

Supplementary information

Photo-assisted (de)lithiation to enhance the photoelectrochemical storage of the
quasi-solid-state Li-ion battery

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Supplementary Figures

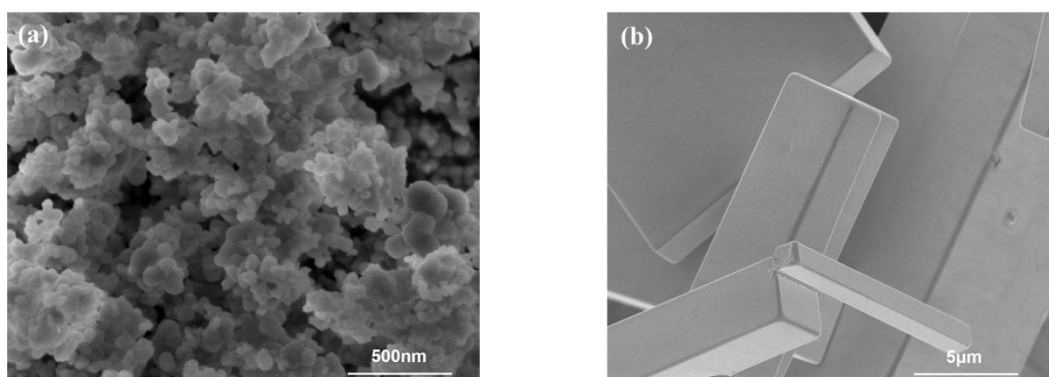


Fig S1. SEM image of PbPA (a) and CsPbBr₃ (b).

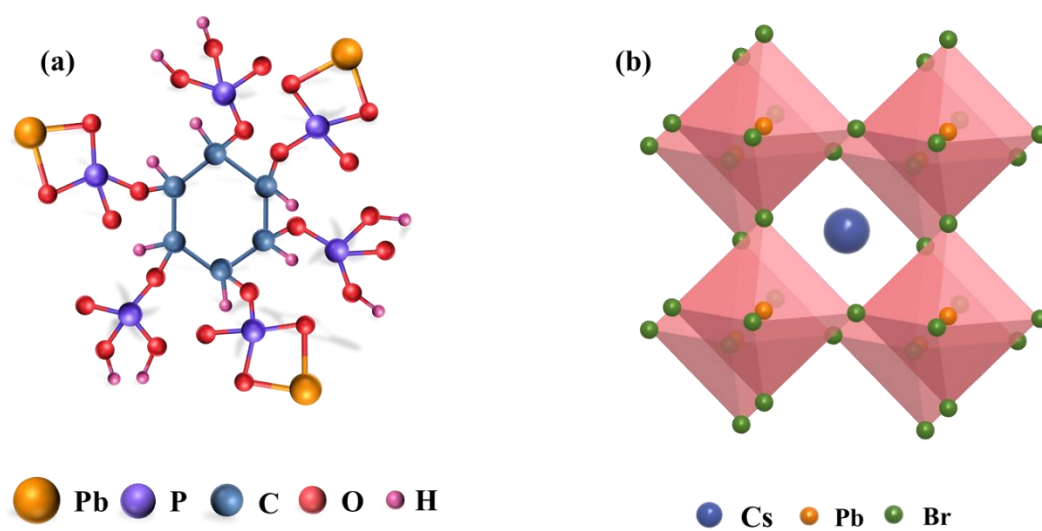


Fig S2. Schematic diagram of molecular structure of PbPA and CsPbBr₃.

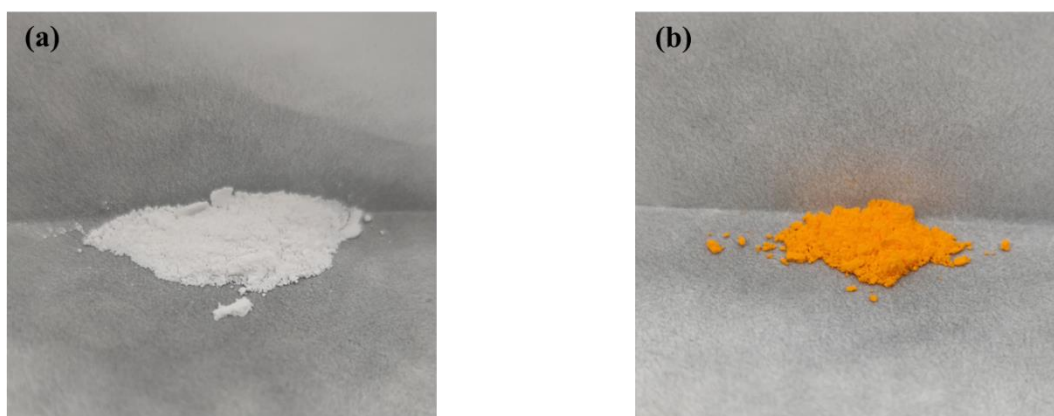


Fig S3. Optic image of PbPA (a) and CsPbBr₃ (b).

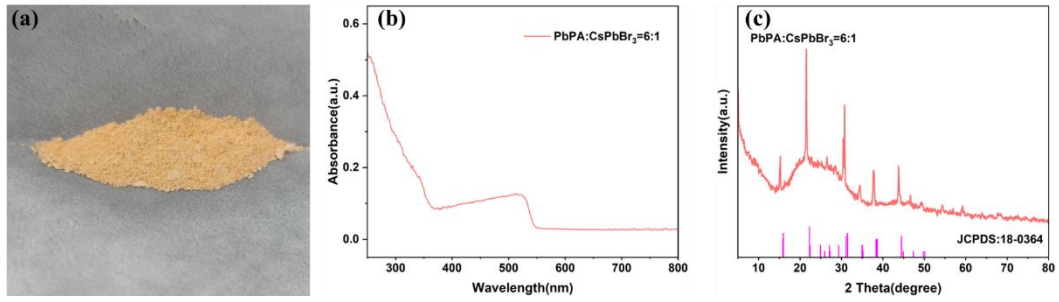


Fig S4. (a) Optic image. (b) UV-Vis absorption spectra. (c) XRD patterns of PbPA: CsPbBr₃ = 6:1.

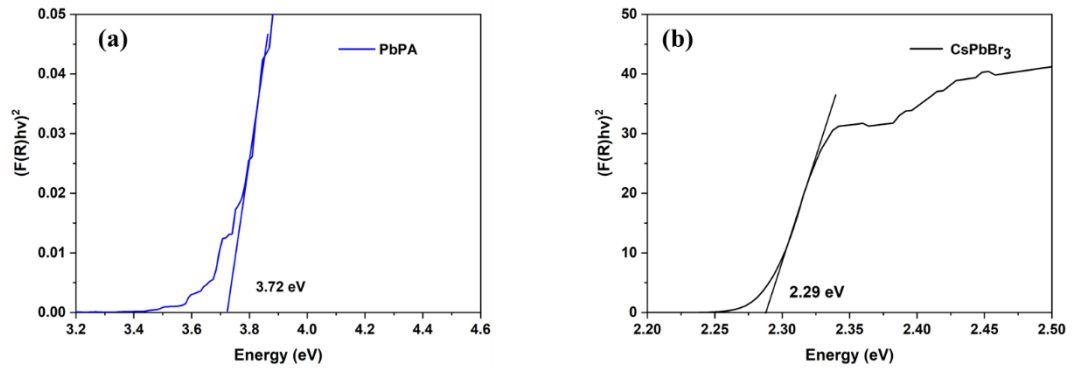


Fig S5. Tauc plot of of PbPA (a) and CsPbBr₃ (b).

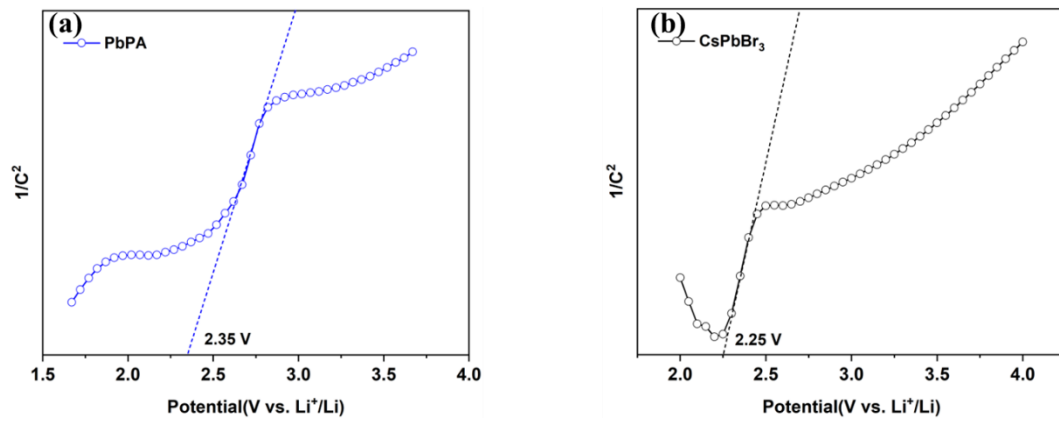


Fig S6. Mott-Schottky plots of PbPA (a) and CsPbBr₃ (b).



Fig S7. Optic image of quasi-solid-state gel polymer electrolyte.

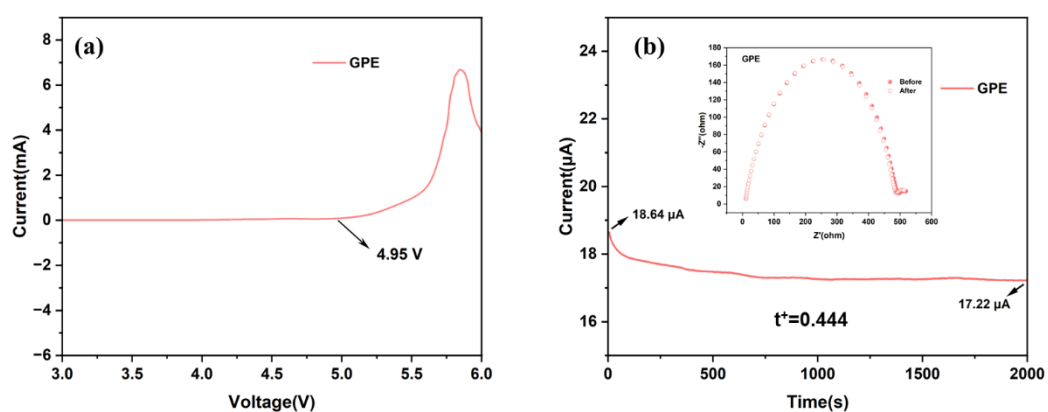


Fig S8. Electrochemical performance of quasi-solid-state gel polymer electrolyte.

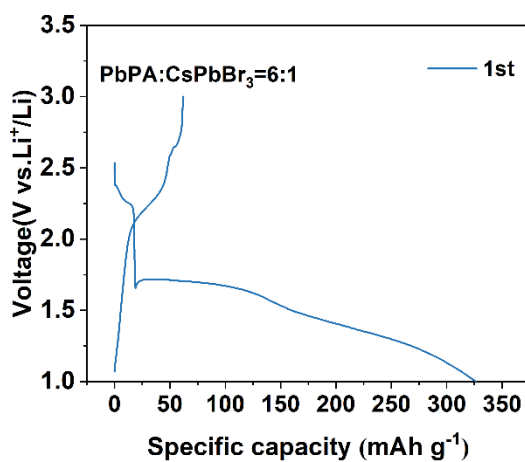


Fig S9. Charge/discharge profiles of the PbPA:CsPbBr₃=6:1 battery at first cycle.

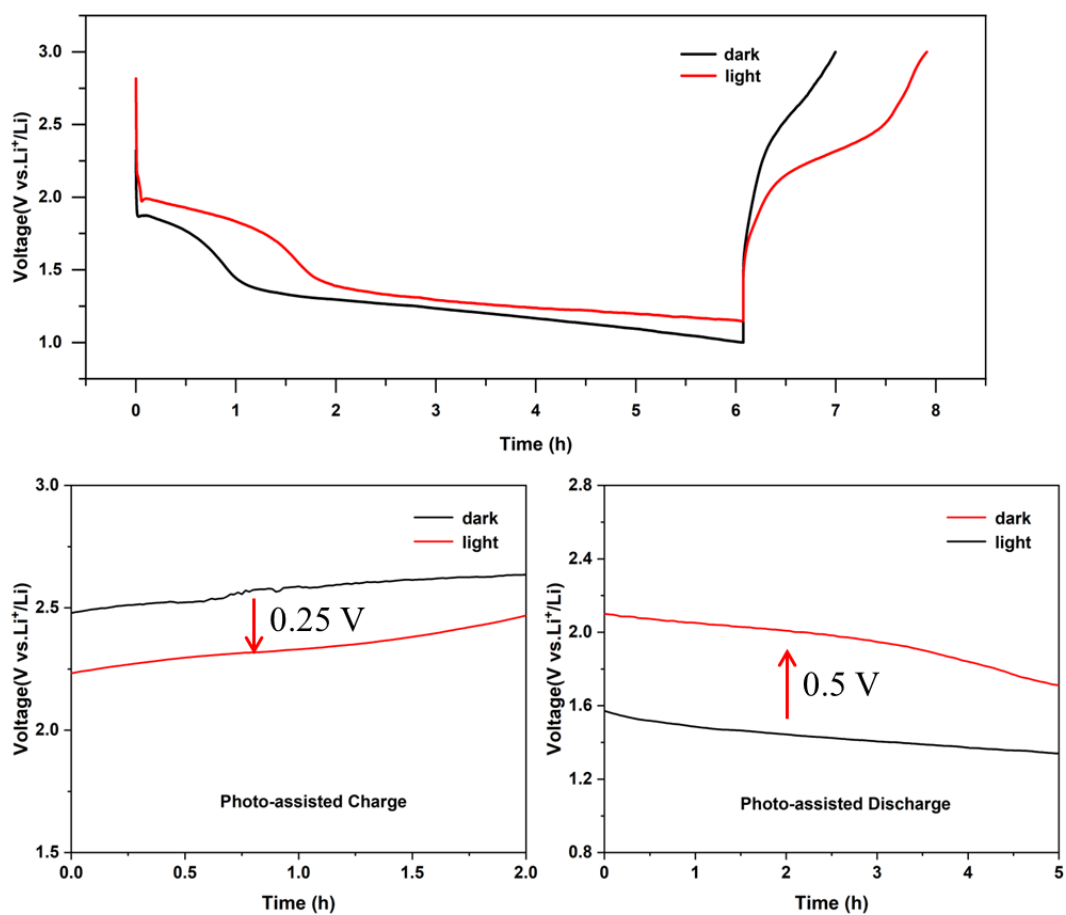


Fig S10. Photo assisted performance of PbPA: CsPbBr₃ = 6:1 at 0.08 C.

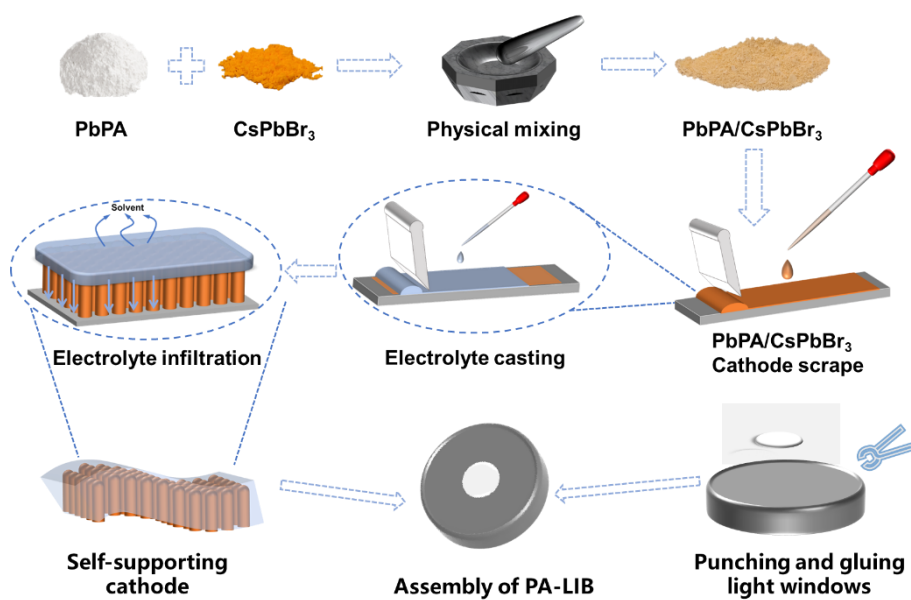


Fig S11. Graphic illumination of the preparation process of PA-LIB.

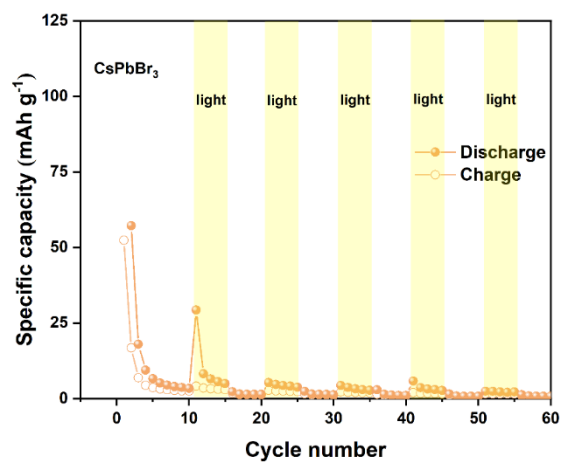


Fig S12. Photo-electrochemical performance of the CsPbBr₃ PA-LIB at 0.2C.