

Adverse oxidation of CsPbI₂Br perovskite during the crystallization process in a N₂ glove-box

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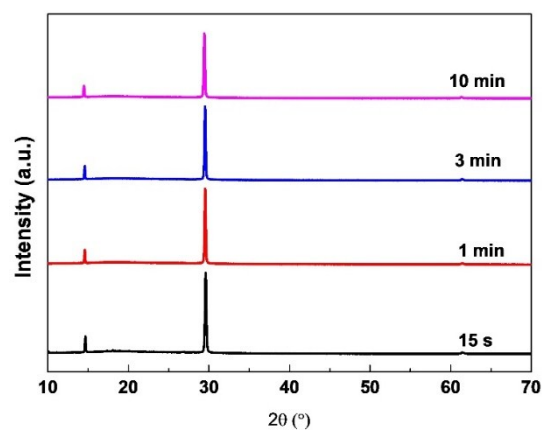


Fig. S1 X-ray diffraction patterns of the as CsPbI₂Br films annealed for different times.

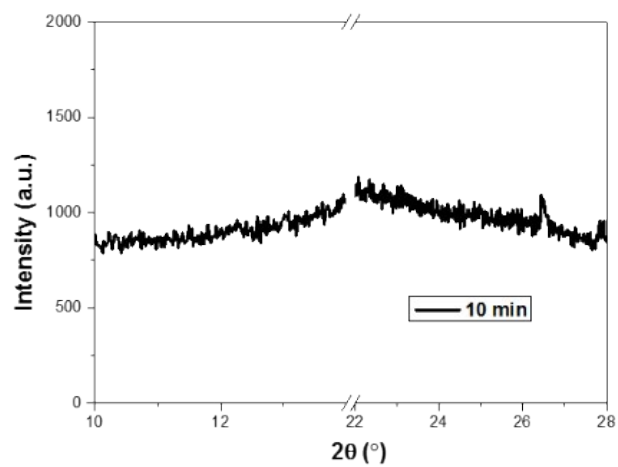


Fig. S2 XRD of CsPbI₂Br film annealed for 10 min, zooming in on the details.

Table S1. Deconvoluted results of Pb 4f XPS peak fitting for CsPbI₂Br annealed film for different times.

Samples	Area of peak for Pb-O (~ 137.3 eV)	Area of peak for Pb in CsPbI ₂ Br (~ 138.1 eV)	Percentage of Pb-O
15 s	672.0	11038.7	5.74
1 min	732.5	10749.4	6.38
3 min	763.1	9557.5	7.39
10 min	959.3	5613.6	14.5

Table S2. PL FWHM of CsPbI₂Br annealed for different times.

Samples	15 s	1 min	3 min	10 min
FWHM (nm)	33.76	33.46	32.24	33.75