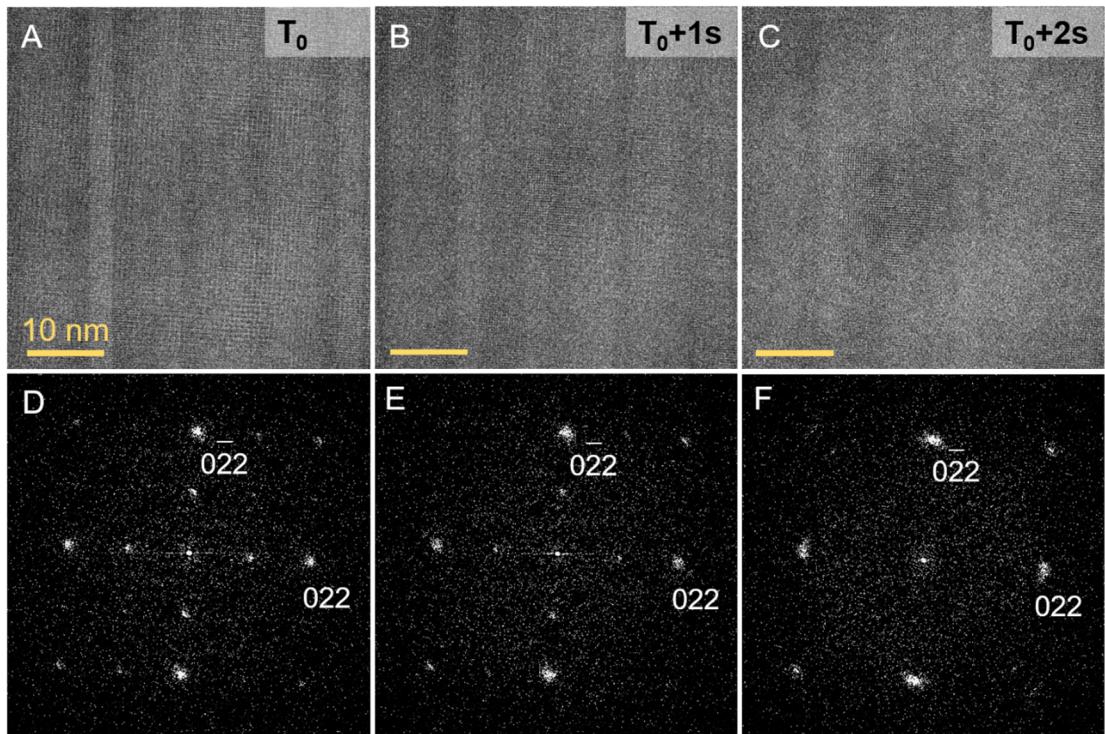


# Supplementary Materials: Structural Damage of Two-Dimensional Organic–Inorganic Halide Perovskites

Biao Yuan, Enzheng Shi, Chao Liang, Letian Dou and Yi Yu

**Table S1.** Single crystal X-ray diffraction data of BA<sub>2</sub>MAPb<sub>2</sub>I<sub>7</sub>.

Bond precision:	Pb–I = 0.0010 Å	Wavelength=0.71073
Cell: a=39.505(4)	b=8.9667(8)	c=8.8916(9)
alpha=90	beta=90	gamma=90
Temperature:310 K		
	Calculated	Reported
Volume	3149.7(5)	3149.7(5)
Space group	C m c m	C m c m
Hall group	-C 2c 2	-C 2c 2
Moiety formula	C <sub>18</sub> H <sub>60</sub> I <sub>14</sub> N <sub>6</sub> Pb <sub>4</sub>	Pb <sub>2</sub> I <sub>7</sub> , C N H <sub>6</sub> , 2(N C <sub>4</sub> H <sub>12</sub> )
Sum formula	C <sub>18</sub> H <sub>60</sub> I <sub>14</sub> N <sub>6</sub> Pb <sub>4</sub>	C <sub>9</sub> H <sub>30</sub> I <sub>7</sub> N <sub>3</sub> Pb <sub>2</sub>
Mr	2966.12	1483.04
D <sub>x,g</sub> cm <sup>-3</sup>	3.128	3.127
Z	2	4
Mu (mm <sup>-1</sup> )	17.537	17.537
F000	2560.0	2560.0
F000'	2522.71	
h,k,lmax	60,13,13	60,13,13
Nref	3222	3211
Tmin, Tmax	0.001, 0.122	0.008, 0.055
Tmin'	0.000	
Correction method= # Reported T Limits: Tmin=0.008		
Tmax=0.055 AbsCorr = MULTI-SCAN		
Data completeness= 0.997 Theta(max)= 33.160		
R(reflections)= 0.0667( 2391) wR2(reflections)= 0.2146( 3211)		
S = 1.053 Npar= 91		



**Figure S1.** Raw HRTEM series and its FT images show the structural change under electron beam.