Yun Seog Lee

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3491389/publications.pdf

Version: 2024-02-01

53 papers	3,720 citations	172457 29 h-index	223800 46 g-index
55 all docs	55 docs citations	55 times ranked	4946 citing authors

#	Article	IF	Citations
1	Vaporâ€Transportâ€Deposited Orthorhombicâ€SnSe Thin Films: A Potential Costâ€Effective Absorber Material for Solarâ€Cell Applications. Solar Rrl, 2022, 6, 2100676.	5.8	10
2	Investigation of Defectâ€Tolerant Perovskite Solar Cells with Longâ€Term Stability via Controlling the Selfâ€Doping Effect. Advanced Energy Materials, 2021, 11, 2100555.	19.5	38
3	Scalable High-Efficiency Bi-Facial Solar Evaporator with a Dendritic Copper Oxide Wick. ACS Applied Materials & Interfaces, 2021, 13, 11869-11878.	8.0	16
4	Confined Growth of High-quality Single-Crystal MAPbBr3 by Inverse Temperature Crystallization for Photovoltaic Applications. Electronic Materials Letters, 2021, 17, 347-354.	2.2	12
5	Interfacial Solar EvaporatorÂ- Physical Principles and Fabrication Methods. International Journal of Precision Engineering and Manufacturing - Green Technology, 2021, 8, 1347-1367.	4.9	16
6	Elucidating Ionic Programming Dynamics of Metalâ€Oxide Electrochemical Memory for Neuromorphic Computing. Advanced Electronic Materials, 2021, 7, 2100185.	5.1	20
7	Semitransparent Perovskite Solar Cells with Enhanced Light Utilization Efficiencies by Transferable Ag Nanogrid Electrodes. ACS Applied Materials & Interfaces, 2021, 13, 58475-58485.	8.0	9
8	Fundamentals, impedance, and performance of solid-state Li-metal microbatteries. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, 033212.	2.1	3
9	Carrier-resolved photo-Hall effect. Nature, 2019, 575, 151-155.	27.8	66
10	Vapor transport deposited tin monosulfide for thin-film solar cells: effect of deposition temperature and duration. Journal of Materials Chemistry A, 2019, 7, 7186-7193.	10.3	35
11	Materials perspectives for next-generation low-cost tandem solar cells. Solar Energy Materials and Solar Cells, 2018, 180, 350-357.	6.2	60
12	Compositional effects in Ag2ZnSnSe4 thin films and photovoltaic devices. Acta Materialia, 2017, 126, 383-388.	7.9	25
13	Industrial perspectives on earth abundant, multinary thin film photovoltaics. Semiconductor Science and Technology, 2017, 32, 033004.	2.0	31
14	Unconventional kesterites: The quest to reduce band tailing in CZTSSe. Current Opinion in Green and Sustainable Chemistry, 2017, 4, 29-36.	5.9	29
15	Determining interface properties limiting open-circuit voltage in heterojunction solar cells. Journal of Applied Physics, 2017, 121, .	2.5	24
16	Back Contact Engineering for Increased Performance in Kesterite Solar Cells. Advanced Energy Materials, 2017, 7, 1602585.	19.5	54
17	Preparation of single-phase SnSe thin-films and modification of electrical properties via stoichiometry control for photovoltaic application. Journal of Alloys and Compounds, 2017, 722, 474-481.	5.5	50
18	Unveiling the carrier transport mechanism in epitaxial graphene for forming wafer-scale, single-domain graphene. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4082-4086.	7.1	34

#	Article	IF	Citations
19	Ultrathin high band gap solar cells with improved efficiencies from the worldâ€™s oldest photovoltaic material. Nature Communications, 2017, 8, 682.	12.8	94
20	Record Efficiencies for Selenium Photovoltaics and Application to Indoor Solar Cells. , 2017, , .		5
21	Atomicâ€Scale Observation of Oxygen Substitution and Its Correlation with Holeâ€Transport Barriers in Cu₂ZnSnSe₄ Thinâ€Film Solar Cells. Advanced Energy Materials, 2016, 6, 1501902.	19.5	56
22	Ag2ZnSn(S,Se)4: A highly promising absorber for thin film photovoltaics. Journal of Chemical Physics, 2016, 144, 104704.	3.0	86
23	Optimization of Silver-alloying for improved photovoltaic properties of CZTSSe. , 2016, , .		0
24	Effects of Postsynthesis Thermal Conditions on Methylammonium Lead Halide Perovskite: Band Bending at Grain Boundaries and Its Impacts on Solar Cell Performance. Journal of Physical Chemistry C, 2016, 120, 21330-21335.	3.1	25
25	Photovoltaic Device with over 5% Efficiency Based on an nâ€Type Ag₂ZnSnSe₄ Absorber. Advanced Energy Materials, 2016, 6, 1601182.	19.5	102
26	Photovoltaic Materials and Devices Based on the Alloyed Kesterite Absorber (Ag_xCu_{1â€“}_x)₂ZnSnSe₄. Advanced Energy Materials, 2016, 6, 1502468.	19.5	226
27	Atomic Layer Deposited Aluminum Oxide for Interface Passivation of Cu₂ZnSn(S,Se)₄ Thinâ€Film Solar Cells. Advanced Energy Materials, 2016, 6, 1600198.	19.5	75
28	Chemical Consequences of Alkali Inhomogeneity in Cu₂ZnSnS₄ Thinâ€Film Solar Cells. Advanced Energy Materials, 2015, 5, 1500922.	19.5	13
29	Monolithic Perovskiteâ€CIGS Tandem Solar Cells via In Situ Band Gap Engineering. Advanced Energy Materials, 2015, 5, 1500799.	19.5	219
30	Flexible kesterite solar cells on ceramic substrates for advanced thermal processing. , 2015, , .		3
31	10.5% efficient polymer and amorphous silicon hybrid tandem photovoltaic cell. Nature Communications, 2015, 6, 6391.	12.8	45
32	The impact of sodium on the sub-bandgap states in CZTSe and CZTS. Applied Physics Letters, 2015, 106, .	3.3	51
33	Two-Step Annealing Study of Cuprous Oxide for Photovoltaic Applications. IEEE Journal of Photovoltaics, 2015, 5, 1476-1481.	2.5	5
34	Phase transition-induced band edge engineering of BiVO ₄ to split pure water under visible light. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13774-13778.	7.1	116
35	Cu₂ZnSnSe₄ Thinâ€Film Solar Cells by Thermal Coâ€evaporation with 11.6% Efficiency and Improved Minority Carrier Diffusion Length. Advanced Energy Materials, 2015, 5, 1401372.	19.5	408
36	Solar Cells: High Efficiency Cu2ZnSn(S,Se)4Solar Cells by Applying a Double In2S3/CdS Emitter (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	21.0	10

#	Article	IF	Citations
37	Band offsets of n-type electron-selective contacts on cuprous oxide (Cu2O) for photovoltaics. Applied Physics Letters, 2014, 105, .	3.3	96
38	X-ray absorption spectroscopy elucidates the impact of structural disorder on electron mobility in amorphous zinc-tin-oxide thin films. Applied Physics Letters, 2014, 104, .	3.3	19
39	Phase-pure evaporation of tin (II) sulfide for solar cell applications. , 2014, , .		0
40	Improved Cu₂Oâ€Based Solar Cells Using Atomic Layer Deposition to Control the Cu Oxidation State at the pâ€n Junction. Advanced Energy Materials, 2014, 4, 1301916.	19.5	142
41	3.88% Efficient Tin Sulfide Solar Cells using Congruent Thermal Evaporation. Advanced Materials, 2014, 26, 7488-7492.	21.0	227
42	Atomic Layer Deposited Gallium Oxide Buffer Layer Enables 1.2 V Openâ€Circuit Voltage in Cuprous Oxide Solar Cells. Advanced Materials, 2014, 26, 4704-4710.	21.0	242
43	High Efficiency Cu₂ZnSn(S,Se)₄ Solar Cells by Applying a Double In₂S₃/CdS Emitter. Advanced Materials, 2014, 26, 7427-7431.	21.0	400
44	Textured conducting glass by nanosphere lithography for increased light absorption in thin-film solar cells. Journal Physics D: Applied Physics, 2014, 47, 085105.	2.8	13
45	Nitrogen-doped cuprous oxide as a p-type hole-transporting layer in thin-film solar cells. Journal of Materials Chemistry A, 2013, 1, 15416.	10.3	108
46	Ultrathin amorphous zinc-tin-oxide buffer layer for enhancing heterojunction interface quality in metal-oxide solar cells. Energy and Environmental Science, 2013, 6, 2112.	30.8	160
47	Low-resistance earth-abundant metal contacts to nitrogen-doped cuprous oxide thin films. , 2012, , .		1
48	Growth and p-type doping of cuprous oxide thin-films for photovoltaic applications. , 2012, , .		2
49	Low contact resistivity of metals on nitrogen-doped cuprous oxide (Cu2O) thin-films. Journal of Applied Physics, 2012, 112, .	2.5	19
50	High Photocurrent in Silicon Photoanodes Catalyzed by Iron Oxide Thin Films for Water Oxidation. Angewandte Chemie - International Edition, 2012, 51, 423-427.	13.8	75
51	Hall mobility of cuprous oxide thin films deposited by reactive direct-current magnetron sputtering. Applied Physics Letters, 2011, 98, .	3.3	120
52	Earth abundant materials for high efficiency heterojunction thin film solar cells. , 2009, , .		11
53	Evolution of metal impurities during crystalline silicon solar cell processing. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	0