## **Electronic Supplementary Information**

## Fabrication of perovskite films using electrostatic assisted spray technique: effect of electric field on morphology, crystallinity and solar cell performance

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**Fig.** S1. SEM micrographs of spray deposited perovskite films prepared by keeping distances of 10, 14, 18, and 22 cm between spray nozzle and substrate.



Figure S2. AFM micrographs of perovskite films prepared by spraying CH<sub>3</sub>NH<sub>3</sub>I solution at different applied voltages of 0 kV, 0.5 kV, 1.0 kV, 1.5 kV, and 2.0 kV on PbI<sub>2</sub> films.



Figure S3. SEM micrographs of perovskite film prepared by one step spin coating method.



Figure S4. J-V graph of perovskite solar cell fabricated using perovskite film prepared from one step spin coating method.