

Supporting Information for

*Centimeter-Sized Lead-Free Iodide-Based
Hybrid Double Perovskite Single Crystals for
Efficient X-Ray Photoresponsivity*

*Yuyin Wang,^a Guoming Lin,^b Bin Su,^c Xiushi Wang,^d Shouxin Wang,^e Ziwen Cheng,^a
Dongyang Li,^a Xiao-Wu Lei^a and Cheng-Yang Yue^{*a}*

*a School of Chemistry, Chemical Engineering and Materials, Jining University,
Qufu, Shandong, 273155, P. R. China. E-mail: yuechengyang@126.com*

*b Department of physics, National University of Singapore, Singapore
117551 E-mail: lingmdbs@nus.edu.sg*

*c School of Materials Science and Engineering in Tsinghua University,
Tsinghua University, Beijing, 100000, P. R. China*

d Soochow University, Suzhou, Jiangsu, 215006, P. R. China

*e School of Materials Science and Engineering, Northwestern Polytechnical
University, Xi'an, Shaanxi 710072, P. R. China*

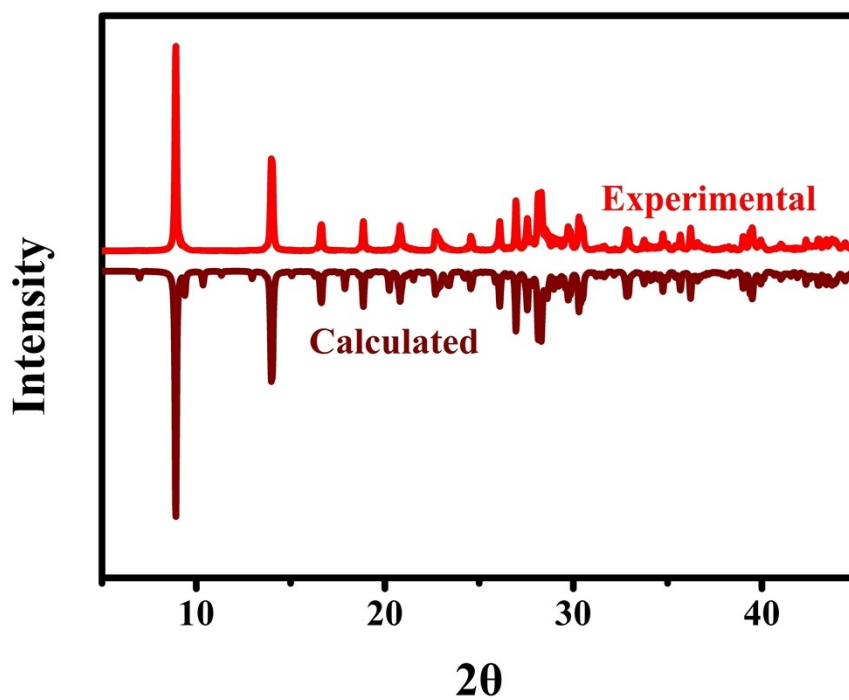


Figure. S1 Powder X-ray Diffraction (PXRD) patterns of experimental data and the calculated data.

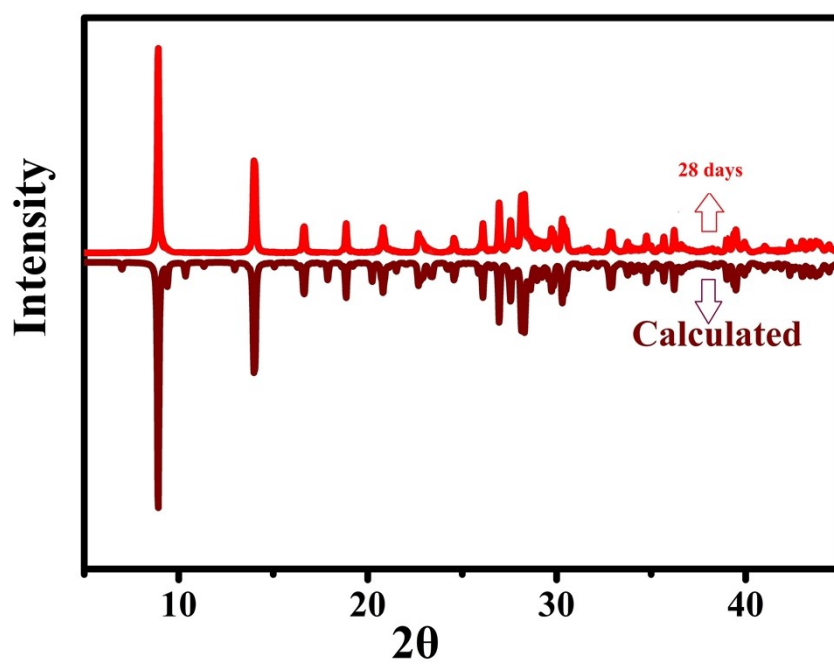


Figure. S2 Powder X-ray Diffraction (PXRD) patterns of 28 days data and the calculated data.

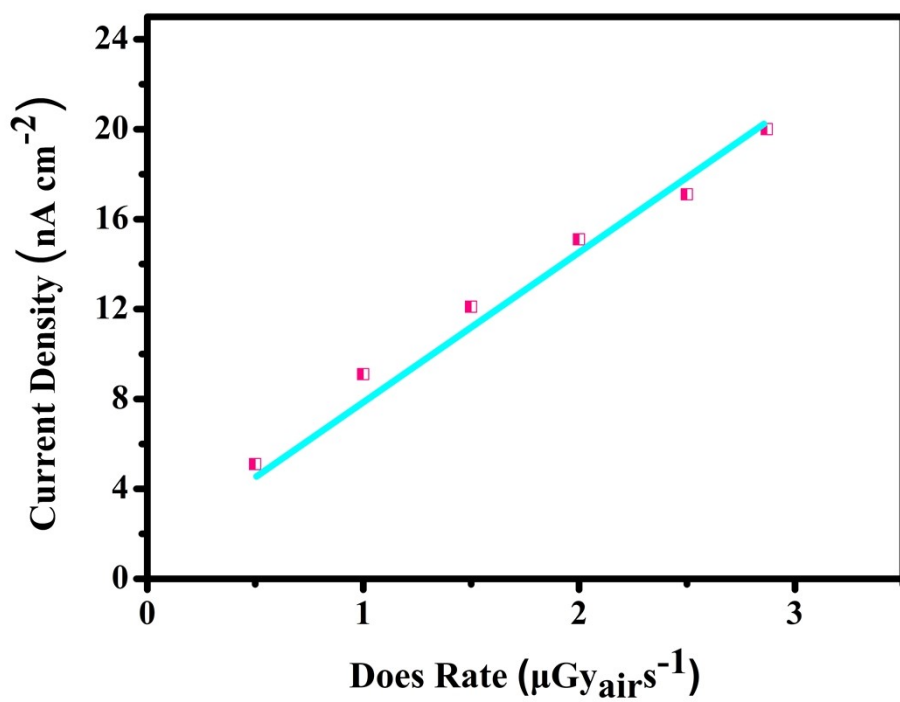


Figure. S3 The sensitivity of the device based on $(\text{C}_6\text{H}_{16}\text{N}_2)_2\text{CuBiI}_8 \cdot 0.5\text{H}_2\text{O}$ single crystal is $5.39 \mu\text{CGy}_{\text{air}}^{-1} \text{ cm}^{-2}$ after the long time stability test.