Supporting Information

Efficient Perovskite Light-Emitting Diodes by Film Annealing Temperature Control

Junqing Liang,^{ab} Yongqiang Zhang, ^{ab} Xiaoyang Guo,*a Zhihong Gan^a, Jie Lin^a, Yi Fan^a, and

Xingyuan Liu*a

^aState Key Laboratory of Luminescence and Applications, Changchun Institute of Optics,

Fine Mechanics and Physics, Chinese Academy of Sciences, Changchun 130033, China

^bUniversity of Chinese Academy of Sciences, Beijing 100049, China

*E-mail: guoxy@ciomp.ac.cn ; liuxy@ciomp.ac.cn

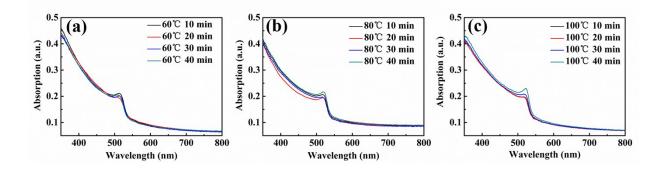


Fig. S1. Absorption spectra of MAPbBr₃ films annealed under (a) 60° C, (b) 80° C and (c) 100° C.

Annealing temperature and time	FWHM (nm)	Absorption peak (nm)	Maximum emission wavelength (nm)	PLQY (%)
60°C 10min	23	514	535	4
60°C 20min	23	514	534	6
60°C 30min	24	515	534	8
60°C 40min	24	513	534	7
80°C 10min	22	519	536	12
80°C 20min	22	519	536	12
80°C 30min	22	518	536	10
80°C 40min	21	520	537	5
100°C 10min	22	518	535	6
100°C 20min	27	518	534	2
100°C 30min	27	518	535	1
100°C 40min	27	521	536	0.6

Table S1. Photophysical properties of MAPbBr₃ films annealed under 60°C, 80°C and 100°C.

PLQY measurements were carried out after the film were encapsulated in a N_2 filled glove box. For this reason, the measured PLQY values may be lower than the actual values due to the decreased light intensity through encapsulating glass.