



Showcasing research from Prof. King-Fu Lin's group and Prof. Leeyih Wang's group at the National Taiwan University, Taiwan.

Boosting the ultra-stable unencapsulated perovskite solar cells by using montmorillonite/ $\text{CH}_3\text{NH}_3\text{PbI}_3$ nanocomposite as photoactive layer

Exfoliated montmorillonite (exMMT) nanoplatelets are repelled to the surface of an exMMT/ MAPbI_3 film during the crystallization of MAPbI_3 , forming an outstandingly dense protection shell that inhibits moisture from penetrating into the perovskite during environmental aging. This innovative method excellently improves the lifetime of unencapsulated inverted photovoltaic solar cells based on organometal halide perovskites.

As featured in:



See Leeyih Wang, King-Fu Lin et al., *Energy Environ. Sci.*, 2019, 12, 1265.