

# James A Raiford

## List of Publications by Year in descending order

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Version: 2024-02-01

20  
papers

1,823  
citations

567144

15  
h-index

887953

17  
g-index

20  
all docs

20  
docs citations

20  
times ranked

2916  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Overcoming Redox Reactions at Perovskite-Nickel Oxide Interfaces to Boost Voltages in Perovskite Solar Cells. <i>Joule</i> , 2020, 4, 1759-1775.   | 11.7 | 284       |
| 2  | Design of low bandgap tin-lead halide perovskite solar cells to achieve thermal, atmospheric and operational stability. <i>Nature Energy</i> , 2019, 4, 939-947.                                       | 19.8 | 235       |
| 3  | Encapsulating perovskite solar cells to withstand damp heat and thermal cycling. <i>Sustainable Energy and Fuels</i> , 2018, 2, 2398-2406.   | 2.5  | 231       |
| 4  | Minimizing Current and Voltage Losses to Reach 25% Efficient Monolithic Two-Terminal Perovskite-Silicon Tandem Solar Cells. <i>ACS Energy Letters</i> , 2018, 3, 2173-2180.                            | 8.8  | 194       |
| 5  | Tin-lead halide perovskites with improved thermal and air stability for efficient all-perovskite tandem solar cells. <i>Sustainable Energy and Fuels</i> , 2018, 2, 2450-2459.                         | 2.5  | 167       |
| 6  | Controlling Thin-Film Stress and Wrinkling during Perovskite Film Formation. <i>ACS Energy Letters</i> , 2018, 3, 1225-1232.   | 8.8  | 148       |
| 7  | Applications of atomic layer deposition and chemical vapor deposition for perovskite solar cells. <i>Energy and Environmental Science</i> , 2020, 13, 1997-2023.                                       | 15.6 | 102       |
| 8  | Mayer Bond Order as a Metric of Complexation Effectiveness in Lead Halide Perovskite Solutions. <i>Chemistry of Materials</i> , 2017, 29, 2435-2444.   | 3.2  | 82        |
| 9  | Opportunities for Atomic Layer Deposition in Emerging Energy Technologies. <i>ACS Energy Letters</i> , 2019, 4, 908-925.   | 8.8  | 81        |
| 10 | Atomic layer deposition of vanadium oxide to reduce parasitic absorption and improve stability in n-i-p perovskite solar cells for tandems. <i>Sustainable Energy and Fuels</i> , 2019, 3, 1517-1525.  | 2.5  | 76        |
| 11 | Interfacial Effects of Tin Oxide Atomic Layer Deposition in Metal Halide Perovskite Photovoltaics. <i>Advanced Energy Materials</i> , 2018, 8, 1800591.  | 10.2 | 62        |
| 12 | The Molybdenum Oxide Interface Limits the High-Temperature Operational Stability of Unencapsulated Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020, 5, 2349-2360.                             | 8.8  | 49        |
| 13 | Enhanced Nucleation of Atomic Layer Deposited Contacts Improves Operational Stability of Perovskite Solar Cells in Air. <i>Advanced Energy Materials</i> , 2019, 9, 1902353.                           | 10.2 | 47        |
| 14 | Understanding Structure-Property Relationships of MoO <sub>3</sub> -Promoted Rh Catalysts for Syngas Conversion to Alcohols. <i>Journal of the American Chemical Society</i> , 2019, 141, 19655-19668. | 6.6  | 41        |
| 15 | Nucleation Effects in the Atomic Layer Deposition of Nickel-Aluminum Oxide Thin Films. <i>Chemistry of Materials</i> , 2020, 32, 1925-1936.  | 3.2  | 15        |
| 16 | The Importance of Decarbonylation Mechanisms in the Atomic Layer Deposition of High-Quality Ru Films by Zero-Oxidation State Ru(DMBD)(CO) <sub>3</sub> . <i>Small</i> , 2022, 18, e2105513.            | 5.2  | 5         |
| 17 | Tailoring the Surface of Metal Halide Perovskites to Enable the Atomic Layer Deposition of Metal Oxide Contacts. <i>ACS Applied Energy Materials</i> , 2021, 4, 9871-9880.                             | 2.5  | 4         |
| 18 | Stability of Tin-Lead Halide Perovskite Solar Cells. , 2019, , .   |      | 0         |

| #  | ARTICLE   | IF | CITATIONS |
|----|---|----|-----------|
| 19 | Highly Efficient and Stable Perovskite-Silicon Tandem Solar Cells. , 2019, , .                                      |    | 0         |
| 20 | Designing Contact Layers and Surface Treatments to Overcome Performance Challenges for Perovskite Tandems. , 0, , . |    | 0         |