## Supporting Information

## An Inversion of Magnetic Field Effects in Electromer-Based Organic

## **Light-Emitting Diodes**

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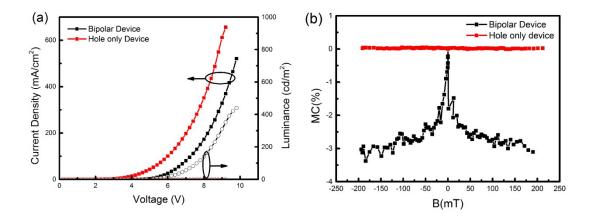


Fig. S1 (a) Current density-luminance-voltage characteristics of hole-only device and Device 1. (b) MC response characteristics of Bipolar Device and Hole-only device at 6 V.

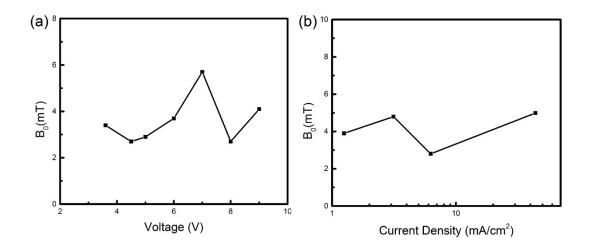


Fig. S2 The calculated  $B_0$  values of MC and MEL responses at different applied voltages (a) and currents (b) by the non-Lorentzian function.

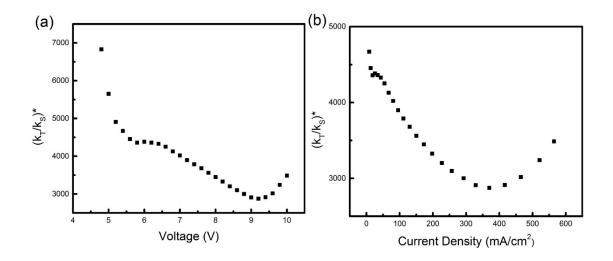


Fig. S3 (a) and (b) Values of  $(k_T/k_S)^*$  versus applied voltages and injected current from our experimental results, where  $(k_T/k_S)^*=3(k_T/k_S)/\eta+1/\eta$  and  $\eta$  is a constant.

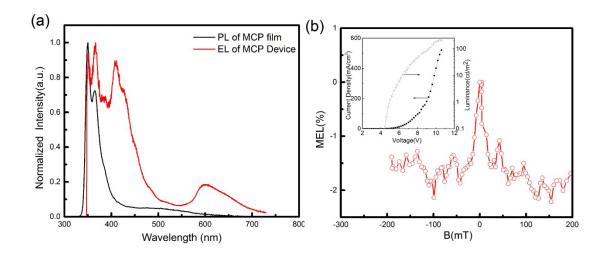


Fig. S4 (a) Normalized PL spectrum of MCP film and EL spectrum of MCP-based OLEDs with the structure of ITO/HAT-CN (10 nm)/MCP (70 nm)/CsCO<sub>3</sub> (1 nm)/Ca (10 nm)/Al (100nm). (b) MEL response characteristic of MCP-based device at a voltage of 6 V. The inset shows the current density-luminance-voltage characteristics of this device.