

Nian Cheng

List of Publications by Year in descending order

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Version: 2024-02-01

26
papers

932
citations

471509

17
h-index

580821

25
g-index

26
all docs

26
docs citations

26
times ranked

1510
citing authors

#	ARTICLE	IF	CITATIONS
1	Low-temperature plasma-enhanced atomic layer deposition of tin oxide electron selective layers for highly efficient planar perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 12080-12087.	10.3	210
2	Stable Organic-Inorganic Perovskite Solar Cells without Hole-Conductor Layer Achieved via Cell Structure Design and Contact Engineering. <i>Advanced Functional Materials</i> , 2016, 26, 4866-4873.	14.9	84
3	W-doped TiO ₂ mesoporous electron transport layer for efficient hole transport material free perovskite solar cells employing carbon counter electrodes. <i>Journal of Power Sources</i> , 2017, 342, 489-494.	7.8	71
4	One-pot stirring-free synthesis of silver nanowires with tunable lengths and diameters via a Fe ³⁺ & Cl ⁻ co-mediated polyol method and their application as transparent conductive films. <i>Nanoscale</i> , 2016, 8, 18121-18133.	5.6	66
5	Multi-walled carbon nanotubes act as charge transport channel to boost the efficiency of hole transport material free perovskite solar cells. <i>Journal of Power Sources</i> , 2016, 332, 24-29.	7.8	58
6	Enhanced performance in hole transport material free perovskite solar cells via morphology control of PbI ₂ film by solvent treatment. <i>Journal of Power Sources</i> , 2016, 319, 111-115.	7.8	46
7	Application of mesoporous SiO ₂ layer as an insulating layer in high performance hole transport material free CH ₃ NH ₃ PbI ₃ perovskite solar cells. <i>Journal of Power Sources</i> , 2016, 321, 71-75.	7.8	46
8	Low-cost and Efficient Hole-Transport-Material-free perovskite solar cells employing controllable electron-transport layer based on P25 nanoparticles. <i>Electrochimica Acta</i> , 2016, 213, 83-88.	5.2	33
9	Enhance the performance and stability of methylammonium lead iodide perovskite solar cells with guanidinium thiocyanate additive. <i>Current Applied Physics</i> , 2019, 19, 25-30.	2.4	32
10	Cu ₂ ZnSnS ₄ as an efficient hole transporting material for low temperature paintable carbon electrode based perovskite solar cells. <i>Organic Electronics</i> , 2020, 76, 105455.	2.6	30
11	Boost the performance of inverted perovskite solar cells with PEDOT:PSS/Graphene quantum dots composite hole transporting layer. <i>Organic Electronics</i> , 2020, 78, 105575.	2.6	28
12	A composite nanostructured electron-transport layer for stable hole-conductor free perovskite solar cells: design and characterization. <i>Nanoscale</i> , 2016, 8, 5847-5851.	5.6	25
13	Ligand modification of Cu ₂ ZnSnS ₄ nanoparticles boosts the performance of low temperature paintable carbon electrode based perovskite solar cells to 17.71%. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12080-12088.	10.3	25
14	Probing effects of molecular conformation on the electronic and charge transport properties in two- and three-dimensional small molecule hole-transporting materials: a theoretical investigation. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 15206-15214.	2.8	24
15	Structural modulation enables magneto-dielectric effect and enhanced photoactivity in ferroelectric bismuth iron niobate pyrochlore. <i>Journal of Materials Chemistry C</i> , 2019, 7, 1263-1272.	5.5	23
16	Post-annealing treatment of a-GeSe thin films for photovoltaic application. <i>Solar Energy</i> , 2020, 199, 837-843.	6.1	23
17	Efficient and stable MAPbI ₃ perovskite solar cells achieved via chlorobenzene/perylene mixed anti-solvent. <i>Solar Energy</i> , 2021, 220, 251-257.	6.1	22
18	A simulation study of valence band offset engineering at the perovskite/Cu ₂ ZnSn(Se _{1-x} S _x) ₄ interface for enhanced performance. <i>Materials Science in Semiconductor Processing</i> , 2019, 90, 59-64.	4.0	17

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19	Efficient Electron Transport Scaffold Made up of Submicron TiO_2 Spheres for High-Performance Hole-Transport Material Free Perovskite Solar Cells. ACS Applied Energy Materials, 2017, 10, 11, 1111-1118.	5.1	13
20	Combined solvent and vapor treatment to prepare high quality perovskite films under high relative humidity. Electrochimica Acta, 2017, 246, 990-996.	5.2	11
21	CZTS nanoparticles as an effective hole-transport layer for Sb_2Se_3 thin-film solar cells. Solar Energy, 2021, 226, 154-160.	6.1	10
22	High performance hole transport material free perovskite solar cells from a low pure PbI_2 source using a facile solid-gas reaction process. Organic Electronics, 2018, 53, 221-226.	2.6	9
23	High performance inverted perovskite solar cells using PEDOT:PSS/KCl hybrid hole transporting layer. Organic Electronics, 2021, 98, 106298.	2.6	9
24	Scalable one-step heating up synthesis of $\text{Cu}_2\text{ZnSnS}_4$ nanocrystals hole conducting materials for carbon electrode based perovskite solar cells. Solar Energy, 2021, 224, 51-57.	6.1	7
25	Inverted planar perovskite solar cells with efficient and stability via optimized cathode-interfacial layer. Solar Energy, 2020, 207, 1165-1171.	6.1	5
26	SnO_2 electron transport layer modified with gentian violet for perovskite solar cells with enhanced performance. Organic Electronics, 2022, 108, 106600.	2.6	5