin films for photoelectrochemical water splitting. <i>High Temperature Materials and Processes</i> , 2021 , 40, 446-460	0.9	0
10	Emerging Chalcogenide Thin Films for Solar Energy Harvesting Devices. <i>Chemical Reviews</i> , 2021 ,	68.1	10
9	Influence of Substrate Temperature and Sulfurization on Sputtered Cu ₂ SnGe(S,Se) Thin Films for Solar Cell Application. <i>IEEE Transactions on Electron Devices</i> , 2022 , 1-6	2.9	
8	Bandgap-Graded Cu ₂ Sn _{1-x} GexS ₃ Thin Film Solar Cells Prepared by Sputtering SnGe/Cu Targets. <i>SSRN Electronic Journal</i> ,	1	
7	The effect of sodium (Na) doping on the performance of n-Si/Cu ₂ SnS ₃ heterojunction solar cells deposited by PLD using a homemade target.. <i>Optik</i> , 2022 , 264, 169364	2.5	2
6	Clean energy for sustainable development: Importance of new materials. 2022 , 1-15		
5	MODELLING OF THE SOLAR CELL BASED ON Cu ₂ SnS ₃ THIN FILM PRODUCED BY SPRAY PYROLYSIS. <i>Middle East Journal of Science</i> ,	1	
4	Defect analysis of thin film CTGS based Solar Cells for performance optimization. 2020 ,		
3	Numerical simulation of high-efficient perovskite-based solar cells using SCAPS 1D. 2020 ,		0

- 2 Effect of Photodegradation on Ternary FeNiS₂ Thin Film with Complexing Agents EDTA and Leishman Stain. **2022**, 34, 3279-3285 ○
- 1 Improvement experimental and numerical simulation of Cu₂SnS₃-based solar cells. **2023**, 137, 113602 ○