

## Supporting Information

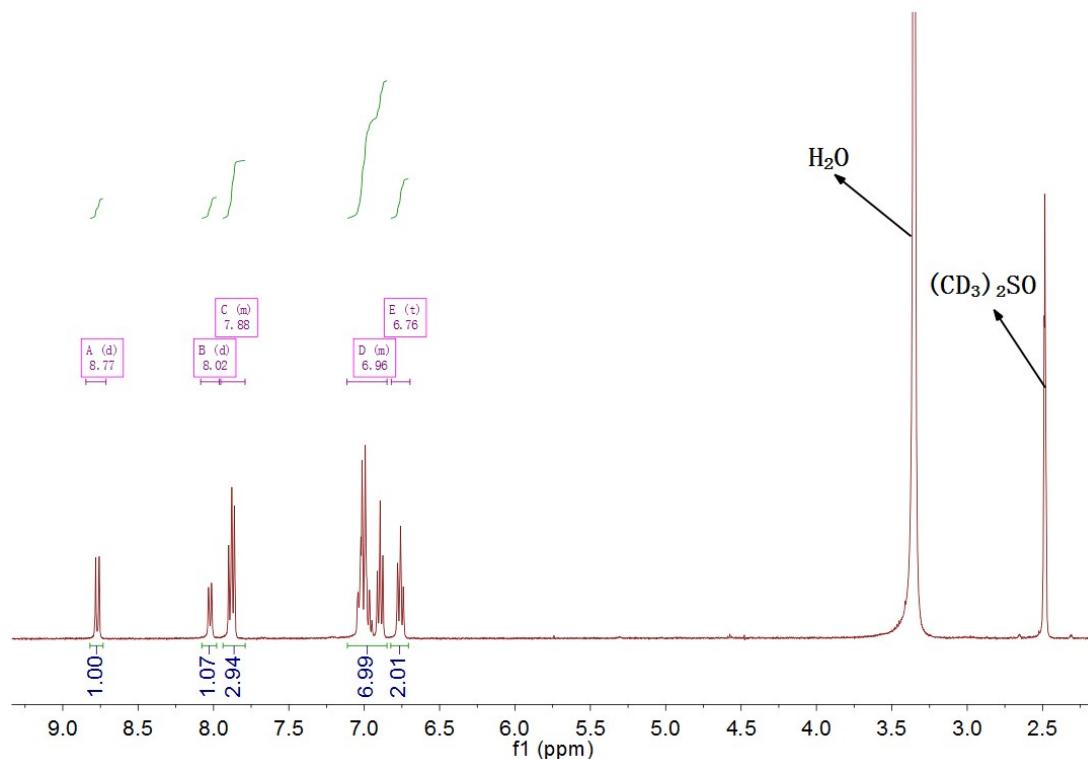
### New Homoleptic Iridium Complexes with C<sup>+</sup>N=N Type Ligand for High Efficiency Orange and Single Emissive-layer White OLEDs

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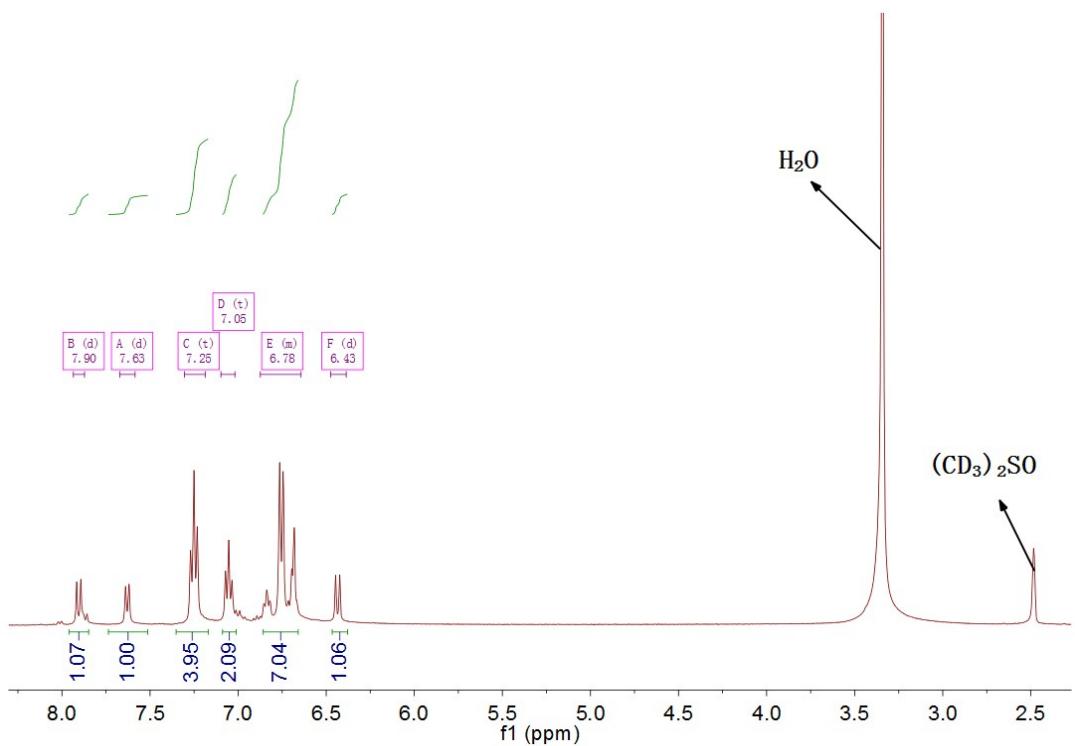
#### ADDITIONAL TABLE AND FIGURES

**Table S1.** Photophysical, thermal and electrochemical properties of the two complexes

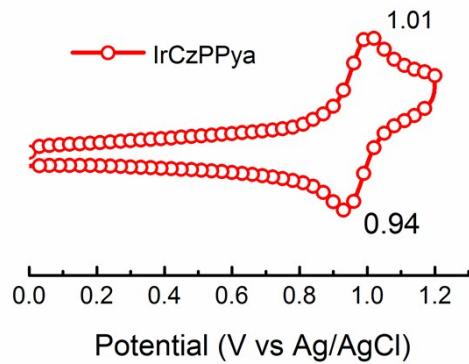
Complex	IrCzPPya	IrNPPya
$\lambda_{\text{em}}$ (nm)	556	558
$\Phi_{\text{PL}}$	0.45	0.55
$\tau$ ( $\mu\text{s}$ )	3.99	6.00
T <sub>d</sub> (°C)	426	382
HOMO (eV)	5.70	5.40
LUMO (eV)	3.10	2.80



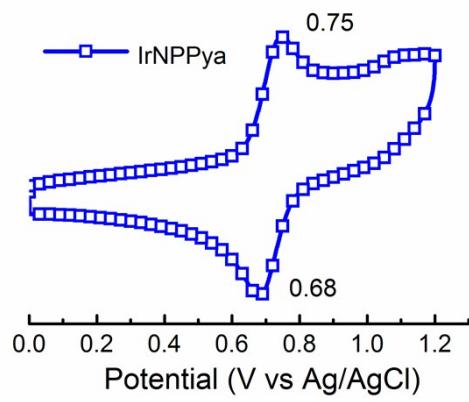
**Fig. S1.** <sup>1</sup>H NMR spectrum of IrCzPPya in (CD<sub>3</sub>)<sub>2</sub>SO.



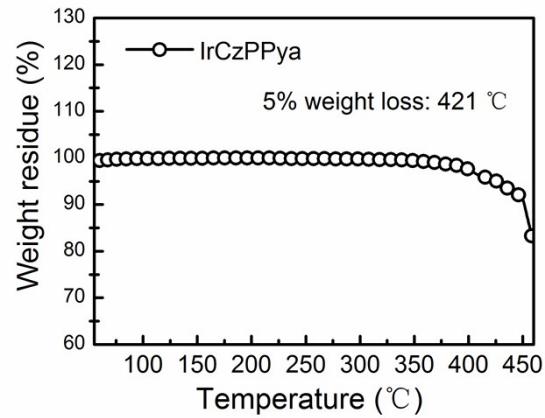
**Fig. S2.**  $^1\text{H}$  NMR spectrum of IrNPPya in  $(\text{CD}_3)_2\text{SO}$ .



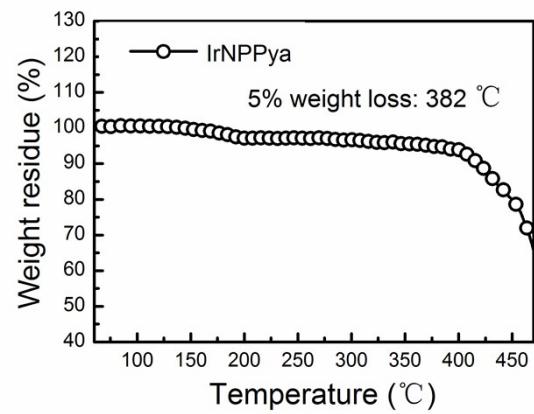
**Fig. S3.** Electrochemical spectra of IrCzPPya.



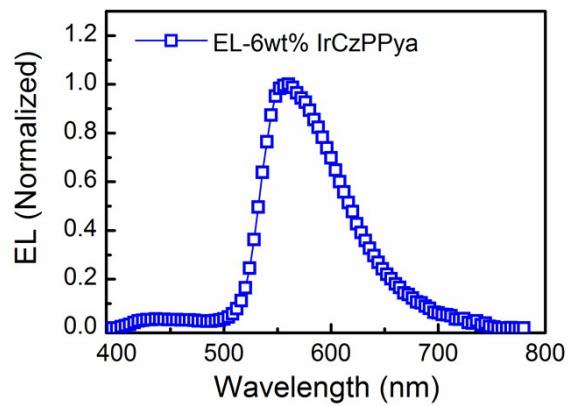
**Fig. S4.** Electrochemical spectra of IrNPPya.



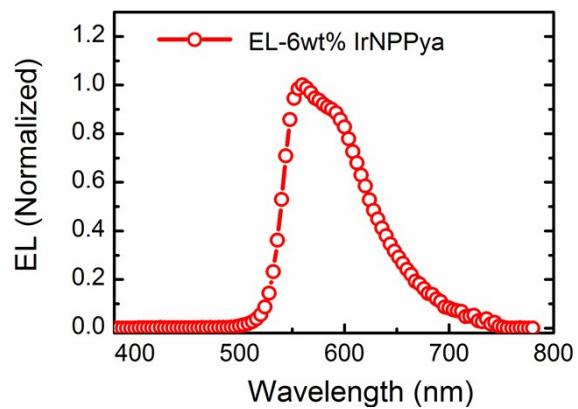
**Fig. S5.** Thermal gravimetric spectra of IrCzPPya.



**Fig. S6.** Thermal gravimetric spectra of IrNPPya.



**Fig. S7.** Electroluminescence spectra of the device doped with IrCzPPya.



**Fig. S8.** Electroluminescence spectra of the device doped with IrNPPya.