Supporting information

High triplet energy exciplex host for improved efficiency and lifetime in blue phosphorescent organic light-emitting diodes

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Figure S1. CV curves for the oxidation and reduction of CNmCBPCN.
Figure S2. DSC thermograms of CNmCBPCN at a heating rate of 10 °C/min in nitrogen atmosphere.
Figure S3. Thermogravimetric analysis data of CNmCBPCN at a heating rate of 10 °C/min in nitrogen atmosphere.
Figure S4. The PL emission spectra of each host and mixed hosts in (a) mCP:mCBP-1CN, (b) mCP:CNmCBPCN.
**Figure S5.** Each host was made into a solid film state, and the low temperature PL emission spectrum at 77K was observed to obtain the triplet energy value, (a) oCBP:CNmCBPCN, (b) oCBP:mCBP-1CN.
Figure S6. Transient PL decay curves of oCBP:CNmCBPCN film.
Figure S7. Chemical structures of materials in the blue OLED devices.
**Figure S8.** Current density-voltage curves of the hole only devices and electron only devices of CNmCBPCN.