



Showcasing research from Professor Sheng Hsiung Chang's laboratory, Department of Physics, Chung Yuan Christian University, Taiwan, Republic of China.

Effects of drying time on the formation of merged and soft  $\text{MAPbI}_3$  grains and their photovoltaic responses

A suitable drying time of the perovskite precursor solution can facilitate the formation of merged grains while maintaining the interfacial contact quality between the perovskite thin film and hole transport layer, which highly increases the open-circuit voltage ( $V_{oc}$ ) from 1.01 V to 1.15 V after 30 days and thereby improving the device performance and lifespan of the resultant inverted perovskite photovoltaic cells. It is noted that the  $V_{oc}$  of the photovoltaic cells is still higher than 1.15 V after 80 days.

As featured in:



See Hsin-Ming Cheng, Sheng Hsiung Chang *et al.*, *Nanoscale Adv.*, 2023, 5, 2190.