

# Perovskite solar cells fabricated from a reliable and scale-up process

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Over the past two years, one of the technologies that taken the photovoltaic community by storm is hybrid organic-inorganic perovskite solar cells. The conversion efficiency of these devices leaped from 3.8% in a forerunner to a certified 20.1% in current versions, rivaling the efficiencies achieved by most of the thin film solar cells. In this presentation, I will briefly present our recent work towards developing reliable process that would be potential for large-area industrial production. I will look into the reproducibility issues of perovskite solar cells and in addition give insights as to identifying the optimum morphology in high-performance perovskite solar cells; furthermore, I will discuss the results on improving and understanding the thin film crystallinity on the operation of perovskite solar cells.