Dhruba B Khadka

List of Publications by Year
in descending order

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Version: 2024-02-01

28 papers	1,305 citations	394286 19 h-index	610775 24 g-index
29 all docs	29 docs citations	29 times ranked	1784 citing authors

#	Article	IF	Citations
1	Band Gap Engineering of Alloyed Cu₂ZnGe_xSn_{1â€“x}Q₄ (Q = S,Se) Films for Solar Cell. Journal of Physical Chemistry C, 2015, 119, 1706-1713.	1.5	127
2	Effects of Na and MoS₂ on Cu₂ZnSnS₄ thinâ€film solar cell. Progress in Photovoltaics: Research and Applications, 2015, 23, 862-873.	4.4	108
3	Exploring the effects of interfacial carrier transport layers on device performance and optoelectronic properties of planar perovskite solar cells. Journal of Materials Chemistry C, 2017, 5, 8819-8827.	2.7	106
4	Degradation of encapsulated perovskite solar cells driven by deep trap states and interfacial deterioration. Journal of Materials Chemistry C, 2018, 6, 162-170.	2.7	91
5	Structural Transition and Band Gap Tuning of Cu₂(Zn,Fe)SnS₄ Chalcogenide for Photovoltaic Application. Journal of Physical Chemistry C, 2014, 118, 14227-14237.	1.5	85
6	Study of structural and optical properties of kesterite Cu2ZnGeX4 (X = S, Se) thin films synthesized by chemical spray pyrolysis. CrystEngComm, 2013, 15, 10500.	1.3	78
7	Tailoring the film morphology and interface band offset of caesium bismuth iodide-based Pb-free perovskite solar cells. Journal of Materials Chemistry C, 2019, 7, 8335-8343.	2.7	78
8	Enhancement in efficiency and optoelectronic quality of perovskite thin films annealed in MACl vapor. Sustainable Energy and Fuels, 2017, 1, 755-766.	2.5	77
9	A Nonvacuum Approach for Fabrication of Cu₂ZnSnSe₄/In₂S₃ Thin Film Solar Cell and Optoelectronic Characterization. Journal of Physical Chemistry C, 2015, 119, 12226-12235.	1.5	76
10	Structural, optical and electrical properties of Cu2FeSnX4 (X=S, Se) thin films prepared by chemical spray pyrolysis. Journal of Alloys and Compounds, 2015, 638, 103-108.	2.8	64
11	Effects of Ge Alloying on Device Characteristics of Kesterite-Based CZTSSe Thin Film Solar Cells. Journal of Physical Chemistry C, 2016, 120, 4251-4258.	1.5	63
12	Tailoring the Open-Circuit Voltage Deficit of Wide-Band-Gap Perovskite Solar Cells Using Alkyl Chain-Substituted Fullerene Derivatives. ACS Applied Materials & Interfaces, 2018, 10, 22074-22082.	4.0	57
13	Unraveling the Impacts Induced by Organic and Inorganic Hole Transport Layers in Inverted Halide Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 7055-7065.	4.0	49
14	Attenuating the defect activities with a rubidium additive for efficient and stable Sn-based halide perovskite solar cells. Journal of Materials Chemistry C, 2020, 8, 2307-2313.	2.7	41
15	Ge-alloyed CZTSe thin film solar cell using molecular precursor adopting spray pyrolysis approach. RSC Advances, 2016, 6, 37621-37627.	1.7	37
16	Ammoniated aqueous precursor ink processed copper iodide as hole transport layer for inverted planar perovskite solar cells. Solar Energy Materials and Solar Cells, 2020, 210, 110486.	3.0	30
17	Insights into Accelerated Degradation of Perovskite Solar Cells under Continuous Illumination Driven by Thermal Stress and Interfacial Junction. ACS Applied Energy Materials, 2021, 4, 11121-11132.	2.5	29
18	A-site tailoring in the vacancy-ordered double perovskite semiconductor Cs2SnI6 for photovoltaic application. Solar Energy Materials and Solar Cells, 2021, 230, 111180.	3.0	28

#	Article	IF	Citations
19	Pseudohalide Functional Additives in Tin Halide Perovskite for Efficient and Stable Pb-Free Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 12819-12826.	2.5	20
20	Effect of solvent vapour annealing on bismuth triiodide film for photovoltaic applications and its optoelectronic properties. Journal of Materials Chemistry C, 2020, 8, 12173-12180.	2.7	19
21	Photoinduced ion-redistribution in CH₃NH₃PbI₃ perovskite solar cells. Physical Chemistry Chemical Physics, 2020, 22, 25118-25125.	1.3	13
22	Sulfur stoichiometry driven chalcopyrite and pyrite structure of spray pyrolyzed Cu-alloyed FeS2 thin films. Materials Science in Semiconductor Processing, 2015, 40, 325-330.	1.9	12
23	Study of Inx(O,OH,S)y buffer layer effect on CIGSe thin film solar cells. Current Applied Physics, 2014, 14, S17-S22.	1.1	8
24	Chemical and Electronic Investigation of Buried NiO_{1â^'Î´}, PCBM, and PTAA/MAPbI_{3â€“x}Cl_x Interfaces Using Hard X-ray Photoelectron Spectroscopy and Transmission Electron Microscopy. ACS Applied Materials & Interfaces, 2021, 13, 50481-50490.	4.0	5
25	Exploring the Recombination Mechanism Induced by Carrier Transport Layers in Perovskite Solar Cells. , 2018, , .		2
26	Aqueous Solution Processed Copper Iodide as Hole Transport Material For Planar Inverted Perovskite Solar Cells. , 2019, , .		1
27	Passivation of the Recombination Activities with Rubidium incorporation for Efficient and Stable Sn-HaP Solar Cells. , 2020, , .		1
28	Exploring the Effect Induced by Hole Transport Layers in Inverted Halide Perovskite Solar Cells. , 0, , .		0