List of Publications by Year in descending order

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DONCMELL

#	Article	IF	CITATIONS
1	Dye-sensitized solar cells with NiS counter electrodes electrodeposited by a potential reversal technique. Energy and Environmental Science, 2011, 4, 2630.	30.8	423
2	Interfaces in Perovskite Solar Cells. Small, 2015, 11, 2472-2486.	10.0	344
3	An all-carbon counter electrode for highly efficient hole-conductor-free organo-metal perovskite solar cells. RSC Advances, 2014, 4, 52825-52830.	3.6	175
4	Efficient (>20 %) and Stable Allâ€Inorganic Cesium Lead Triiodide Solar Cell Enabled by Thiocyanate Molten Salts. Angewandte Chemie - International Edition, 2021, 60, 13436-13443.	13.8	166
5	Selfâ€Adhesive Macroporous Carbon Electrodes for Efficient and Stable Perovskite Solar Cells. Advanced Functional Materials, 2018, 28, 1802985.	14.9	161
6	Highly efficient planar perovskite solar cells with a TiO ₂ /ZnO electron transport bilayer. Journal of Materials Chemistry A, 2015, 3, 19288-19293.	10.3	145
7	Mg-doped TiO ₂ boosts the efficiency of planar perovskite solar cells to exceed 19%. Journal of Materials Chemistry A, 2016, 4, 15383-15389.	10.3	131
8	Localized Surface Plasmon Resonance Enhanced Photocatalytic Hydrogen Evolution via Pt@Au NRs/C ₃ N ₄ Nanotubes under Visibleâ€Light Irradiation. Advanced Functional Materials, 2019, 29, 1806774.	14.9	129
9	Intermolecular ï€â€"ï€ Conjugation Selfâ€Assembly to Stabilize Surface Passivation of Highly Efficient Perovskite Solar Cells. Advanced Materials, 2020, 32, e1907396.	21.0	128
10	Investigation on the role of Lewis bases in the ripening process of perovskite films for highly efficient perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 20874-20881.	10.3	117
11	Aqueous colloidal CuInS2 for quantum dot sensitized solar cells. Journal of Materials Chemistry, 2011, 21, 15903.	6.7	110
12	Non orrosive, Nonâ€Absorbing Organic Redox Couple for Dye‧ensitized Solar Cells. Advanced Functional Materials, 2010, 20, 3358-3365.	14.9	109
13	A Simple Way to Simultaneously Release the Interface Stress and Realize the Inner Encapsulation for Highly Efficient and Stable Perovskite Solar Cells. Advanced Functional Materials, 2019, 29, 1905336.	14.9	96
14	Sodium-doped carbon nitride nanotubes for efficient visible light-driven hydrogen production. Nano Research, 2018, 11, 2295-2309.	10.4	94
15	Quantifying the Interface Defect for the Stability Origin of Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1901352.	19.5	91
16	Inorganic Ammonium Halide Additive Strategy for Highly Efficient and Stable CsPbI ₃ Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2010813.	14.9	90
17	Optimization the solid-state electrolytes for dye-sensitized solar cells. Energy and Environmental Science, 2009, 2, 283-291.	30.8	85
18	Opto-electro-modulated transient photovoltage and photocurrent system for investigation of charge transport and recombination in solar cells. Review of Scientific Instruments, 2016, 87, 123107.	1.3	84

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19	Piezo-phototronic Effect Enhanced Efficient Flexible Perovskite Solar Cells. ACS Nano, 2019, 13, 4507-4513.	14.6	82
20	Pressure-assisted CH ₃ NH ₃ PbI ₃ morphology reconstruction to improve the high performance of perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 5289-5293.	10.3	76
21	DMF as an Additive in a Two-Step Spin-Coating Method for 20% Conversion Efficiency in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 26937-26947.	8.0	75
22	Temperatureâ€Reliable Lowâ€Dimensional Perovskites Passivated Blackâ€Phase CsPbI ₃ toward Stable and Efficient Photovoltaics. Angewandte Chemie, 2022, 134, .	2.0	73
23	Quasi-solid-state dye-sensitized solar cell fabricated with poly (β-hydroxyethyl methacrylate) based organogel electrolyte. Energy and Environmental Science, 2011, 4, 1298.	30.8	72
24	Graphdiyneâ€Based Bulk Heterojunction for Efficient and Moistureâ€Stable Planar Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1802012.	19.5	70
25	Fumed SiO ₂ modified electrolytes for quantum dot sensitized solar cells with efficiency exceeding 11% and better stability. Journal of Materials Chemistry A, 2016, 4, 14194-14203.	10.3	68
26	Controlling the conduction band offset for highly efficient ZnO nanorods based perovskite solar cell. Applied Physics Letters, 2015, 107, .	3.3	67
27	New hole transporting materials for planar perovskite solar cells. Chemical Communications, 2018, 54, 1651-1654.	4.1	66
28	Efficient CH3NH3PbI3 perovskite solar cells with 2TPA-n-DP hole-transporting layers. Nano Research, 2015, 8, 1116-1127.	10.4	65
29	Perovskite thin-film solar cell: excitation in photovoltaic science. Science China Chemistry, 2015, 58, 221-238.	8.2	63
30	Identification of high-temperature exciton states and their phase-dependent trapping behaviour in lead halide perovskites. Energy and Environmental Science, 2018, 11, 1460-1469.	30.8	61
31	Ge Bidirectional Diffusion to Simultaneously Engineer Back Interface and Bulk Defects in the Absorber for Efficient CZTSSe Solar Cells. Advanced Materials, 2022, 34, e2202858.	21.0	60
32	Efficient and Compositionâ€Tolerant Kesterite Cu ₂ ZnSn(S, Se) ₄ Solar Cells Derived From an In Situ Formed Multifunctional Carbon Framework. Advanced Energy Materials, 2021, 11, 2102298.	19.5	58
33	The Formation of Ti–H Species at Interface Is Lethal to the Efficiency of TiO ₂ -Based Dye-Sensitized Devices. Journal of the American Chemical Society, 2017, 139, 2083-2089.	13.7	55
34	Application of Cesium on the Restriction of Precursor Crystallization for Highly Reproducible Perovskite Solar Cells Exceeding 20% Efficiency. ACS Applied Materials & Interfaces, 2018, 10, 9503-9513.	8.0	55
35	Ge Incorporation to Stabilize Efficient Inorganic CsPbI ₃ Perovskite Solar Cells. Advanced Energy Materials, 2022, 12, .	19.5	55
36	Application of a New Cyclic Guanidinium Ionic Liquid on Dye-Sensitized Solar Cells (DSCs). Langmuir, 2009, 25, 4808-4814.	3.5	53

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37	Exploiting Electrical Transients to Quantify Charge Loss in Solar Cells. Joule, 2020, 4, 472-489.	24.0	53
38	A perylene diimide based polymer: a dual function interfacial material for efficient perovskite solar cells. Materials Chemistry Frontiers, 2017, 1, 1079-1086.	5.9	51
39	Inorganic–organic halide perovskites for new photovoltaic technology. National Science Review, 2018, 5, 559-576.	9.5	49
40	Solvent-engineering toward CsPb(I _x Br _{1â^'x}) ₃ films for high-performance inorganic perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 19810-19816.	10.3	47
41	Photoacoustic and photoelectrochemical current spectra of combined CdS/CdSe quantum dots adsorbed on nanostructured TiO2 electrodes, together with photovoltaic characteristics. Journal of Applied Physics, 2010, 108, .	2.5	39
42	Underlying mechanism of the efficiency loss in CZTSSe solar cells: Disorder and deep defects. Science China Materials, 2020, 63, 2371-2396.	6.3	37
43	A thin pristine non-triarylamine hole-transporting material layer for efficient CH ₃ NH ₃ PbI ₃ perovskite solar cells. RSC Advances, 2014, 4, 32918.	3.6	35
44	Intrinsic slow charge response in the perovskite solar cells: Electron and ion transport. Applied Physics Letters, 2015, 107, 163901.	3.3	35
45	The Effect of Humidity upon the Crystallization Process of Twoâ€Step Spin oated Organic–Inorganic Perovskites. ChemPhysChem, 2016, 17, 112-118.	2.1	35
46	A high-efficiency (12.5%) kesterite solar cell realized by crystallization growth kinetics control over aqueous solution based Cu ₂ ZnSn(S,Se) ₄ . Journal of Materials Chemistry A, 2022, 10, 779-788.	10.3	35
47	CdS/CdSe Co-Sensitized Solar Cells Based on a New SnO ₂ Photoanode with a Three-Dimensionally Interconnected Ordered Porous Structure. Journal of Physical Chemistry C, 2014, 118, 4007-4015.	3.1	34
48	High Quality Perovskite Crystals for Efficient Film Photodetectors Induced by Hydrolytic Insulating Oxide Substrates. Advanced Functional Materials, 2018, 28, 1705220.	14.9	34
49	High-efficiency (>20%) planar carbon-based perovskite solar cells through device configuration engineering. Journal of Colloid and Interface Science, 2022, 608, 3151-3158.	9.4	34
50	New two-dimensional porous graphitic carbon nitride nanosheets for highly efficient photocatalytic hydrogen evolution under visible-light irradiation. Catalysis Science and Technology, 2018, 8, 3846-3852.	4.1	32
51	Application of a new π-conjugated ladder-like polymer in enhancing the stability and efficiency of perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 1417-1424.	10.3	32
52	Molecular "Flower―as the High-Mobility Hole-Transport Material for Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 43855-43860.	8.0	31
53	Microscopic Charge Transport and Recombination Processes behind the Photoelectric Hysteresis in Perovskite Solar Cells. Small, 2016, 12, 5288-5294.	10.0	29
54	Plasma-enhanced atomic-layer-deposited gallium nitride as an electron transport layer for planar perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 25347-25354.	10.3	28

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55	In-Situ Electropolymerized Polyamines as Dopant-Free Hole-Transporting Materials for Efficient and Stable Inverted Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 5058-5066.	5.1	26
56	Band engineering of Cu2+ doped In2xZn3(1â^'x)S3 solid solution with high photocatalytic activity for H2 production under visible light. Catalysis Science and Technology, 2013, 3, 1993.	4.1	25
57	Using hysteresis to predict the charge recombination properties of perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 6382-6392.	10.3	25
58	Two-Step Annealing CZTSSe/CdS Heterojunction to Improve Interface Properties of Kesterite Solar Cells. ACS Applied Materials & amp; Interfaces, 2021, 13, 55243-55253.	8.0	25
59	Hydrothermal synthesis of zinc indium sulfide microspheres with Ag ⁺ doping for enhanced H ₂ production by photocatalytic water splitting under visible light. Catalysis Science and Technology, 2014, 4, 1144-1150.	4.1	23
60	Enhanced photocatalytic activity of mesoporous carbon/C3N4 composite photocatalysts. Journal of Colloid and Interface Science, 2018, 512, 474-479.	9.4	22
61	Exciton Character and Highâ€Performance Stimulated Emission of Hybrid Lead Bromide Perovskite Polycrystalline Film. Advanced Optical Materials, 2020, 8, 1902026.	7.3	22
62	Fabrication of Cu ₂ ZnSn(S,Se) ₄ photovoltaic devices with 10% efficiency by optimizing the annealing temperature of precursor films. RSC Advances, 2018, 8, 4119-4124.	3.6	21
63	Photocharge accumulation and recombination in perovskite solar cells regarding device performance and stability. Applied Physics Letters, 2018, 112, 053904.	3.3	20
64	Electropolymerization Porous Aromatic Framework Film As a Hole-Transport Layer for Inverted Perovskite Solar Cells with Superior Stability. ACS Applied Materials & Interfaces, 2017, 9, 43688-43695.	8.0	19
65	Enhancing back interfacial contact by in-situ prepared MoO3 thin layer for Cu2ZnSnSxSe4-x solar cells. Science China Materials, 2019, 62, 797-802.	6.3	19
66	Enhanced Perovskite Solar Cell Efficiency Via the Electric-Field-Induced Approach. ACS Applied Materials & Interfaces, 2020, 12, 27258-27267.	8.0	19
67	The potential of eutectic mixtures as environmentally friendly, solvent-free electrolytes for dye-sensitized solar cells. RSC Advances, 2013, 3, 6922.	3.6	18
68	CdS Induced Passivation toward High Efficiency and Stable Planar Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 9771-9780.	8.0	17
69	Enhancement of H2 evolution over new ZnIn2S4/RGO/MoS2 photocatalysts under visible light. APL Materials, 2015, 3, 104417.	5.1	16
70	Efficient (>20 %) and Stable Allâ€Inorganic Cesium Lead Triiodide Solar Cell Enabled by Thiocyanate Molten Salts. Angewandte Chemie, 2021, 133, 13548-13555.	2.0	15
71	A new figure of merit for qualifying the fluorine-doped tin oxide glass used in dye-sensitized solar cells. Journal of Renewable and Sustainable Energy, 2009, 1, 063107.	2.0	14
72	An overview on water splitting photocatalysts. Frontiers of Chemistry in China: Selected Publications From Chinese Universities, 2009, 4, 343-351.	0.4	14

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73	The influence of different mask aperture on the open-circuit voltage measurement of perovskite solar cells. Journal of Renewable and Sustainable Energy, 2015, 7, 043104.	2.0	13
74	Ultra-small interlayer spacing and nano channels in anionic layered perovskite Cs2Pb(SCN)2I2 enable efficient photoelectric conversion. Science China Materials, 2021, 64, 61-72.	6.3	10
75	Eliminating the electric field response in a perovskite heterojunction solar cell to improve operational stability. Science Bulletin, 2021, 66, 536-544.	9.0	10
76	Study on negative incident photon-to-electron conversion efficiency of quantum dot-sensitized solar cells. Review of Scientific Instruments, 2014, 85, 023103.	1.3	9
77	Simple biphenyl or carbazole derivatives with four di(anisyl)amino substituents as efficient hole-transporting materials for perovskite solar cells. RSC Advances, 2016, 6, 92213-92217.	3.6	9
78	Methylammonium cation deficient surface for enhanced binding stability at TiO2/CH3NH3PbI3 interface. Nano Research, 2017, 10, 483-490.	10.4	8
79	Reconfiguring perovskite interface via R4NBr addition reaction toward efficient and stable FAPbI3-based solar cells. Science China Chemistry, 2022, 65, 1185-1195.	8.2	5
80	A rapid and scalable strategy to high quality inverse opal tin dioxide porous films. Journal of Materials Chemistry C, 2013, 1, 5450.	5.5	4
81	A new molecular material as a dopant-free hole-transporting layer for stable perovskite solar cells. Materials Chemistry Frontiers, 0, , .	5.9	4
82	Enhanced electron injection/transportation by surface states increment in mesoporous TiO2 dye-sensitized solar cells. Frontiers of Optoelectronics in China, 2011, 4, 65-71.	0.2	1
83	Diffusion Dynamics of Mobile Ions Hidden in Transient Optoelectronic Measurement in Planar Perovskite Solar Cells. ACS Applied Energy Materials, 2020, 3, 8330-8337.	5.1	1
84	Investigation on stability of perovskite solar cells: from Materials to Devices. , 0, , .		0