Shuying Cheng

List of Publications by Year
in descending order

67 papers	1,033 citations	430442 18 h-index	500791 28 g-index
68 all docs	68 docs citations	68 times ranked	1086 citing authors

#	ARTICLE	IF	CITATIONS
1	Achieving Uniform Li Plating/Stripping at Ultrahigh Currents and Capacities by Optimizing 3D Nucleation Sites and Li$_2$Se–Enriched SEI. Advanced Science, 2022, 9, e2104689.	5.6	77
2	Very-Short-Term Power Prediction for PV Power Plants Using a Simple and Effective RCC-LSTM Model Based on Short Term Multivariate Historical Datasets. Electronics (Switzerland), 2020, 9, 289.	1.8	50
3	Novel symmetrical bifacial flexible CZTSSe thin film solar cells for indoor photovoltaic applications. Nature Communications, 2021, 12, 3107.	5.8	49
4	An Intelligent Fault Diagnosis Approach for PV Array Based on SA-RBF Kernel Extreme Learning Machine. Energy Procedia, 2017, 105, 1070-1076.	1.8	46
5	High flexible Cu2ZnSn(S,Se)4 solar cells by green solution-process. Solar Energy, 2019, 177, 508-516.	2.9	45
6	Stable Lithium Metal Anode Achieved by *In Situ* Grown CuO Nanowire Arrays on Cu Foam. Energy & Fuels, 2020, 34, 7684-7691.	2.5	36
7	A Hierarchical Copper Oxide–Germanium Hybrid Film for High Areal Capacity Lithium Ion Batteries. Frontiers in Chemistry, 2020, 7, 869.	1.8	35
8	Self-Powered Sb$_2$S$_3$ Thin-Film Photodetectors with High Detectivity for Weak Light Signal Detection. ACS Applied Materials & Interfaces, 2022, 14, 12385-12394.	4.0	34
9	Plasma enhanced multistate storage capability of single ZnO nanowire based memory. Applied Physics Letters, 2015, 106, .	1.5	30
10	Photoinduced Inverse Spin Hall Effect of Surface States in the Topological Insulator Bi$_2$Se$_3$. Nano Letters, 2017, 17, 7878-7885.	4.5	29
11	10.24% Efficiency of Flexible Cu$_2$ZnSn(S,Se)$_4$ Solar Cells by Pre–Evaporation Selenization Technique. Small, 2022, 18, e2201347.	5.2	28
12	Resistive Switching of Plasma–Treated Zinc Oxide Nanowires for Resistive Random Access Memory. Nanomaterials, 2016, 6, 16.	1.9	25
13	Using hysteresis to predict the charge recombination properties of perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 6382-6392.	5.2	25
14	Mechanism of Current Shunting in Flexible Cu$_2$Zn$_{1-x}$Cd$_x$Sn(S,Se)$_4$ Solar Cells. Solar Rrl, 2020, 4, 1900410.	3.1	23
15	Investigation of structural, optical and electrical properties of Cu doped Î²-In2S3 thin films. Journal of Materials Science: Materials in Electronics, 2016, 27, 5810-5817.	1.1	22
16	Efficient flexible Mo foil-based Cu2ZnSn(S, Se)4 solar cells from In-doping technique. Solar Energy Materials and Solar Cells, 2020, 209, 110434.	3.0	22
17	Prospects of Zn(O,S) as an alternative buffer layer for Cu$_2$ZnSnS$_4$ thin–film solar cells from numerical simulation. Micro and Nano Letters, 2016, 11, 386-390.	0.6	21
18	A Density Peak-Based Clustering Approach for Fault Diagnosis of Photovoltaic Arrays. International Journal of Photoenergy, 2017, 2017, 1-14.	1.4	21

#	Article	IF	Citations
19	Efficient $(Cu_{1-x}Ag_x)_2ZnSn(S,Se)_4$ solar cells on flexible Mo foils. RSC Advances, 2018, 8, 27686-27694.	1.7	21
20	Efficient All‐Inorganic Sb_2S_3 Solar Cells with Matched Energy Levels Using Sb_2Se_3 as Hole Transport Layers. Solar Rrl, 2022, 6, .	3.1	21
21	Flexible Planar Microsupercapacitors Based on Polypyrrole Nanotubes. ACS Applied Energy Materials, 2021, 4, 8857-8865.	2.5	20
22	Helicity-dependent photocurrent of the top and bottom Dirac surface states of epitaxial thin films of three-dimensional topological insulators <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Sb</mml:mi><mml:mn>2</mml:mn></mml:r Physical Review B, 2019, 100, .	1.1	19
23	Surface crack detection based on image stitching and transfer learning with pretrained convolutional neural network. Structural Control and Health Monitoring, 2021, 28, e2766.	1.9	19
24	Al‐doped ZnS thin films for buffer layers of solar cells prepared by chemical bath deposition. Micro and Nano Letters, 2013, 8, 211-214.	0.6	18
25	Control of Circular Photogalvanic Effect of Surface States in the Topological Insulator Bi2Te3 via Spin Injection. ACS Applied Materials & Interfaces, 2020, 12, 18091-18100.	4.0	18
26	A Population Classification Evolution Algorithm for the Parameter Extraction of Solar Cell Models. International Journal of Photoenergy, 2016, 2016, 1-16.	1.4	15
27	A Robust Magnetic Tracking Approach Based on Graph Optimization. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7933-7940.	2.4	15
28	Defects and Resistive Switching of Zinc Oxide Nanorods with Copper Addition Grown by Hydrothermal Method. Journal of Electronic Materials, 2014, 43, 2676-2682.	1.0	14
29	Improved Magnetic Guidance Approach for Automated Guided Vehicles by Error Analysis and Prior Knowledge. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 6843-6852.	4.7	14
30	Efficiency Improvement of Flexible $Cu_2ZnSn(S,Se)_4$ Solar Cells by Window Layer Interface Engineering. ACS Applied Energy Materials, 2021, 4, 14467-14475.	2.5	14
31	Six‐degree‐of‐freedom generalized displacements measurement based on binocular vision. Structural Control and Health Monitoring, 2020, 27, e2458.	1.9	13
32	Depleted Sb_2S_3 Thin Film Photoconductive Detectors with Fast Response Speed and High Polarization Sensitivity. Advanced Materials Interfaces, 2022, 9, 2101504.	1.9	13
33	Band alignment at the In2S3/Cu2ZnSnS4 heterojunction interface investigated by X-ray photoemission spectroscopy. Applied Physics A: Materials Science and Processing, 2014, 116, 2173-2177.	1.1	12
34	Effects of Sulfurization Temperature on Properties of CZTS Films by Vacuum Evaporation and Sulfurization Method. International Journal of Photoenergy, 2013, 2013, 1-6.	1.4	10
35	Improved performance of inverted organic solar cells by using La-doped TiO2 film as electron transport layer. Journal of Materials Science: Materials in Electronics, 2017, 28, 2272-2278.	1.1	10
36	Online Fault Diagnosis for Photovoltaic Arrays Based on Fisher Discrimination Dictionary Learning for Sparse Representation. IEEE Access, 2021, 9, 30180-30192.	2.6	10

#	Article	IF	Citations
37	Numerical Study to Improve the Back Interface Contact of CZTSSe Solar Cells Using Oxygen-Doped $Mo(Se_{1-x}, O_x)_2$. Journal of Physical Chemistry C, 2021, 125, 16746-16752.	1.5	10
38	Design and Realization of Home Appliances Control System Based on the Android Smartphone. , 2012, , .		9
39	Influence of Sulfurization Temperature on Photoelectric Properties Cu_2SnS_3 Thin Films Deposited by Magnetron Sputtering. Advances in Materials Science and Engineering, 2013, 2013, 1-4.	1.0	9
40	Influence of oxidization temperature on Zn(O,S) films deposited by electron beam evaporation. Crystal Research and Technology, 2016, 51, 354-359.	0.6	8
41	Tuning of Rashba/Dresselhaus Spin Splittings by Inserting Ultra-Thin InAs Layers at Interfaces in Insulating GaAs/AlGaAs Quantum Wells. Nanoscale Research Letters, 2016, 11, 477.	3.1	8
42	Object tracking in the presence of shaking motions. Neural Computing and Applications, 2019, 31, 5917-5934.	3.2	8
43	10.18% PCE of organic solar cells with pyramid micron-structured PDMS. Solar Energy, 2021, 220, 394-399.	2.9	8
44	Comparing molybdenum oxide thin films prepared by magnetron sputtering and thermal evaporation applied in organic solar cells. Journal of Materials Science: Materials in Electronics, 2016, 27, 3245-3249.	1.1	7
45	Upconversion improvement in KLaF4:Yb3+/Er3+ nanoparticles by doping Al3+ ions. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	7
46	Modification of back electrode structure by a Mo intermediate layer for flexible CZTS thin film solar cells. Micro and Nano Letters, 2018, 13, 237-242.	0.6	7
47	Optimal data collection of multi-radio multi-channel multi-power wireless sensor networks for structural monitoring applications: A simulation study. Structural Control and Health Monitoring, 2019, 26, e2328.	1.9	7
48	Giant photoinduced anomalous Hall effect of the topological surface states in three dimensional topological insulators Bi2Te3. Applied Physics Letters, 2020, 116, 141603.	1.5	7
49	Observation of current-induced spin polarization in the topological insulator Bi_2 via circularly polarized photoconductive differential current. Physical Review B, 2021, 104, .		7
50	Plasmon-enhanced upconversion luminescence of the composite films through tunable ZnO spacer. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	5
51	Solution processable reduced graphene oxide decorated ATO electrode for organic solar cells. Applied Physics A: Materials Science and Processing, 2014, 117, 1095-1101.	1.1	4
52	Optical and Electrical Properties of Ag-Doped In_2S_3 Thin Films Prepared by Thermal Evaporation. Advances in Materials Science and Engineering, 2014, 2014, 1-4.	1.0	4
53	Power conversion efficiency enhancement of polymer solar cells using MoO3/TFB as hole transport layer. Applied Physics A: Materials Science and Processing, 2015, 120, 857-861.	1.1	4
54	Self-cleaning organic solar cells based on micro/nanostructured haze films with optical enhancement effect. Applied Physics Letters, 2019, 115, .	1.5	4

#	Article	IF	Citations
55	Giant circular photogalvanic effect of the surface states in an ultra-thin Bi2Se3 nanoplate grown by chemical vapor deposition. Journal of Applied Physics, 2021, 129, .	1.1	3
56	Upconversion luminescence enhancement of the composite films by coupling local surface plasmon effect and photonic crystals effect. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	1.1	3
57	Characterisation and properties of Cu2ZnSnS4 thin films synthesised by sputtering from an alloy target. Materials Research Innovations, 2017, 21, 97-101.	1.0	2
58	Different doping positions of Au nanorods impact on organic solar cells performance. Journal of Materials Science: Materials in Electronics, 2018, 29, 10669-10676.	1.1	2
59	BitFlow-Net: Toward Fully Binarized Convolutional Neural Networks. IEEE Access, 2019, 7, 154617-154626.	2.6	2
60	Bipolar Conduction and Giant Positive Magnetoresistance in Doped Metallic Titanium Oxide Heterostructures. Advanced Materials Interfaces, 2021, 8, 2002147.	1.9	2
61	Thermally evaporated SnS:Cu thin films for solar cells. , 2011, , .		1
62	Observation of Extrinsic Photo-Induced Inverse Spin Hall Effect in a GaAs/AlGaAs Two-Dimensional Electron Gas. Nanoscale Research Letters, 2018, 13, 320.	3.1	1
63	Influence of thickness on structural and optical properties of evaporated SnS films. , 2011, , .		0
64	Fully Binarized Convolutional Neural Network for Accelerating Edge Vision Computing. , 2018, , .		0
65	A Highly Digital ADC With Enhanced Accuracy Using a Simple Ripple-Transferring Replica Pseudo PLL Technique. IEEE Transactions on Circuits and Systems II: Express Briefs, 2019, 66, 197-201.	2.2	0
66	Enhanced performance of organic solar cells with multifunctional silica-coated Au nanobowtie core-shell structure. Journal of Nanoparticle Research, 2020, 22, 1.	0.8	0
67	In-plane magnetic field induced helicity dependent photogalvanic effect on the surface states of topological insulators (BixSb1−x)2Te3. Journal of Applied Physics, 2021, 130, 085305.	1.1	0