# Jiandong Fan

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6572357/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 78 papers | 4,602 citations | 136740 32 h-index | 98622 67 g-index |
| 78 all docs | 78 docs citations | 78 times ranked | 6559 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Enhanced UV-light stability of planar heterojunction perovskite solar cells with caesium bromide interface modification. Energy and Environmental Science, 2016, 9, 490-498. | 15.6 | 535 |
| 2 | All-Inorganic CsPbI<sub>2</sub>Br Perovskite Solar Cells with High Efficiency Exceeding 13%. Journal of the American Chemical Society, 2018, 140, 3825-3828. | 6.6 | 505 |
| 3 | Controllable Grain Morphology of Perovskite Absorber Film by Molecular Self-Assembly toward Efficient Solar Cell Exceeding 17%. Journal of the American Chemical Society, 2015, 137, 10399-10405. | 6.6 | 347 |
| 4 | Addictive-assisted construction of all-inorganic CsSnIBr<sub>2</sub>mesoscopic perovskite solar cells with superior thermal stability up to 473 K. Journal of Materials Chemistry A, 2016, 4, 17104-17110. | 5.2 | 250 |
| 5 | Structurally Reconstructed CsPbI<sub>2</sub>Br Perovskite for Highly Stable and Squareâ€Centimeter Allâ€Inorganic Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1803572. | 10.2 | 192 |
| 6 | Ultra-thin MoOx as cathode buffer layer for the improvement of all-inorganic CsPbIBr2 perovskite solar cells. Nano Energy, 2017, 41, 75-83. | 8.2 | 190 |
| 7 | Thermodynamically Selfâ€Healing 1Dâ€“3D Hybrid Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1703421. | 10.2 | 158 |
| 8 | Nonlinear Optical Response of Organicâ€“Inorganic Halide Perovskites. ACS Photonics, 2016, 3, 371-377. | 3.2 | 154 |
| 9 | Coreâ€“Shell Nanoparticles As Building Blocks for the Bottom-Up Production of Functional Nanocomposites: PbTeâ€“PbS Thermoelectric Properties. ACS Nano, 2013, 7, 2573-2586. | 7.3 | 137 |
| 10 | In Situ Regulating the Orderâ€“Disorder Phase Transition in Cs<sub>2</sub>AgBiBr<sub>6</sub> Single Crystal toward the Application in an Xâ€Ray Detector. Advanced Functional Materials, 2019, 29, 1900234. | 7.8 | 114 |
| 11 | Morphology evolution of Cu2â^'xS nanoparticles: from spheres to dodecahedrons. Chemical Communications, 2011, 47, 10332. | 2.2 | 107 |
| 12 | Antimony-Based Ligand Exchange To Promote Crystallization in Spray-Deposited Cu<sub>2</sub>ZnSnSe<sub>4</sub> Solar Cells. Journal of the American Chemical Society, 2013, 135, 15982-15985. | 6.6 | 107 |
| 13 | Perovskite-based low-cost and high-efficiency hybrid halide solar cells. Photonics Research, 2014, 2, 111. | 3.4 | 89 |
| 14 | Highly Efficient Perovskite Solar Cells with Substantial Reduction of Lead Content. Scientific Reports, 2016, 6, 35705. | 1.6 | 86 |
| 15 | Hysteretic Behavior upon Light Soaking in Perovskite Solar Cells Prepared via Modified Vapor-Assisted Solution Process. ACS Applied Materials & Interfaces, 2015, 7, 9066-9071. | 4.0 | 84 |
| 16 | In situ induced core/shell stabilized hybrid perovskites via gallium(<scp>iii</scp>) acetylacetonate intermediate towards highly efficient and stable solar cells. Energy and Environmental Science, 2018, 11, 286-293. | 15.6 | 79 |
| 17 | Influence of the Annealing Atmosphere on the Performance of ZnO Nanowire Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2013, 117, 16349-16356. | 1.5 | 74 |
| 18 | Lattice vibration spectra and thermal properties of SrWO4 single crystal. Chemical Physics Letters, 2006, 426, 85-90. | 1.2 | 72 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | C<sub>60</sub> additive-assisted crystallization in CH<sub>3</sub>NH<sub>3</sub>Pb<sub>0.75</sub>Sn<sub>0.25</sub>I<sub>3</sub> perovskite solar cells with high stability and efficiency. Nanoscale, 2017, 9, 13967-13975. | 2.8 | 71 |
| 20 | Means and Limits of Control of the Shell Parameters in Hollow Nanoparticles Obtained by the Kirkendall Effect. Chemistry of Materials, 2011, 23, 3095-3104. | 3.2 | 67 |
| 21 | Cobalt(II/III) Redox Electrolyte in ZnO Nanowire-Based Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 1902-1906. | 4.0 | 64 |
| 22 | Control of the doping concentration, morphology and optoelectronic properties of vertically aligned chlorine-doped ZnO nanowires. Acta Materialia, 2011, 59, 6790-6800. | 3.8 | 57 |
| 23 | Structural and thermal properties of the monoclinic Lu<sub>2</sub>SiO<sub>5</sub>single crystal: evaluation as a new laser matrix. Journal of Applied Crystallography, 2009, 42, 284-294. | 1.9 | 54 |
| 24 | Latticeâ€Matching Structurallyâ€Stable 1D@3D Perovskites toward Highly Efficient and Stable Solar Cells. Advanced Energy Materials, 2020, 10, 1903654. | 10.2 | 50 |
| 25 | An Emerging Leadâ€Free Doubleâ€Perovskite Cs<sub>2</sub>AgFeCl<sub>6</sub>:In Single Crystal. Advanced Functional Materials, 2020, 30, 2002225. | 7.8 | 48 |
| 26 | Spectroscopic properties and continuous-wave laser operation of a new disordered crystal: Yb-doped CNGG. Optics Express, 2007, 15, 9464. | 1.7 | 46 |
| 27 | Growth, structure and thermal properties of Yb3+-doped NaGd(WO4)2crystal. Journal Physics D: Applied Physics, 2006, 39, 1034-1041. | 1.3 | 45 |
| 28 | Giant Twoâ€Photon Absorption in Mixed Halide Perovskite CH<sub>3</sub>NH<sub>3</sub>Pb<sub>0.75</sub>Sn<sub>0.25</sub>I<sub>3</sub> Thin Films and Application to Photodetection at Optical Communication Wavelengths. Advanced Optical Materials, 2018, 6, 1700819. | 3.6 | 44 |
| 29 | A brief review on the lead element substitution in perovskite solar cells. Journal of Energy Chemistry, 2018, 27, 1054-1066. | 7.1 | 38 |
| 30 | Structurally Stabilizing and Environment Friendly Triggers: Doubleâ€Metallic Leadâ€Free Perovskites. Solar Rrl, 2019, 3, 1900148. | 3.1 | 36 |
| 31 | Chromiumâ€Based Metalâ€“Organic Framework as Aâ€Site Cation in CsPbI<sub>2</sub>Br Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2106233. | 7.8 | 36 |
| 32 | Controllable Cs<sub>x</sub>FA<sub>1â€“x</sub>PbI<sub>3</sub> Single-Crystal Morphology via Rationally Regulating the Diffusion and Collision of Micelles toward High-Performance Photon Detectors. ACS Applied Materials & Interfaces, 2019, 11, 13812-13821. | 4.0 | 35 |
| 33 | Aquointermediate Assisted Highly Orientated Perovskite Thin Films toward Thermally Stable and Efficient Solar Cells. Advanced Energy Materials, 2017, 7, 1601433. | 10.2 | 34 |
| 34 | Visible Photoluminescence Components of Solution-Grown ZnO Nanowires: Influence of the Surface Depletion Layer. Journal of Physical Chemistry C, 2012, 116, 19496-19502. | 1.5 | 33 |
| 35 | Lead-free metal-halide double perovskites: from optoelectronic properties to applications. Nanophotonics, 2021, 10, 2181-2219. | 2.9 | 33 |
| 36 | Electrochemical grafting passivation of silicon via electron transfer at polymer/silicon hybrid interface. Electrochimica Acta, 2017, 247, 826-834. | 2.6 | 29 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | High Performance of Perovskite Solar Cells via Catalytic Treatment in Two-Step Process: The Case of Solvent Engineering. ACS Applied Materials & Interfaces, 2016, 8, 30107-30115. | 4.0 | 28 |
| 38 | Silicon surface passivation by polystyrenesulfonate thin films. Applied Physics Letters, 2017, 110, . | 1.5 | 28 |
| 39 | Molecular Selfâ€Assembly Fabrication and Carrier Dynamics of Stable and Efficient CH<sub>3</sub>NH<sub>3</sub>Pb<sub>(1â^'x)</sub>Sn<sub>x</sub>I<sub>3</sub> Perovskite Solar Cells. ChemSusChem, 2017, 10, 3839-3845. | 3.6 | 28 |
| 40 | Solution-growth and optoelectronic performance of ZnOâ€‰:â€‰Cl/TiO<sub>2</sub> and ZnOâ€‰:â€‰Cl/Zn<sub>x</sub>TiO<sub>y</sub>/TiO<sub>2</sub> coreâ€“shell nanowires with tunable shell thickness. Journal Physics D: Applied Physics, 2012, 45, 415301. | 1.3 | 27 |
| 41 | Hole selective materials and device structures of heterojunction solar cells: Recent assessment and future trends. APL Materials, 2019, 7, . | 2.2 | 27 |
| 42 | Engineered Electronic Structure and Carrier Dynamics in Emerging Cs<sub>2</sub>Ag<sub>x</sub>Na<sub>1â€“x</sub>FeCl<sub>6</sub> Perovskite Single Crystals. Journal of Physical Chemistry Letters, 2020, 11, 9535-9542. | 2.1 | 27 |
| 43 | Solution-growth and optoelectronic properties of ZnO:Cl@ZnS coreâ€“shell nanowires with tunable shell thickness. Journal of Alloys and Compounds, 2013, 555, 213-218. | 2.8 | 25 |
| 44 | Enhancement of the photoelectrochemical properties of Cl-doped ZnO nanowires by tuning their coaxial doping profile. Applied Physics Letters, 2011, 99, . | 1.5 | 24 |
| 45 | Enhanced Photovoltaic Performance of Nanowire Dye-Sensitized Solar Cells Based on Coaxial TiO<sub>2</sub>@TiO Heterostructures with a Cobalt(II/III) Redox Electrolyte. ACS Applied Materials & Interfaces, 2013, 5, 9872-9877. | 4.0 | 24 |
| 46 | Ï€-Ï€ conjugate structure enabling the channel construction of carrier-facilitated transport in 1Dâ€“3D multidimensional CsPbI2Br solar cells with high stability. Nano Energy, 2021, 89, 106340. | 8.2 | 20 |
| 47 | Efficiency enhancement of Cu <sub>2</sub> ZnSnS <sub>4</sub> solar cells via surface treatment engineering. Royal Society Open Science, 2018, 5, 171163. | 1.1 | 19 |
| 48 | Alleviation of Ï€â€“Ï€* Transition Enabling Enhanced Luminescence in Emerging TpyInCl<sub>x</sub> (xÂ= 3, 5) Perovskite Single Crystals. Advanced Optical Materials, 2022, 10, . | 3.6 | 19 |
| 49 | Solution-Processed One-Dimensional ZnO@CdS Heterojunction toward Efficient Cu2ZnSnS4 Solar Cell with Inverted Structure. Scientific Reports, 2016, 6, 35300. | 1.6 | 18 |
| 50 | Architecturing 1Dâ€2Dâ€3D Multidimensional Coupled CsPbI<sub>2</sub>Br Perovskites toward Highly Effective and Stable Solar Cells. Small, 2021, 17, e2100888. | 5.2 | 17 |
| 51 | A Yb3+-doped NaY(WO4)2crystal grown by the Czochralski technique. Journal of Applied Crystallography, 2008, 41, 584-591. | 1.9 | 16 |
| 52 | An Emerging All-Inorganic CsSn<sub>x</sub>Pb<sub>1â€“x</sub>Br<sub>3</sub> (0 â‰) Tj ETQq0 0 0 rgBT /Overlock 1<br>Properties. Journal of Physical Chemistry C, 2020, 124, 13434-13446. | 1.5 | 16 |
| 53 | Regulation of the orderâ€“disorder phase transition in a Cs<sub>2</sub>NaFeCl<sub>6</sub> double perovskite towards reversible thermochromic application. Journal of Semiconductors, 2021, 42, 072202. | 2.0 | 15 |
| 54 | On the light-induced enhancement in photovoltaic performance of PEDOT:PSS/Si organic-inorganic hybrid solar cells. Applied Physics Letters, 2017, 111, 183904. | 1.5 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Growth and optical properties of self-frequency-doubling laser crystal Yb:LuAl3(BO3)4. Journal of Crystal Growth, 2009, 311, 4251-4254. | 0.7 | 12 |
| 56 | Fine-tuning the coordination atoms of copper redox mediators: an effective strategy for boosting the photovoltage of dye-sensitized solar cells. Journal of Materials Chemistry A, 2019, 7, 12808-12814. | 5.2 | 12 |
| 57 | Atomic Force Microscopy Studies on {101} Surfaces of <scp>l</scp>-arginine Trifluoroacetate Single Crystals. Journal of Physical Chemistry C, 2007, 111, 14165-14169. | 1.5 | 10 |
| 58 | Enhanced charge collection and stability in planar perovskite solar cells based on a cobalt(<scp>iii</scp>)-complex additive. RSC Advances, 2017, 7, 37654-37658. | 1.7 | 9 |
| 59 | L-Argininium(+) maleate(â^') dihydrate. Acta Crystallographica Section E: Structure Reports Online, 2007, 63, o2805-o2807. | 0.2 | 7 |
| 60 | Crystallization Dependent Stability of Perovskite Solar Cells With Different Hole Transporting Layers. Solar Rrl, 2017, 1, 1700141. | 3.1 | 7 |
| 61 | Terpyridine-derived perovskite single crystals with tunable structures and electronic dimensionality. RSC Advances, 2021, 11, 24816-24821. | 1.7 | 7 |
| 62 | Electron Delocalization and Structure Coupling Promoted Ï€-Conjugated Charge Transport in a Novel [Ga-Tpy<sub>2</sub>]PbI<sub>5</sub> Perovskite-like Single Crystal. Journal of Physical Chemistry Letters, 2021, 12, 5571-5579. | 2.1 | 7 |
| 63 | Enhanced Charge Transport by Regulating the Electronic Structure in 2D Tin-Based Perovskite Solar Cells. Journal of Physical Chemistry C, 2022, 126, 9425-9436. | 1.5 | 6 |
| 64 | Multiple Electronic Transition-Induced Anomalous Broadband Absorption in a New Class of [Ni-Tpy<sub>2</sub>]-Based Lead-Free Perovskite Single Crystals. Journal of Physical Chemistry C, 2021, 125, 15579-15589. | 1.5 | 5 |
| 65 | Improving the Passivation Stability of a Polymer Thin Film on Si by the Introduction of MoO<sub>3</sub> Nanoparticles Into the Polymer Matrix. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700206. | 1.2 | 4 |
| 66 | Multidimensional perovskites enhance solar cell performance. Journal of Semiconductors, 2021, 42, 020201. | 2.0 | 4 |
| 67 | Synthesis of polycrystalline materials of SrWO4 and growth of its single crystal. Frontiers of Chemistry in China: Selected Publications From Chinese Universities, 2006, 1, 264-267. | 0.4 | 3 |
| 68 | Highly crystalline hydrothermal ZnO nanowires as photoanodes in DSCs. International Journal of Nanotechnology, 2014, 11, 747. | 0.1 | 3 |
| 69 | Electrical and hysteric properties of organic compound-based humidity sensor and its dualistic interactive approach to H2O molecules. Materials Today Communications, 2021, 29, 102882. | 0.9 | 3 |
| 70 | Sodium isocyanurate monohydrate. Acta Crystallographica Section E: Structure Reports Online, 2007, 63, m1463-m1464. | 0.2 | 2 |
| 71 | Flux growth of KGaP2O7 single crystals. Materials Letters, 2008, 62, 3352-3354. | 1.3 | 2 |
| 72 | L-Lysinium trifluoroacetate. Acta Crystallographica Section E: Structure Reports Online, 2008, 64, o393-o394. | 0.2 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Crystal structure of bis(4-bromophenylaminium) tetraiodoplumbate(II), (BrC6H4NH3)2PbI4. Zeitschrift Fur Kristallographie - New Crystal Structures, 2009, 224, . | 0.1 | 2 |
| 74 | Picolylamine Isomers Trigger Multidimension Coupling Strategy toward Efficient and Stable Inorganic Perovskite Solar Cells. Solar Rrl, 0, , . | 3.1 | 2 |
| 75 | (E)-4-(Nicotinoylhydrazono)pentanoic acid. Acta Crystallographica Section E: Structure Reports Online, 2007, 63, o4655-o4655. | 0.2 | 1 |
| 76 | Improving the Passivation Stability of a Polymer Thin Film on Si by the Introduction of MoO<sub>3</sub> Nanoparticles Into the Polymer Matrix (Phys. Status Solidi RRL 9/2017). Physica Status Solidi - Rapid Research Letters, 2017, 11, 1770347. | 1.2 | 1 |
| 77 | Triphenyl-n-propylphosphonium bis(2-thioxo-1,3-dithiole-4,5-dithiolato)aurate(III). Acta Crystallographica Section E: Structure Reports Online, 2007, 63, m2529-m2530. | 0.2 | 0 |
| 78 | Crystal structure of bis(4-methylpyridinium) hexachlorotin(IV), (C6H8N)2SnCl6. Zeitschrift Fur Kristallographie - New Crystal Structures, 2009, 224, . | 0.1 | 0 |