Ming Cheng

List of Publications by Year
in descending order

#	Article	IF	Citations
1	A low-cost spiro[fluorene-9,9â€²-xanthene]-based hole transport material for highly efficient solid-state dye-sensitized solar cells and perovskite solar cells. Energy and Environmental Science, 2016, 9, 873-877.	30.8	362
2	Structure Engineering of Holeâ€"Conductor Free Perovskite-Based Solar Cells with Low-Temperature-Processed Commercial Carbon Paste As Cathode. ACS Applied Materials & Interfaces, 2014, 6, 16140-16146.	8.0	245
3	Boosting the efficiency and the stability of low cost perovskite solar cells by using CuPc nanorods as hole transport material and carbon as counter electrode. Nano Energy, 2016, 20, 108-116.	16.0	240
4	Progress of the key materials for organic solar cells. Science China Chemistry, 2020, 63, 758-765.	8.2	158
5	A chlorinated copolymer donor demonstrates a 18.13% power conversion efficiency. Journal of Semiconductors, 2021, 42, 010501.	3.7	158
6	Charge-transport layer engineering in perovskite solar cells. Science Bulletin, 2020, 65, 1237-1241.	9.0	115
7	CsPb(I Br1â^')3 solar cells. Science Bulletin, 2019, 64, 1532-1539.	9.0	114
8	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
9	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
10	Facile synthesis of fluorene-based hole transport materials for highly efficient perovskite solar cells and solid-state dye-sensitized solar cells. Nano Energy, 2016, 26, 108-113.	16.0	103
11	Novel Small Molecular Materials Based on Phenoxazine Core Unit for Efficient Bulk Heterojunction Organic Solar Cells and Perovskite Solar Cells. Chemistry of Materials, 2015, 27, 1808-1814.	6.7	100
12	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
13	High conductivity Ag-based metal organic complexes as dopant-free hole-transport materials for perovskite solar cells with high fill factors. Chemical Science, 2016, 7, 2633-2638.	7.4	89
14	Optically Transparent Wood Substrate for Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 6061-6067.	6.7	89
15	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
16	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
17	Engineering of hole-selective contact for low temperature-processed carbon counter electrode-based perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 24272-24280.	10.3	78
18	Graphene quantum dots modified flower like Bi2WO6 for enhanced photocatalytic nitrogen fixation. Journal of Colloid and Interface Science, 2019, 557, 498-505.	9.4	78

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19	Dual effective dopant based hole transport layer for stable and efficient perovskite solar cells. Nano Energy, 2020, 72, 104673.	16.0	78
20	Cu(II) Complexes as p-Type Dopants in Efficient Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 497-503.	17.4	77
21	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
22	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
23	1,1,2,2â€Tetrachloroethane (TeCA) as a Solvent Additive for Organic Hole Transport Materials and Its Application in Highly Efficient Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1402340.	19.5	57
24	Constructing binary electron transport layer with cascade energy level alignment for efficient CsPbI2Br solar cells. Nano Energy, 2020, 71, 104604.	16.0	56
25	Efficient dye-sensitized solar cells with [copper(6,6â€²-dimethyl-2,2â€²-bipyridine)₂]^{2+/1+} redox shuttle. RSC Advances, 2017, 7, 4611-4615.	3.6	48
26	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
27	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
28	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
29	Dopant-free methoxy substituted copper(II) phthalocyanine for highly efficient and stable perovskite solar cells. Chemical Engineering Journal, 2020, 387, 124130.	12.7	34
30	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
31	Multiple conformation locks gift polymer donor high efficiency. Nano Energy, 2020, 77, 105161.	16.0	33
32	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
33	A Perylenediimide Tetramerâ€Based 3D Electron Transport Material for Efficient Planar Perovskite Solar Cell. Solar Rrl, 2017, 1, 1700046.	5.8	28
34	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
35	Exploitation of a photoelectrochemical sensing platform for catechol quantitative determination using BiPO4 nanocrystals/BiOI heterojunction. Analytica Chimica Acta, 2018, 1042, 11-19.	5.4	25
36	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

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37	A novel phenoxazine-based hole transport material for efficient perovskite solar cell. Journal of Energy Chemistry, 2015, 24, 698-706.	12.9	22
38	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
39	Impact of fluorine substitution in organic functional materials for perovskite solar cell. Dyes and Pigments, 2022, 198, 110029.	3.7	22
40	Fused-ring phenazine building blocks for efficient copolymer donors. Materials Chemistry Frontiers, 2020, 4, 1454-1458.	5.9	21
41	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
42	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
43	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
44	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
45	Interfacial self-assembly of monolayer Mg-doped NiO honeycomb structured thin film with enhanced performance for gas sensing. Journal of Materials Science: Materials in Electronics, 2018, 29, 11498-11508.	2.2	18
46	An efficient medium-bandgap nonfullerene acceptor for organic solar cells. Journal of Materials Chemistry A, 2020, 8, 8857-8861.	10.3	17
47	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
48	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
49	Facile synthesized fluorine substituted benzothiadiazole based dopant-free hole transport material for high efficiency perovskite solar cell. Dyes and Pigments, 2021, 184, 108786.	3.7	15
50	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
51	Molecular engineering of triphenylamine functionalized phenoxazine sensitizers for highly efficient solid-state dye sensitized solar cells. Dyes and Pigments, 2019, 162, 606-610.	3.7	14
52	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
53	An all-organic TPA-3CN/2D-C3N4 heterostructure for high efficiency photocatalytic hydrogen evolution. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 589, 124397.	4.7	10
54	Rational design of phenothiazine-based hole transport material with fluorene-containing asymmetric peripheral donor group for perovskite solar cells. Dyes and Pigments, 2022, 202, 110279.	3.7	9

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55	Molecular engineering of phenothiazine-based monomer and dimer hole transport materials and their photovoltaic performance. Dyes and Pigments, 2021, 191, 109340.	3.7	7
56	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
57	Natural Chlorophyll Derivative Assisted Defect Passivation and Hole Extraction for MAPbI₃ Perovskite Solar Cells with Efficiency Exceeding 20%. ACS Applied Energy Materials, 2022, 5, 1390-1396.	5.1	5
58	Benzo[1,2-<i>c</i>:4,5-<i>c</i>â€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
59	Dye-Sensitized Solar Cells: 1,1,2,2-Tetrachloroethane (TeCA) as a Solvent Additive for Organic Hole Transport Materials and Its Application in Highly Efficient Solid-State Dye-Sensitized Solar Cells (Adv.) Tj ETQq1 1 0.784314 rg BT /Overlo	19.5	0
60	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