Dong-Xing Kou

List of Publications by Year
in descending order

39 papers	1,429 citations	304743 22 h-index	330143 37 g-index
39 all docs	39 docs citations	39 times ranked	1174 citing authors

#	Article	IF	Citations
1	Engineering of interface band bending and defects elimination via a Ag-graded active layer for efficient (Cu,Ag)₂ZnSn(S,Se)₄ solar cells. Energy and Environmental Science, 2017, 10, 2401-2410.	30.8	221
2	Improving the Performance of Solution-Processed Cu₂ZnSn(S,Se)₄ Photovoltaic Materials by Cd²⁺ Substitution. Chemistry of Materials, 2016, 28, 5821-5828.	6.7	124
3	Elemental Precursor Solution Processed (Cu_{1â€“<i>x</i>}Ag_{<i>x</i>})₂ZnSn(S,Se)₄ Photovoltaic Devices with over 10% Efficiency. ACS Applied Materials & Interfaces, 2017, 9, 21243-21250.	8.0	114
4	High Efficiency CIGS Solar Cells by Bulk Defect Passivation through Ag Substituting Strategy. ACS Applied Materials & Interfaces, 2020, 12, 12717-12726.	8.0	79
5	Ag, Ge dual-gradient substitution for low-energy loss and high-efficiency kesterite solar cells. Journal of Materials Chemistry A, 2020, 8, 22292-22301.	10.3	59
6	Controllable Formation of Ordered Vacancy Compound for High Efficiency Solution Processed Cu(In,Ga)Se₂ Solar Cells. Advanced Functional Materials, 2021, 31, 2007928.	14.9	52
7	Solution-deposited pure selenide CIGSe solar cells from elemental Cu, In, Ga, and Se. Journal of Materials Chemistry A, 2015, 3, 19263-19267.	10.3	51
8	Cu2ZnSnS4 decorated CdS nanorods for enhanced visible-light-driven photocatalytic hydrogen production. International Journal of Hydrogen Energy, 2018, 43, 20408-20416.	7.1	51
9	Lithium-assisted synergistic engineering of charge transport both in GBs and GI for Ag-substituted Cu2ZnSn(S,Se)4 solar cells. Journal of Energy Chemistry, 2020, 50, 9-15.	12.9	46
10	Application of quaternary Cu₂ZnSnS₄ quantum dot-sensitized solar cells based on the hydrolysis approach. Green Chemistry, 2015, 17, 4377-4382.	9.0	40
11	Adjusting the SnZn defects in Cu2ZnSn(S,Se)4 absorber layer via Ge4+ implanting for efficient kesterite solar cells. Journal of Energy Chemistry, 2021, 61, 1-7.	12.9	38
12	Quaternary Cu 2 ZnSnS 4 quantum dot-sensitized solar cells: Synthesis, passivation and ligand exchange. Journal of Power Sources, 2016, 318, 35-40.	7.8	35
13	Nanoscale electrical property enhancement through antimony incorporation to pave the way for the development of low-temperature processed Cu₂ZnSn(S,Se)₄ solar cells. Journal of Materials Chemistry A, 2019, 7, 3135-3142.	10.3	35
14	Cu₂ZnSnS₄ Quantum Dots as Hole Transport Material for Enhanced Charge Extraction and Stability in Allâ€Inorganic CsPbBr₃ Perovskite Solar Cells. Solar Rrl, 2019, 3, 1800354.	5.8	34
15	Synergistic incorporation of NaF and CsF PDT for high efficiency kesterite solar cells: unveiling of grain interior and grain boundary effects. Journal of Materials Chemistry A, 2021, 9, 413-422.	10.3	34
16	Eliminating fine-grained layers in Cu(In,Ga)(S,Se)₂ thin films for solution-processed high efficiency solar cells. Journal of Materials Chemistry A, 2016, 4, 13476-13481.	10.3	31
17	Enhancing Grain Growth for Efficient Solution-Processed (Cu,Ag)₂ZnSn(S,Se)₄ Solar Cells Based on Acetate Precursor. ACS Applied Materials & Interfaces, 2020, 12, 14213-14223.	8.0	31
18	Surface defect ordered Cu2ZnSn(S,Se)4 solar cells with efficiency over 12% via manipulating local substitution. Journal of Energy Chemistry, 2022, 67, 555-562.	12.9	31

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19	High efficiency CZTSSe thin film solar cells from pure element solution: A study of additional Sn complement. Solar Energy Materials and Solar Cells, 2016, 155, 209-215.	6.2	30
20	Phase-dependent photocatalytic H₂evolution of copper zinc tin sulfide under visible light. Chemical Communications, 2014, 50, 12726-12729.	4.1	28
21	Chemical Dynamics of Back Contact with MoO₃ Interfacial Layer in Kesterite Solar Cells: Microstructure Evolution and Photovoltaic Performance. Solar Rrl, 2019, 3, 1900131.	5.8	25
22	Synergistic effect of Mn on bandgap fluctuations and surface electrical characteristics in Ag-based Cu₂ZnSn(S,Se)₄ solar cells. Journal of Materials Chemistry A, 2021, 9, 2292-2300.	10.3	25
23	Performances Enhancement in Perovskite Solar Cells by Incorporating Plasmonic Au NRs@SiO₂ at Absorber/HTL Interface. Solar Rrl, 2017, 1, 1700151.	5.8	21
24	High temperature recrystallization of kersterite Cu2ZnSnS4 towards enhanced photocatalytic H2 evolution. International Journal of Hydrogen Energy, 2015, 40, 13456-13462.	7.1	19
25	Precise-tuning the In content to achieve high fill factor in hybrid buffer structured Cu 2 ZnSn(S, Se) 4 solar cells. Solar Energy, 2017, 148, 157-163.	6.1	18
26	Engineering the Band Offsets at the Back Contact Interface for Efficient Kesterite CZTSSe Solar Cells. ACS Applied Energy Materials, 2020, 3, 10976-10982.	5.1	18
27	Cu2ZnSnSe4 nanocrystals capped with S2âˆ’ by ligand exchange: utilizing energy level alignment for efficiently reducing carrier rec ombination. Nanoscale Research Letters, 2014, 9, 262.	5.7	17
28	Solution-Processed Cu2ZnSn(S,Se)4 Thin-Film Solar Cells Using Elemental Cu, Zn, Sn, S, and Se Powders as Source. Nanoscale Research Letters, 2015, 10, 1045.	5.7	16
29	Local Cu Component Engineering to Achieve Continuous Carrier Transport for Enhanced Kesterite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 795-805.	8.0	16
30	Cu₂ZnSnS₄â€“CdS heterostructured nanocrystals for enhanced photocatalytic hydrogen production. Catalysis Science and Technology, 2017, 7, 3980-3984.	4.1	15
31	Boosting the efficiency of solution-based CZTSSe solar cells by supercritical carbon dioxide treatment. Green Chemistry, 2020, 22, 3597-3607.	9.0	15
32	Se-Assisted Performance Enhancement of Cu₂ZnSn(S,Se)₄ Quantum-Dot Sensitized Solar Cells via a Simple Yet Versatile Synthesis. Inorganic Chemistry, 2019, 58, 13285-13292.	4.0	13
33	Regulation of selenium composition by supercritical carbon dioxide for CZTSSe solar cells efficiency improvement. Solar Energy Materials and Solar Cells, 2021, 231, 111308.	6.2	13
34	CuInGaSe2 thin-film solar cells with 11.5% efficiency: An effective and low-cost way of Na-incorporation for grain-growth. Solar Energy, 2019, 185, 34-40.	6.1	11
35	Plasmon-mediated nonradiative energy transfer from a conjugated polymer to a plane of graphene-nanodot-supported silver nanoparticles: an insight into characteristic distance. Nanoscale, 2019, 11, 6737-6746.	5.6	9
36	Interface Engineering for High-Efficiency Solution-Processed Cu(In,Ga)(S,Se)₂ Solar Cells via a Novel Indium-Doped CdS Strategy. ACS Applied Materials & Interfaces, 2022, 14, 5149-5158.	8.0	6

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37	Effect of ligand exchange of Cu2ZnSnS4 nanocrystals on the charge transport and photovoltaic performance of nanostructured depleted bulk heterojunction solar cell. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	4
38	Plasmonic Local Electric Field-Enhanced Interface toward High-Efficiency Cu₂ZnSn(S,Se)₄ Thin-Film Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 26690-26698.	8.0	4
39	Precisely tuning Ge substitution for efficient solution-processed Cu 2 ZnSn(S, Se) 4 solar cells. Chinese Physics B, 2018, 27, 018809.	1.4	0