

## Supporting Information

### Organic-Inorganic Hybrid Perovskite for Low-Cost and High-Performance Xerographic Photoreceptors

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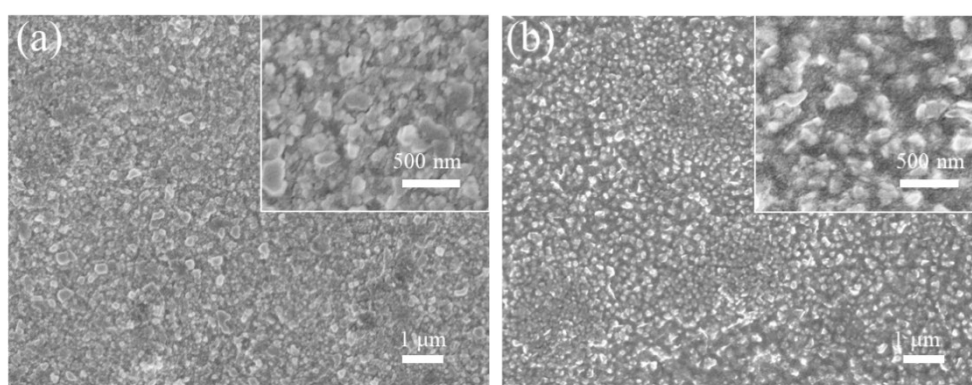


Fig. S1 Top SEM of the perovskite films with different PEG concentration: PEG:MAPbI<sub>3</sub> = 1.5:1 (a), and 2:1 (b).

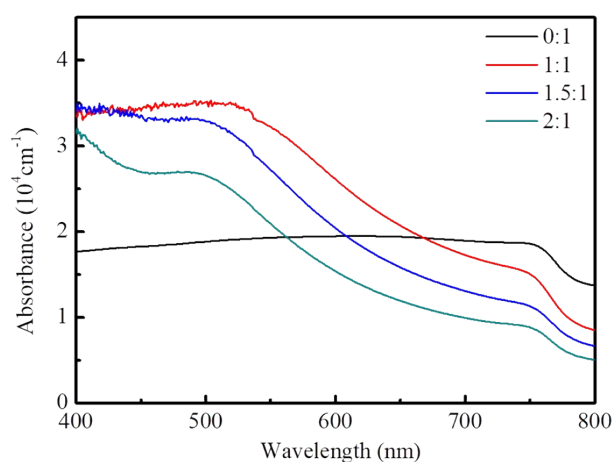


Fig. S2 The UV-vis optical absorption of the MAPbI<sub>3</sub> films with and without PEG, the molar ratios of PEG to MAPbI<sub>3</sub> are 0:1, 1:1, 1.5:1, and 2:1, respectively.

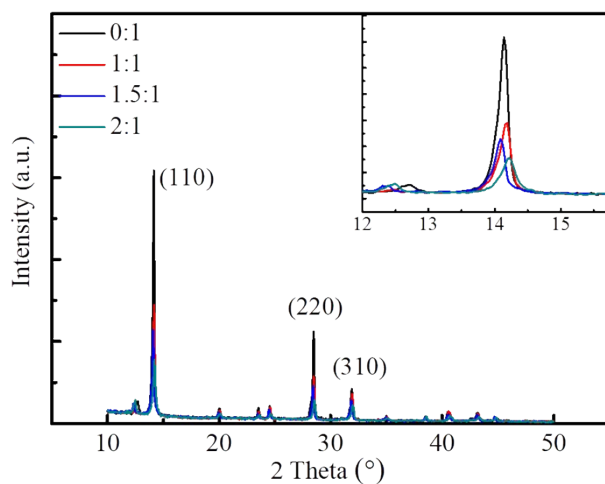


Fig. S3 XRD patterns of the MAPbI<sub>3</sub> films with and without PEG, the molar ratios of PEG to MAPbI<sub>3</sub> are 0:1, 1:1, 1.5:1 and 2:1, respectively.

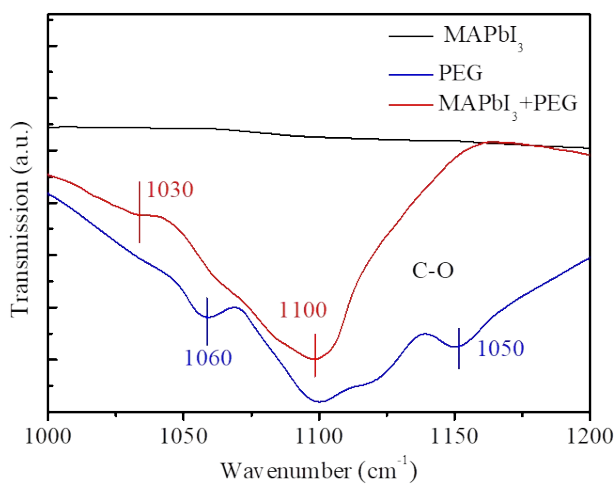


Fig. S4 FTIR spectra of PEG and MAPbI<sub>3</sub> with and without PEG.

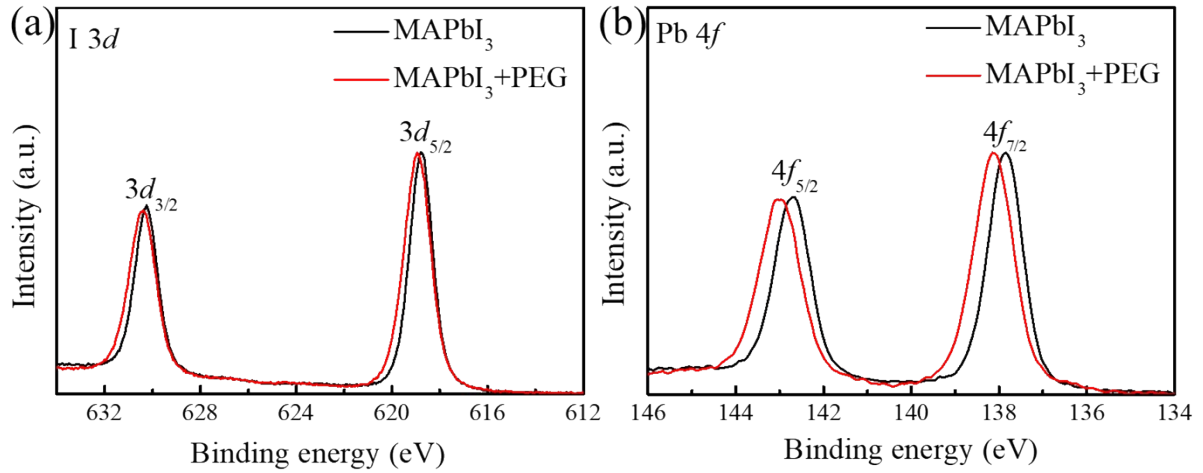


Fig. S5 The narrow scan XPS spectra of I 3d (a) and Pb 4f (b) of the MAPbI<sub>3</sub> films with and without PEG.

Table S1 Xerographic properties of Perovskite photoreceptors under 780-nm illumination.

Device (PEG: MAPbI <sub>3</sub> )	$V_0$ [ V ]	$R_d$ [ V s ]	$E_{0.5}$ [ $\mu$ J cm <sup>-2</sup> ]	$V_r$ [ V ]
0:1	-335	58	0.077	-2
1:1	-715	12	0.138	-2
1.5:1	-776	16	0.163	-9
2:1	-790	12	0.225	-4

Note: All photoconductive data listed in the table were measured with a corona voltage of -5 kV and a monochromatic light of 1.0  $\mu$ W ( $\lambda$ : 780 nm).

Table S2 Xerographic properties of a perovskite photoreceptor (PEG:MAPbI<sub>3</sub> = 1:1) after ageing.

No.	Ageing Time [d]	$V_0$ [ V ]	$R_d$ [ V s ]	$E_{0.5}$ [ $\mu$ J cm <sup>-2</sup> ]	$V_r$ [ V ]
1	0	-727	12	0.071	-2
2	30	-741	13	0.088	-3

Note: The photoreceptor was stored at a temperature of 50 °C with humidity of 40–50 RH% for 30 days, and measured with a corona voltage of -5 kV and a monochromatic light of 1.0  $\mu$ W ( $\lambda$ : 550 nm).