

# Supplementary Information

## High-Performance Photoresistors Based on Perovskite Thin Film with a High PbI<sub>2</sub> Doping Level

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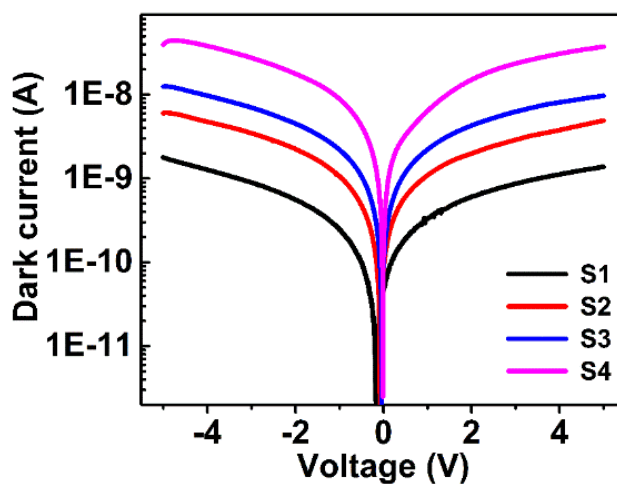
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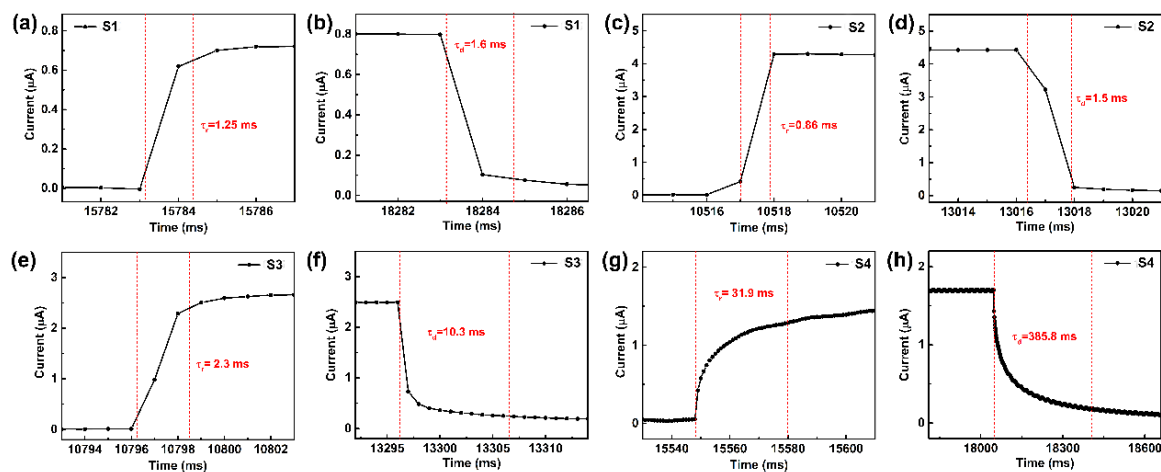
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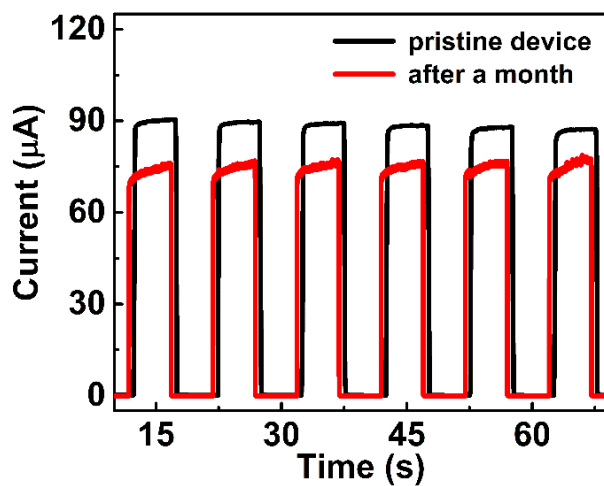
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**Figure S1.** The dark I-V curves of all the devices fabricated from perovskite films with different MAI: PbI<sub>2</sub> ratio.



**Figure S2.** The enlarged rise edges and decay edges of all the devices under white LED light illumination of  $4.5 \text{ mW/cm}^2$  at 5 V bias.



**Figure S3.** The I-t curves of the device measured as pristine and after a month under  $100 \text{ mW/cm}^2$  light illumination.