Ian Forbes

List of Publications by Year in descending order

51 papers	2,935 citations	394421 19 h-index	223800 46 g-index
51 all docs	51 docs citations	51 times ranked	3997 citing authors

#	Article	IF	Citations
1	Inorganic photovoltaic cells. Materials Today, 2007, 10, 20-27.	14.2	1,135
2	New routes to sustainable photovoltaics: evaluation of Cu₂ZnSnS₄ as an alternative absorber material. Physica Status Solidi (B): Basic Research, 2008, 245, 1772-1778.	1.5	322
3	Cu₂ZnSnSe₄ thin film solar cells produced by selenisation of magnetron sputtered precursors. Progress in Photovoltaics: Research and Applications, 2009, 17, 315-319.	8.1	276
4	Photovoltaic solar cells: An overview of state-of-the-art cell development and environmental issues. Progress in Crystal Growth and Characterization of Materials, 2005, 51, 1-42.	4.0	229
5	Thermally evaporated thin films of SnS for application in solar cell devices. Thin Solid Films, 2009, 517, 4702-4705.	1.8	125
6	Thin films of tin sulphide for use in thin film solar cell devices. Thin Solid Films, 2009, 517, 2485-2488.	1.8	83
7	V_{oc} Boosting and Grain Growth Enhancing Ge-Doping Strategy for Cu₂ZnSnSe₄ Photovoltaic Absorbers. Journal of Physical Chemistry C, 2016, 120, 9661-9670.	3.1	69
8	Annealing studies and electrical properties of SnS-based solar cells. Thin Solid Films, 2011, 519, 7425-7428.	1.8	57
9	Electrical, morphological and structural properties of RF magnetron sputtered Mo thin films for application in thin film photovoltaic solar cells. Journal of Materials Science, 2011, 46, 4913-4921.	3.7	52
10	Revealing the beneficial effects of Ge doping on Cu₂ZnSnSe₄ thin film solar cells. Journal of Materials Chemistry A, 2018, 6, 11759-11772.	10.3	46
11	Single Phase, Large Grain, p-Conductivity-type SnS Layers Produced using the Thermal Evaporation Method. Energy Procedia, 2012, 15, 354-360.	1.8	36
12	Electronic and structural characterisation of Cu3BiS3 thin films for the absorber layer of sustainable photovoltaics. Thin Solid Films, 2014, 562, 195-199.	1.8	36
13	Impact of Interstitial Ni on the Thermoelectric Properties of the Half-Heusler TiNiSn. Materials, 2018, 11, 536.	2.9	35
14	Chalcogenisation of Cuâ€“Sb metallic precursors into Cu3Sb(SexS1â^'x)3. Solar Energy Materials and Solar Cells, 2013, 113, 186-194.	6.2	34
15	Effect of composition gradient in Cu(In,Al)Se2 solar cells. Solar Energy Materials and Solar Cells, 2009, 93, 922-925.	6.2	31
16	The potential of thermophotovoltaic heat recovery for the UK industry. International Journal of Ambient Energy, 2004, 25, 19-25.	2.5	27
17	Simplified levelised cost of the domestic photovoltaic energy in the UK: the importance of the feedâ€in tariff scheme. IET Renewable Power Generation, 2014, 8, 451-458.	3.1	27
18	Earth abundant thin film solar cells from co-evaporated Cu2SnS3 absorber layers. Journal of Alloys and Compounds, 2016, 689, 182-186.	5.5	24

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19	Growth of high-quality CuInSe2 films by selenising sputtered Cuâ€“In bilayers using a closed graphite box. Materials Letters, 1998, 37, 57-62.	2.6	20
20	Radiative recombination in Cu₂ZnSnSe₄thin films with Cu deficiency and Zn excess. Journal Physics D: Applied Physics, 2015, 48, 475109.	2.8	20
21	A combined model for PV system lifetime energy prediction and annual energy assessment. Solar Energy, 2019, 183, 738-744.	6.1	20
22	The influence of precursor Cu content and two-stage processing conditions on the microstructure of Cu 2 ZnSnSe 4. Thin Solid Films, 2015, 582, 220-223.	1.8	19
23	A SOLAR CELL STACKED SLOT-LOADED SUSPENDED MICROSTRIP PATCH ANTENNA WITH MULTIBAND RESONANCE CHARACTERISTICS FOR WLAN AND WiMAX SYSTEMS. Progress in Electromagnetics Research, 2013, 142, 321-332.	4.4	18
24	Suppression of thermal conductivity without impeding electron mobility in n-type XNiSn half-Heusler thermoelectrics. Journal of Materials Chemistry A, 2019, 7, 27124-27134.	10.3	18
25	Rocking disc electro-deposition of CuIn alloys, selenisation, and pinhole effect minimisation in CISe solar absorber layers. Electrochimica Acta, 2012, 79, 141-147.	5.2	14
26	Optical spectroscopy studies of Cu 2 ZnSnSe 4 thin films. Thin Solid Films, 2015, 582, 154-157.	1.8	14
27	Crystallographic properties and elemental migration in two-stage prepared CuIn1â^'xAlxSe2 thin films for photovoltaic applications. Journal of Alloys and Compounds, 2013, 566, 180-186.	5.5	12
28	A meshed multiband solar patch array antenna. , 2012, , .		10
29	Production of high quality CuInSe2 thin films from magnetron sputtered ultra-thin Cu-In multilayers. Journal of Materials Science Letters, 1996, 15, 478-481.	0.5	9
30	Deposition and Characterization of Copper Chalcopyrite Based Solar Cells using Electrochemical Techniques. ECS Transactions, 2007, 6, 535-546.	0.5	9
31	Shortâ€term performance variations of different photovoltaic system technologies under the humid subtropical climate of Kanpur in India. IET Renewable Power Generation, 2015, 9, 438-445.	3.1	9
32	CuInSe2 precursor films electro-deposited directly onto MoSe2. Journal of Electroanalytical Chemistry, 2010, 645, 16-21.	3.8	8
33	Metal-organic chemical vapor deposition of ultra-thin photovoltaic devices using a pyrite based pâ€“iâ€“n structure. Thin Solid Films, 2011, 519, 7360-7363.	1.8	8
34	Evolution of phases in two-stage vacuum processed thin film Cu2ZnSnSe4 absorber layers. Materials Research Innovations, 2014, 18, 515-518.	2.3	8
35	Investigation of the Structural, Optical and Electrical Properties of Cu3BiS3 Semiconducting Thin Films. Energy Procedia, 2014, 60, 166-172.	1.8	8
36	Environmental assessment of vacuum and non-vacuum techniques for the fabrication of Cu₂ZnSnS₄ thin film photovoltaic cells. Japanese Journal of Applied Physics, 2018, 57, 08RC14.	1.5	8

#	Article	IF	Citations
37	Title is missing!. Journal of Materials Science: Materials in Electronics, 2003, 14, 567-571.	2.2	7
38	Design of a highly efficient wideband suspended solar array antenna. , 2012, , .		7
39	A solar parabolic reflector antenna design for digital satellite communication systems. , 2012, , .		7
40	A triband short-circuited suspended solar patch antenna. , 2012, , .		6
41	Effects of Ar+ etching of Cu2ZnSnSe4 thin films: An x-ray photoelectron spectroscopy and photoluminescence study. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, .	1.2	6
42	Rocking disc electro-deposition of copper films on Mo/MoSe2 substrates. Thin Solid Films, 2011, 519, 7458-7463.	1.8	5
43	Study of the Al-grading effect in the crystallisation of chalcopyrite CuIn1â^'xAlxSe2 thin films. Materials Chemistry and Physics, 2013, 140, 236-242.	4.0	5
44	Effects of irradiation of ZnO/CdS/Cu2ZnSnSe4/Mo/glass solar cells by 10ÂMeV electrons on photoluminescence spectra. Materials Science in Semiconductor Processing, 2021, 121, 105301.	4.0	4
45	Title is missing!. Journal of Materials Science Letters, 2001, 20, 921-923.	0.5	2
46	Heat Transfer Modelling of Glass Media within TPV Systems. AIP Conference Proceedings, 2004, , .	0.4	2
47	Characterisation of thin film chalcogenide PV materials using MeV ion beam analysis. , 2009, , .		2
48	A PL and PLE Study of High Cu Content Cu2ZnSnSe4 Films on Mo/Glass and Solar Cells. Physics of the Solid State, 2019, 61, 908-917.	0.6	2
49	Diamond-doped silica aerogel for solar geoengineering. Diamond and Related Materials, 2021, 117, 108474.	3.9	2
50	New Chalcogenide Materials forÂThin Film Solar Cells. RSC Energy and Environment Series, 2014, , 160-208.	0.5	1
51	Effects of selenisation temperature on photoluminescence and photoluminescence excitation spectra of ZnO/CdS/Cu2ZnSnSe4/Mo/glass. Thin Solid Films, 2019, 672, 146-151.	1.8	1