

Electronic Supplementary Information

Polymer light-emitting electrochemical cells with ultralow salt content:
performance enhancement through synergetic chemical and electrochemical
doping actions

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Supporting Figures

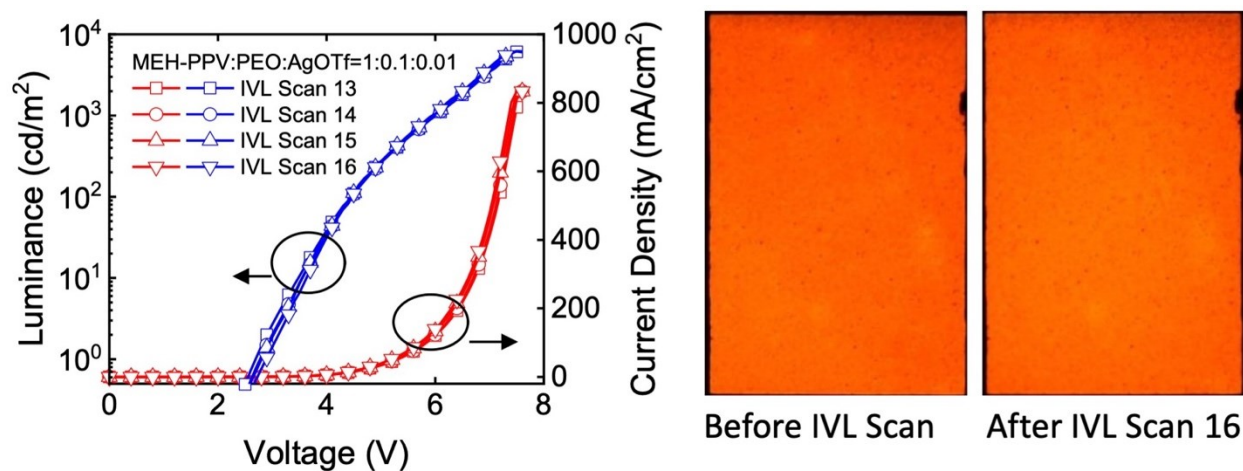


Fig. S1. Current vs. voltage vs. luminance (I-V-L) scans of a Ag⁺(0.01) cell (IVL) curves of the Ag⁺(0.01) cell. Multiple scans were applied after the cell had been biased with a 83.3 mA/cm² constant current density. The scan rate was 0.1 V/s. The exposure time for the images was 1/200 s.

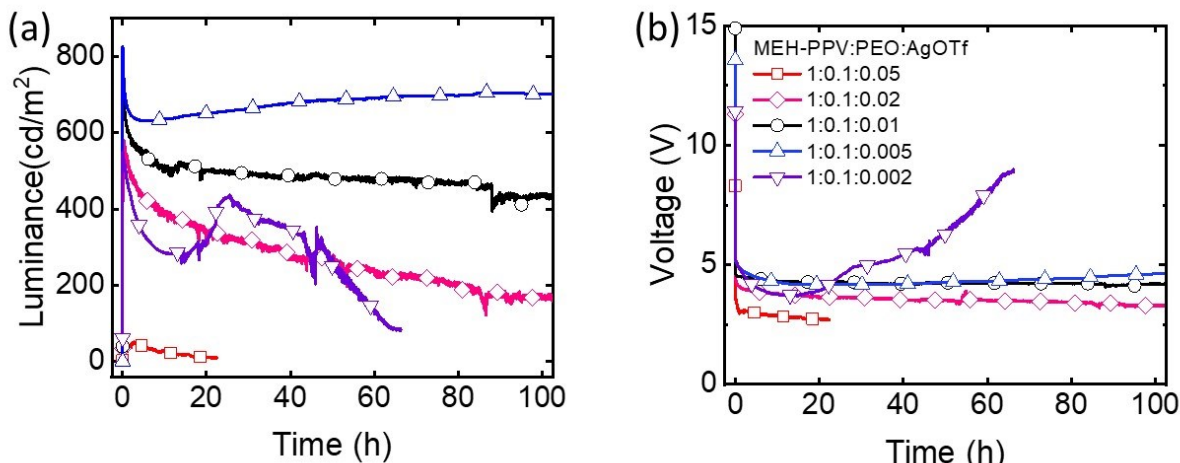


Fig. S2. Time evolution of (a) luminance and (b) driving voltage of Ag⁺ cells tested under a constant current density of 83.3 mA/cm².

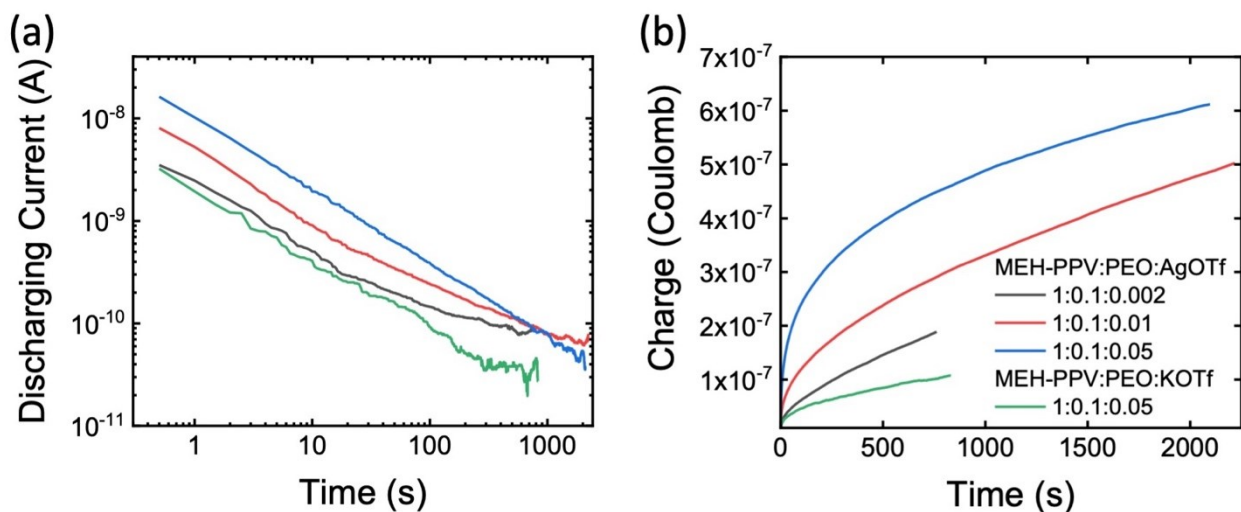


Fig. S3. (a) Time evolution of discharging current for PLECs with different salt and salt concentration. The curves had been smoothed to show sub-nA discharging currents. (b) Dedoping charge of the same PLECs obtained by integrating the current in (a) with respect to time. The compositions of the cells are specified in (b). The cell had been biased with a 83.3 mA/cm² constant current density.

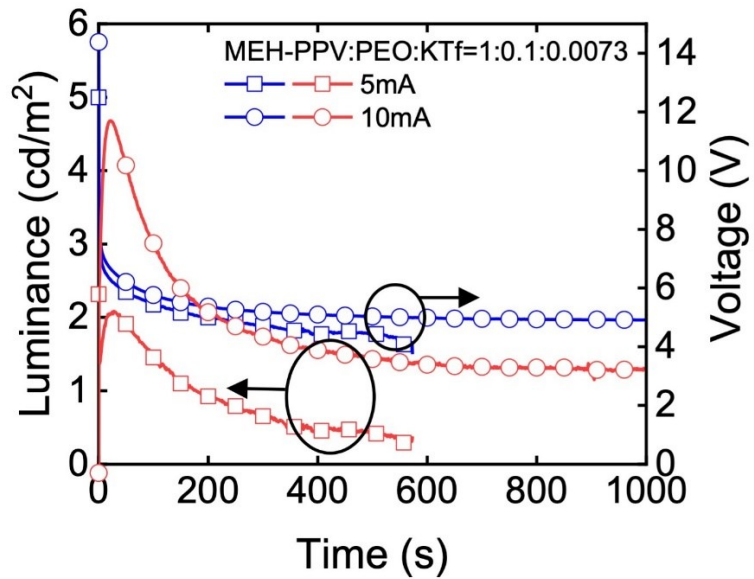


Fig. S4. Constant-current activation of a MEH-PPV:PEO:KOTf = 1:0.1:0.0073 cell. The cell has the same molar concentration of cations as the $\text{Ag}^+(0.01)$ cell.