

Supporting Information For: Photonic flash-annealing of lead halide perovskite solar cells in 1 ms

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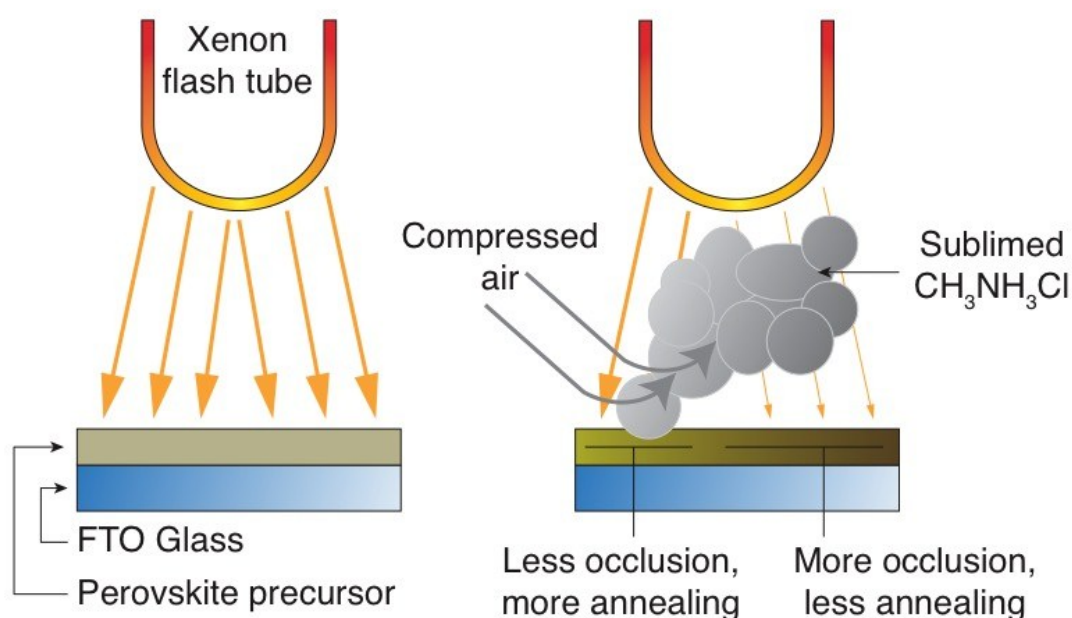


Figure S1. A schematic representation of the “forced-air front” responsible for the variations in film morphology across the glass’ surface. Rapidly sublimed $\text{CH}_3\text{NH}_3\text{Cl}$ from the perovskite precursor during crystallization is blown across the substrate through the photonic tool’s compressed air stream, this vapor attenuates light and leads to less annealing in underlying regions.

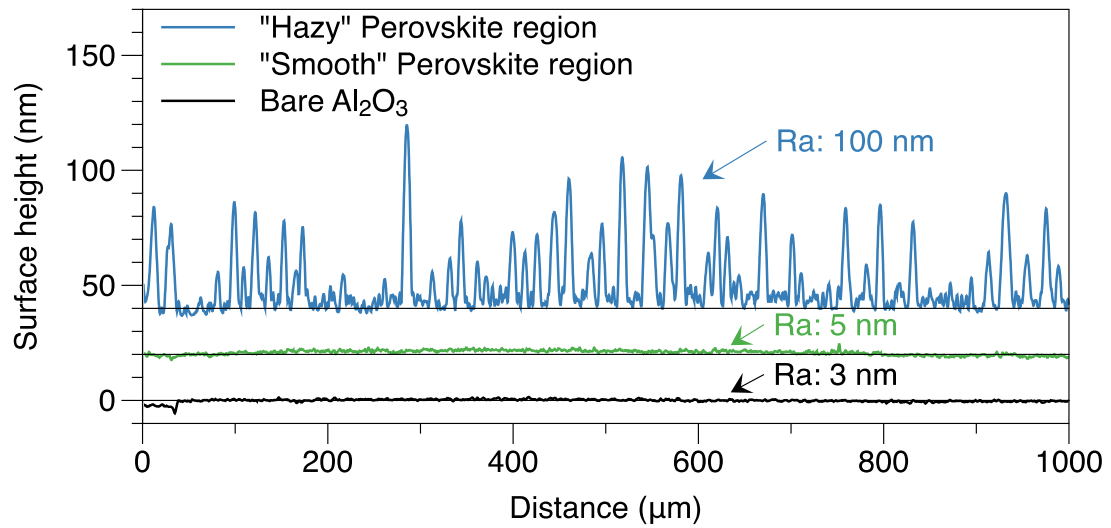


Figure S2. Profilometer measurements for “hazy” and “smooth” photonically crystallized perovskite regions with corresponding Ra values. Also shown is a scan for the bare Al₂O₃ scaffold with no perovskite deposited