# Yan Jiang

List of Publications by Year
in descending order



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|---|---|---|---|
| 42 papers | 4,219 citations | 201674 27 h-index | 276875 41 g-index |
| 42 all docs | 42 docs citations | 42 times ranked | 5561 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Hole transporting materials in inorganic CsPbI3â^'Br solar cells: Fundamentals, criteria and opportunities. Materials Today, 2022, 52, 250-268. | 14.2 | 20 |
| 2 | Strain relaxation and domain enlargementviaphase transition towards efficient CsPbI<sub>2</sub>Br solar cells. Journal of Materials Chemistry A, 2022, 10, 3513-3521. | 10.3 | 11 |
| 3 | Perovskite solar cells by vapor deposition based and assisted methods. Applied Physics Reviews, 2022, 9, . | 11.3 | 33 |
| 4 | Metal halide perovskite-based flexible tandem solar cells: next-generation flexible photovoltaic technology. Materials Chemistry Frontiers, 2021, 5, 4833-4850. | 5.9 | 15 |
| 5 | Metal halide perovskite solar cells by modified chemical vapor deposition. Journal of Materials Chemistry A, 2021, 9, 22759-22780. | 10.3 | 22 |
| 6 | Electrical Loss Management by Molecularly Manipulating Dopantâ€free Poly(3â€hexylthiophene) towards 16.93â€‰% CsPbI<sub>2</sub>Br Solar Cells. Angewandte Chemie, 2021, 133, 16524-16529. | 2.0 | 18 |
| 7 | Electrical Loss Management by Molecularly Manipulating Dopantâ€free Poly(3â€hexylthiophene) towards 16.93â€‰% CsPbI<sub>2</sub>Br Solar Cells. Angewandte Chemie - International Edition, 2021, 60, 16388-16393. | 13.8 | 57 |
| 8 | Engineering inorganic lead halide perovskite deposition toward solar cells with efficiency approaching 20%. Aggregate, 2021, 2, 66-83. | 9.9 | 24 |
| 9 | Regulating the crystalline phase of intermediate films enables FA<sub>1â^'x</sub>MA<sub>x</sub>PbI<sub>3</sub> perovskite solar cells with efficiency over 22%. Journal of Materials Chemistry A, 2021, 9, 24064-24070. | 10.3 | 20 |
| 10 | Revealing the perovskite formation kinetics during chemical vapour deposition. Journal of Materials Chemistry A, 2020, 8, 21973-21982. | 10.3 | 24 |
| 11 | A holistic approach to interface stabilization for efficient perovskite solar modules with over 2,000-hour operational stability. Nature Energy, 2020, 5, 596-604. | 39.5 | 274 |
| 12 | Nearâ€Infraredâ€Transparent Perovskite Solar Cells and Perovskiteâ€Based Tandem Photovoltaics. Small Methods, 2020, 4, 2000395. | 8.6 | 63 |
| 13 | High-Mobility In<sub>2</sub>O<sub>3</sub>:H Electrodes for Four-Terminal Perovskite/CuInSe<sub>2</sub> Tandem Solar Cells. ACS Nano, 2020, 14, 7502-7512. | 14.6 | 54 |
| 14 | Mitigation of Vacuum and Illumination-Induced Degradation in Perovskite Solar Cells by Structure Engineering. Joule, 2020, 4, 1087-1103. | 24.0 | 69 |
| 15 | Highly Efficient and Stable Perovskite Solar Cells via Modification of Energy Levels at the Perovskite/Carbon Electrode Interface. Advanced Materials, 2019, 31, e1804284. | 21.0 | 161 |
| 16 | Reduction of lead leakage from damaged lead halide perovskite solar modules using self-healing polymer-based encapsulation. Nature Energy, 2019, 4, 585-593. | 39.5 | 327 |
| 17 | Hybrid chemical vapor deposition enables scalable and stable Cs-FA mixed cation perovskite solar modules with a designated area of 91.8 cm<sup>2</sup> approaching 10% efficiency. Journal of Materials Chemistry A, 2019, 7, 6920-6929. | 10.3 | 112 |
| 18 | Negligibleâ€Pbâ€Waste and Upscalable Perovskite Deposition Technology for Highâ€Operationalâ€Stability Perovskite Solar Modules. Advanced Energy Materials, 2019, 9, 1803047. | 19.5 | 68 |

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|---|---|---|---|
| 19 | Scalable Fabrication of Stable High Efficiency Perovskite Solar Cells and Modules Utilizing Room Temperature Sputtered SnO<sub>2</sub> Electron Transport Layer. Advanced Functional Materials, 2019, 29, 1806779. | 14.9 | 118 |
| 20 | Photodecomposition and thermal decomposition in methylammonium halide lead perovskites and inferred design principles to increase photovoltaic device stability. Journal of Materials Chemistry A, 2018, 6, 9604-9612. | 10.3 | 437 |
| 21 | Enhancing Optical, Electronic, Crystalline, and Morphological Properties of Cesium Lead Halide by Mn Substitution forÂHighâ€Stability Allâ€Inorganic Perovskite Solar Cells withÂCarbon Electrodes. Advanced Energy Materials, 2018, 8, 1800504. | 19.5 | 272 |
| 22 | Highly Boosted Microbial Extracellular Electron Transfer by Semiconductor Nanowire Array with Suitable Energy Level. Advanced Functional Materials, 2018, 28, 1707408. | 14.9 | 17 |
| 23 | Largeâ€Area Perovskite Solar Modules: Combination of Hybrid CVD and Cation Exchange for Upscaling Csâ€Substituted Mixed Cation Perovskite Solar Cells with High Efficiency and Stability (Adv. Funct.) Tj ETQq1 1 0.784314 rgBT /Overlock | 14.9 | 17 |
| 24 | Engineering Interface Structure to Improve Efficiency and Stability of Organometal Halide Perovskite Solar Cells. Journal of Physical Chemistry B, 2018, 122, 511-520. | 2.6 | 68 |
| 25 | Combination of Hybrid CVD and Cation Exchange for Upscaling Csâ€Substituted Mixed Cation Perovskite Solar Cells with High Efficiency and Stability. Advanced Functional Materials, 2018, 28, 1703835. | 14.9 | 158 |
| 26 | Gas-solid reaction based over one-micrometer thick stable perovskite films for efficient solar cells and modules. Nature Communications, 2018, 9, 3880. | 12.8 | 109 |
| 27 | Benchmarking Chemical Stability of Arbitrarily Mixed 3D Hybrid Halide Perovskites for Solar Cell Applications. Small Methods, 2018, 2, 1800242. | 8.6 | 26 |
| 28 | The influence of secondary solvents on the morphology of a spiro-MeOTAD hole transport layer for lead halide perovskite solar cells. Journal Physics D: Applied Physics, 2018, 51, 294001. | 2.8 | 23 |
| 29 | Improved Efficiency and Stability of Perovskite Solar Cells Induced by Cï£¾O Functionalized Hydrophobic Ammoniumâ€Based Additives. Advanced Materials, 2018, 30, 1703670. | 21.0 | 132 |
| 30 | Accelerated degradation of methylammonium lead iodide perovskites induced by exposure to iodine vapour. Nature Energy, 2017, 2, . | 39.5 | 491 |
| 31 | Application of Methylamine Gas in Fabricating Organicâ€“Inorganic Hybrid Perovskite Solar Cells. Energy Technology, 2017, 5, 1750-1761. | 3.8 | 46 |
| 32 | Methylammonium Lead Bromide Perovskite Light-Emitting Diodes by Chemical Vapor Deposition. Journal of Physical Chemistry Letters, 2017, 8, 3193-3198. | 4.6 | 113 |
| 33 | Chemical vapor deposition grown formamidinium perovskite solar modules with high steady state power and thermal stability. Journal of Materials Chemistry A, 2016, 4, 13125-13132. | 10.3 | 169 |
| 34 | Post-annealing of MAPbI<sub>3</sub> perovskite films with methylamine for efficient perovskite solar cells. Materials Horizons, 2016, 3, 548-555. | 12.2 | 141 |
| 35 | Hierarchical Nanowire Arrays as Three-Dimensional Fractal Nanobiointerfaces for High Efficient Capture of Cancer Cells. Nano Letters, 2016, 16, 766-772. | 9.1 | 122 |
| 36 | Boosting the Open Circuit Voltage and Fill Factor of QDSSCs Using Hierarchically Assembled ITO@Cu<sub>2</sub>S Nanowire Array Counter Electrodes. Nano Letters, 2015, 15, 3088-3095. | 9.1 | 86 |

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|---|---|---|---|
| 37 | Physical vapor deposition of amorphous MoS<sub>2</sub> nanosheet arrays on carbon cloth for highly reproducible large-area electrocatalysts for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2015, 3, 19277-19281. | 10.3 | 97 |
| 38 | Carbon-free Cu2ZnSn(S,Se)4 film prepared via a non-hydrazine route. Science China Chemistry, 2014, 57, 1552-1558. | 8.2 | 3 |
| 39 | ITO@Cu<sub>2</sub>S Tunnel Junction Nanowire Arrays as Efficient Counter Electrode for Quantum-Dot-Sensitized Solar Cells. Nano Letters, 2014, 14, 365-372. | 9.1 | 118 |
| 40 | In situ nitrogen-doped nanoporous carbon nanocables as an efficient metal-free catalyst for oxygen reduction reaction. Journal of Materials Chemistry A, 2014, 2, 10154. | 10.3 | 73 |
| 41 | Engineering the Interfaces of ITO@Cu<sub>2</sub>S Nanowire Arrays toward Efficient and Stable Counter Electrodes for Quantum-Dot-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 15448-15455. | 8.0 | 24 |
| 42 | Up-Scaling of Organic-Inorganic Hybrid Perovskite Solar Cells and Modules. , 0, , . | | 0 |