

Supporting Information

Surfacial Ligand Management of Perovskite Film for Efficient and Stable Light-Emitting Diodes

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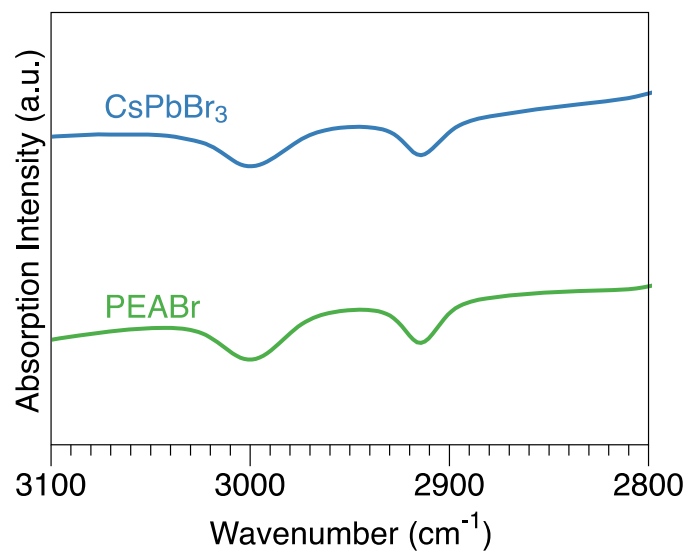


Figure S1. FTIR spectra of pristine CsPbBr₃ film and PEABr film.

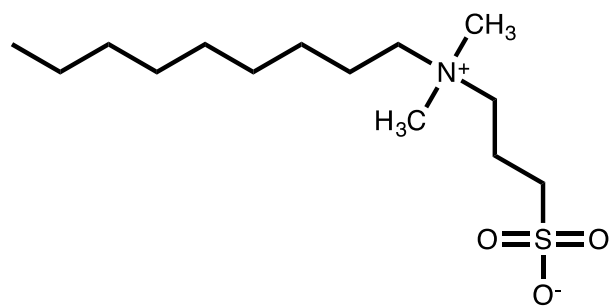


Figure S2. Structure of C₁₅H₃₃NO₃S (N-Decyl-N, N-dimethyl-3-ammonio-1-propanesulfonate).

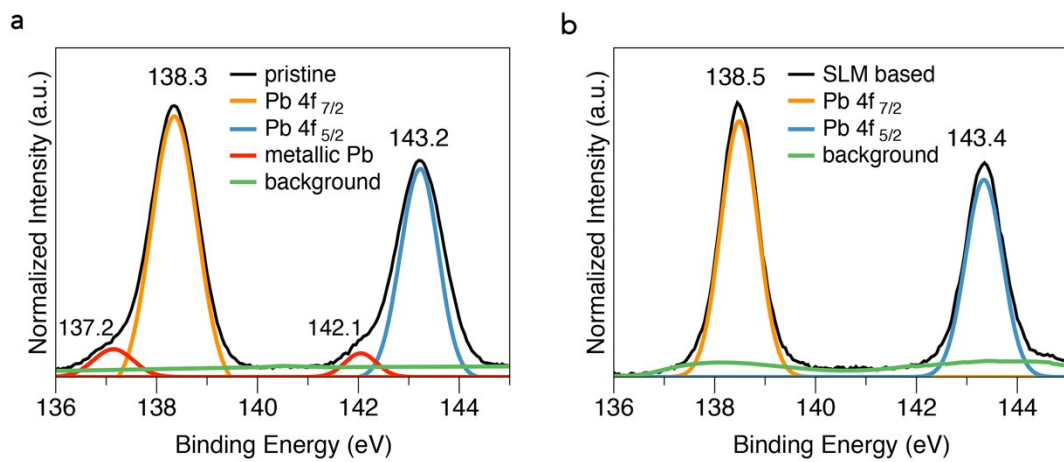


Figure S3. XPS spectra of (a) the pristine perovskite and (b) the SLM based perovskite film.

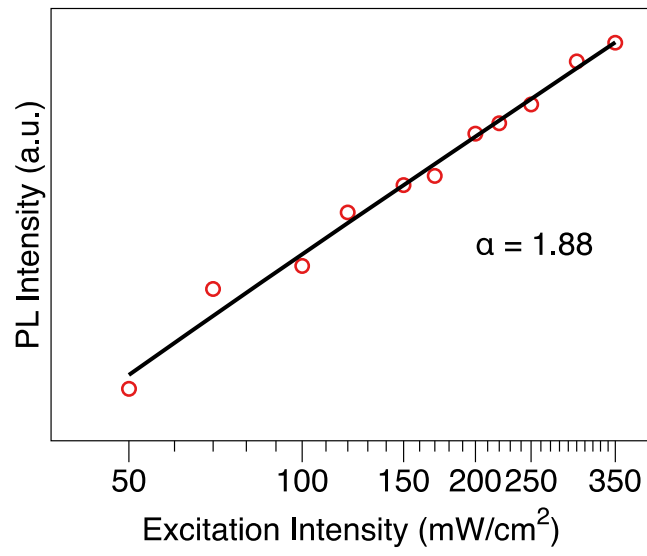


Figure S4. Power-dependent spectra of the SLM based perovskite film on a double logarithmic scale.

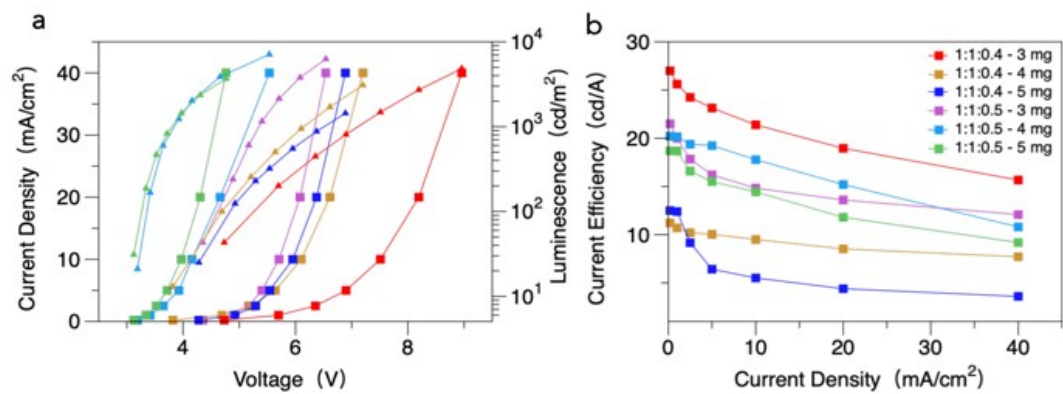


Figure S5. (a) J-V-L curves and (b) CE-J curves of PeLEDs with different concentration ratios.

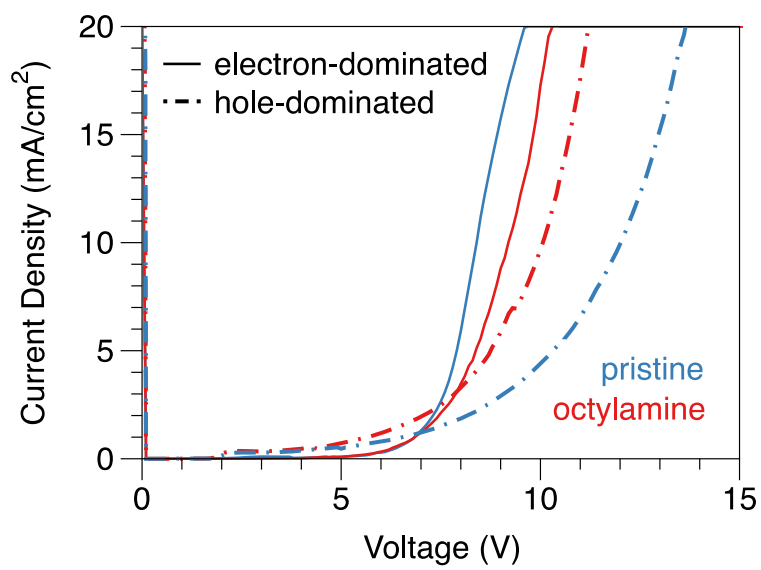


Figure S6. J-V curves of hole/electron-dominated devices with/without octylamine treatment.

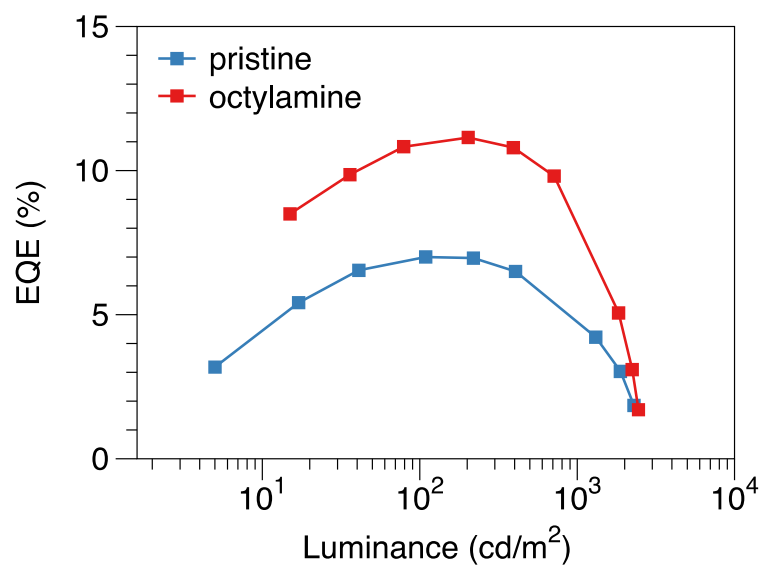


Figure S7. EQE of pristine PeLEDs and SLM based PeLEDs.

$$\tau_{average} = \frac{1}{k_r + k_{nr}}$$

$$PLQY = \frac{k_r}{k_r + k_{nr}}$$

$$k_{nr} = \frac{1 - PLQY}{\tau_{average}}$$

Equation S1. Calculation of non-radiative recombination rate.