Cheng Chen

List of Publications by Year
in descending order

35 papers	1,299 citations	394421 19 h-index	377865 34 g-index
35 all docs	35 docs citations	35 times ranked	1504 citing authors

#	Article	IF	Citations
1	Phenoxazineâ€Based Small Molecule Material for Efficient Perovskite Solar Cells and Bulk Heterojunction Organic Solar Cells. Advanced Energy Materials, 2015, 5, 1401720.	19.5	109
2	Efficient Perovskite Solar Cells Based on a Solution Processable Nickel(II) Phthalocyanine and Vanadium Oxide Integrated Hole Transport Layer. Advanced Energy Materials, 2017, 7, 1602556.	19.5	107
3	Interfacial Molecular Doping and Energy Level Alignment Regulation for Perovskite Solar Cells with Efficiency Exceeding 23%. ACS Energy Letters, 2021, 6, 2690-2696.	17.4	96
4	Passivation functionalized phenothiazine-based hole transport material for highly efficient perovskite solar cell with efficiency exceeding 22%. Chemical Engineering Journal, 2021, 410, 128328.	12.7	83
5	Acceptorâ€“Donorâ€“Acceptor type ionic molecule materials for efficient perovskite solar cells and organic solar cells. Nano Energy, 2016, 30, 387-397.	16.0	79
6	Dual effective dopant based hole transport layer for stable and efficient perovskite solar cells. Nano Energy, 2020, 72, 104673.	16.0	78
7	Highly efficient phenothiazine 5,5-dioxide-based hole transport materials for planar perovskite solar cells with a PCE exceeding 20%. Journal of Materials Chemistry A, 2019, 7, 9510-9516.	10.3	60
8	Application of benzodithiophene based Aâ€“Dâ€“A structured materials in efficient perovskite solar cells and organic solar cells. Nano Energy, 2016, 23, 40-49.	16.0	59
9	Degradation of Cyanoacrylic Acidâ€Based Organic Sensitizers in Dyeâ€Sensitized Solar Cells. ChemSusChem, 2013, 6, 1270-1275.	6.8	56
10	Constructing binary electron transport layer with cascade energy level alignment for efficient CsPbI2Br solar cells. Nano Energy, 2020, 71, 104604.	16.0	56
11	Highly Efficient Integrated Perovskite Solar Cells Containing a Small Molecule-PC₇₀BM Bulk Heterojunction Layer with an Extended Photovoltaic Response Up to 900 nm. Chemistry of Materials, 2016, 28, 8631-8639.	6.7	41
12	Highly Efficient Phenoxazine Core Unit Based Hole Transport Materials for Hysteresis-Free Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 36608-36614.	8.0	41
13	Efficient Panchromatic Organic Sensitizers with Dihydrothiazole Derivative as Ï€-Bridge for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 10960-10965.	8.0	35
14	Molecular Engineering of Triphenylamine-Based Non-Fullerene Electron-Transport Materials for Efficient Rigid and Flexible Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 38970-38977.	8.0	34
15	Dopant-free methoxy substituted copper(II) phthalocyanine for highly efficient and stable perovskite solar cells. Chemical Engineering Journal, 2020, 387, 124130.	12.7	34
16	Construct efficient CsPbI2Br solar cells by minimizing the open-circuit voltage loss through controlling the peripheral substituents of hole-transport materials. Chemical Engineering Journal, 2021, 425, 131675.	12.7	34
17	Highly efficient perovskite solar cells based on symmetric hole transport material constructed with indaceno[1,2-b:5,6-b']dithiophene core building block. Journal of Energy Chemistry, 2020, 43, 98-103.	12.9	31
18	Surface Defect Passivation and Energy Level Alignment Engineering with a Fluorine-Substituted Hole Transport Material for Efficient Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 13470-13477.	8.0	26

#	Article	IF	Citations
19	In-situ secondary annealing treatment assisted effective surface passivation of shallow defects for efficient perovskite solar cells. Journal of Power Sources, 2021, 492, 229621.	7.8	23
20	Construction of efficient perovskite solar cell through small-molecule synergistically assisted surface defect passivation and fluorescence resonance energy transfer. Chemical Engineering Journal, 2021, 426, 131358.	12.7	22
21	Impact of fluorine substitution in organic functional materials for perovskite solar cell. Dyes and Pigments, 2022, 198, 110029.	3.7	22
22	Bi(trifluoromethyl) Benzoic Acid-Assisted Shallow Defect Passivation for Perovskite Solar Cells with an Efficiency Exceeding 21%. ACS Applied Materials & Interfaces, 2022, 14, 3930-3938.	8.0	21
23	Electron transport interface engineering with pyridine functionalized perylene diimide-based material for inverted perovskite solar cell. Chemical Engineering Journal, 2022, 438, 135410.	12.7	21
24	Spatial configuration engineering of perylenediimide-based non-fullerene electron transport materials for efficient inverted perovskite solar cells. Journal of Energy Chemistry, 2021, 56, 374-382.	12.9	20
25	Molecular engineering of ionic type perylenediimide dimer-based electron transport materials for efficient planar perovskite solar cells. Materials Today Energy, 2018, 9, 264-270.	4.7	19
26	Enhancing the performance of perovskite solar cells through simple bilateral active site molecule assisted surface defect passivation. Chemical Engineering Journal, 2022, 432, 134223.	12.7	17
27	Fluorineâ€Substituted Benzotriazole Core Building Blockâ€Based Highly Efficient Holeâ€Transporting Materials for Mesoporous Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900362.	5.8	16
28	Molecular engineering of small molecules donor materials based on phenoxazine core unit for solution-processed organic solar cells. Journal of Materials Chemistry A, 2014, 2, 10465-10469.	10.3	15
29	Constructing Efficient Hole-Transporting Materials by Tuning Fluorine Substitution for Inverted Perovskite Solar Cells with Efficiency Exceeding 20%. ACS Applied Energy Materials, 2022, 5, 5901-5908.	5.1	15
30	Construction of Efficient and Stable FAPbI₃ Perovskite Solar Cells through Bifunctional Ionic Liquidâ€Assisted Crystallization and Defect Passivation. Solar Rrl, 2022, 6, .	5.8	12
31	Highly efficient organic dyes containing a benzopyran ring as a Ïâ€“bridge for DSSCs. RSC Advances, 2013, 3, 12688.	3.6	5
32	Bipolar Organic Material Assisted Surface and Boundary Defects Passivation for Highly Efficient MAPbI 3 â€Based Inverted Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000369.	5.8	5
33	Kernel Sparse Representation with Hybrid Regularization for On-Road Traffic Sensor Data Imputation. Sensors, 2018, 18, 2884.	3.8	4
34	Benzo[1,2-c:4,5-câ€²]dithiophene-4,8-dione (BDD) Core Building Block Based Dopant-Free Hole-Transport Materials for Efficient and Stable Perovskite Solar Cell. ACS Applied Energy Materials, 2020, 3, 10333-10339.	5.1	3
35	Solar Cells: Efficient Perovskite Solar Cells Based on a Solution Processable Nickel(II) Phthalocyanine and Vanadium Oxide Integrated Hole Transport Layer (Adv. Energy Mater. 14/2017). Advanced Energy Materials, 2017, 7, .	19.5	0