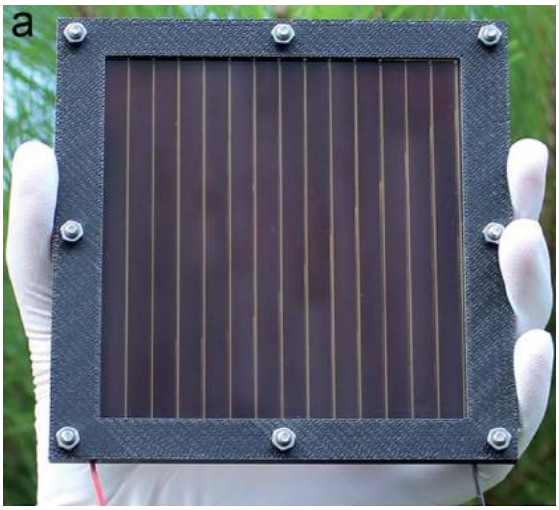
OIST OKINAWA INSTITUTE OF SCIENCE AND TECHNOLOGY GRADUATE UNIVERSITY
沖縄科学技術大学院大学

Alternative Energy Devices and Methods Based On Perovskite

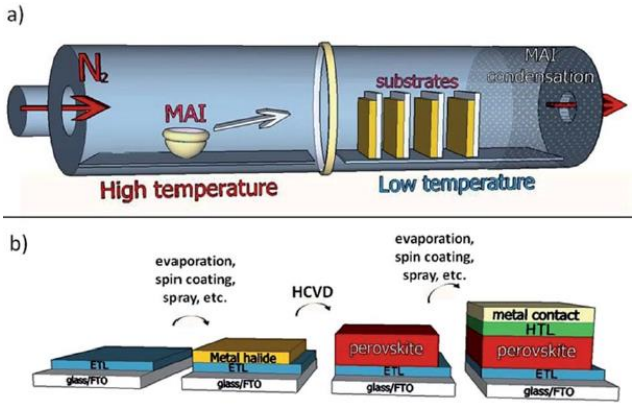
Applications

- Solar Cells
- Batteries
- Light Emitting Diodes

Perovskite has attracted much attention as a 3rd generation energy material because of its low cost and its rapid increase in efficiency.
This technology is based on chemical vapor deposition (CVD), a well established technique of producing high quality, high-performance, flexible materials and is compatible with scaled up operations. In addition to the superior perovskite films that it can produce, increased reproducibility and process controllability offer a competitive advantage.



A large scale perovskite solar cell panel fabricated using the CVD method, exhibiting high energy efficiencies and good film uniformity.



CVD perovskite based synthesis by methylammonium iodide (MAI) deposition onto metal halide seeded substrates in a CVD Furnace

Benefits

- Perovskite uniformity
- Reproducibility/process control
- Low cost/large area

Portfolio of Patents Granted

Keywords

Perovskite, solar cell, battery, light emitting diode, chemical vapor deposition

For more information

Business Development/Technology Licensing Section
bdtl@oist.jp or +81-(0)98-966-8937