

Electronic Supplementary Material (ESI) for XXX.
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Distinct phosphorescence enhancement of red-emitting iridium(III) complexes with formyl-functionalized phenylpyridine ligands

Sizhen Cao,^{a, †} Lin Hao,^{a, †} Wen-Yong Lai,^{*a, b} Hao Zhang,^a Zhou Yu,^a Xinwen Zhang,^{*a} Xu Liu,^a
Wei Huang^{*a, b}

^a Key Laboratory for Organic Electronics & Information Displays (KLOEID) & Institute of Advanced Materials (IAM), Jiangsu National Synergetic Innovation Center for Advanced Materials (SICAM), Nanjing University of Posts & Telecommunications, 9 Wenyuan Road, Nanjing 210046, China

^b Key Laboratory of Flexible Electronics (KLOFE) & Institute of Advanced Materials (IAM), Jiangsu National Synergetic Innovation Center for Advanced Materials (SICAM), Nanjing Tech University, 30 South Puzhu Road, Nanjing 211816, China.

† These authors contributed equally.

* E-mail: iamwylai@njupt.edu.cn (W.-Y. Lai); iamxwzhang@njupt.edu.cn (X. Zhang)

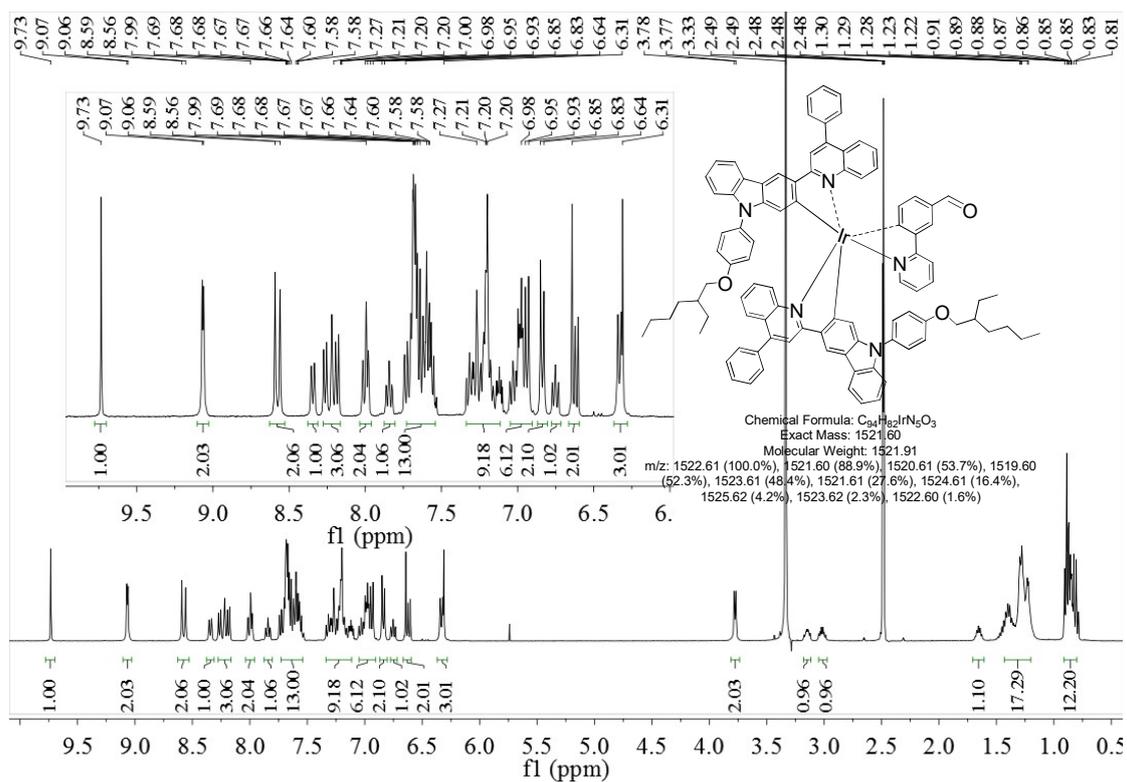


Figure S1. ^1H NMR of Ir-CHO.

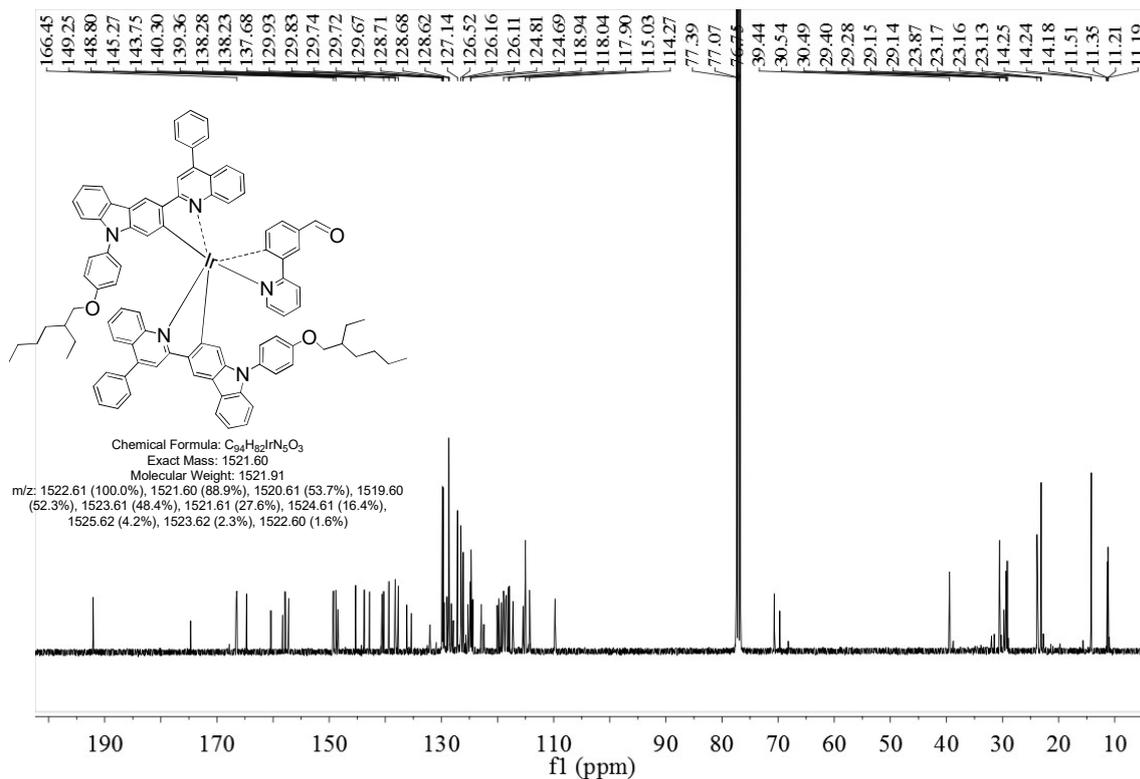


Figure S2. ^{13}C NMR of Ir-CHO.

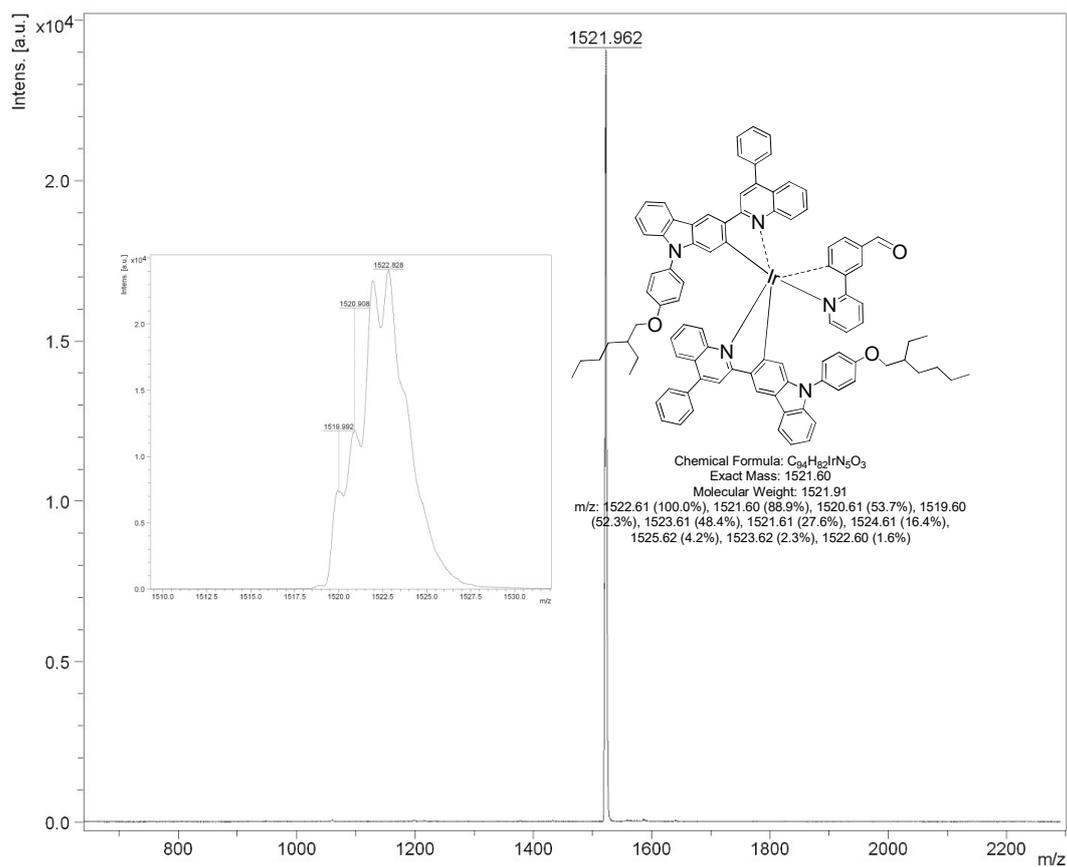


Figure S3. MALDI-TOF mass spectra of Ir-CHO.

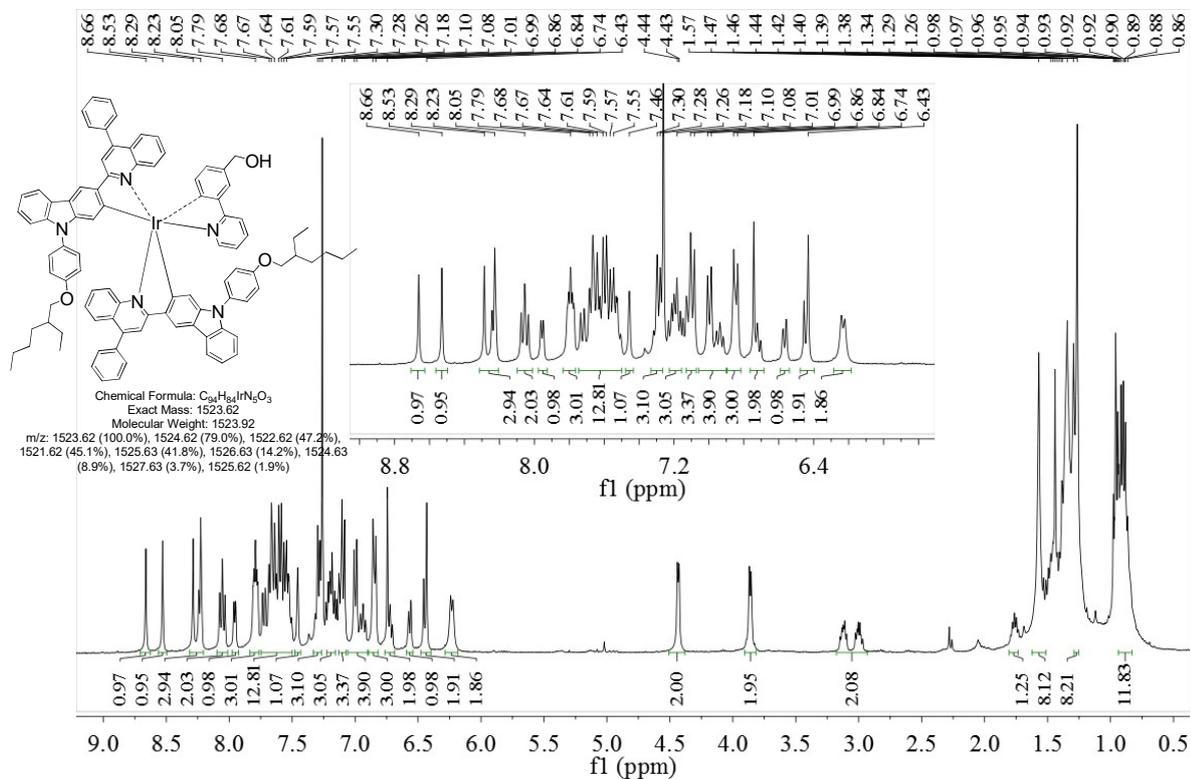


Figure S4. 1H NMR of Ir-OH.

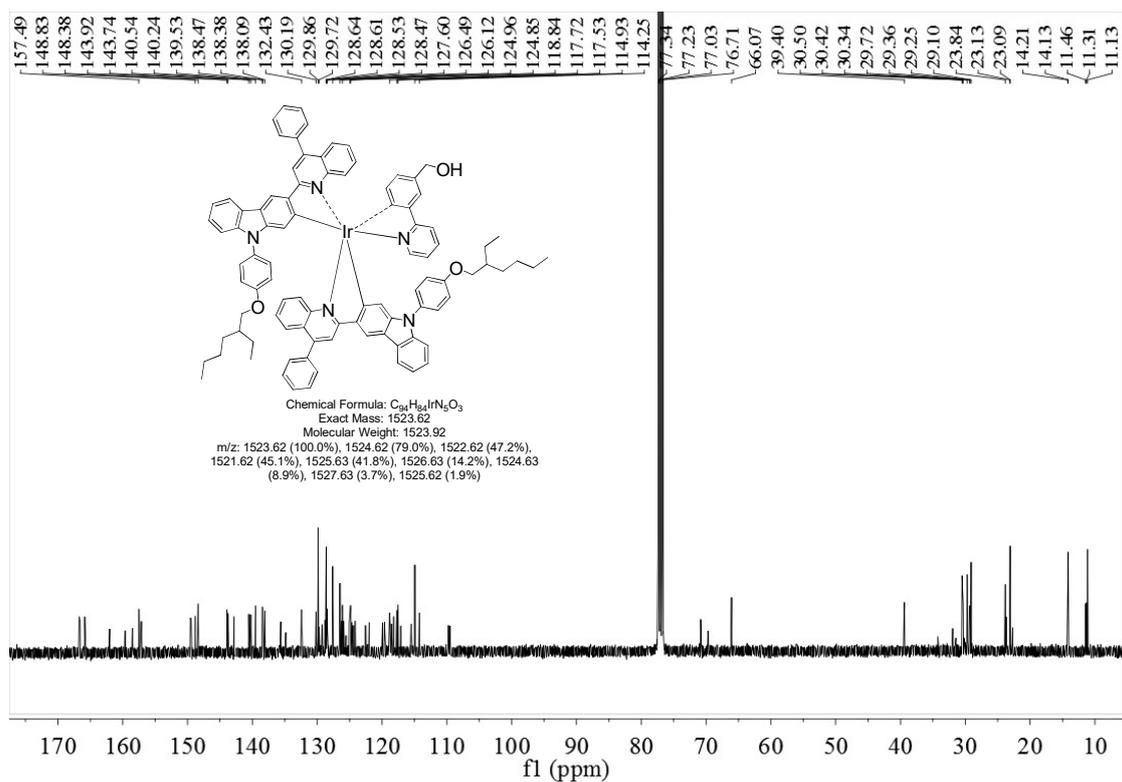


Figure S5. ^{13}C NMR of Ir-OH.

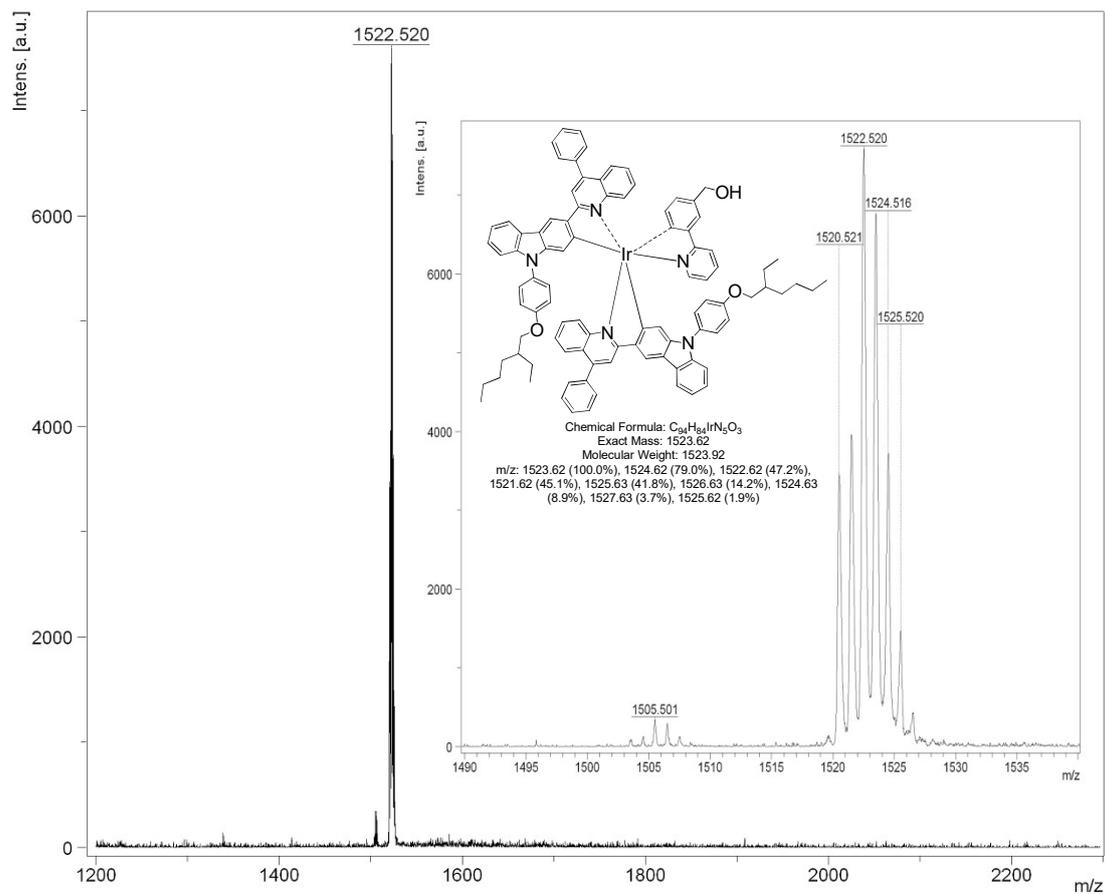


Figure S6. MALDI-TOF mass spectra of Ir-OH.

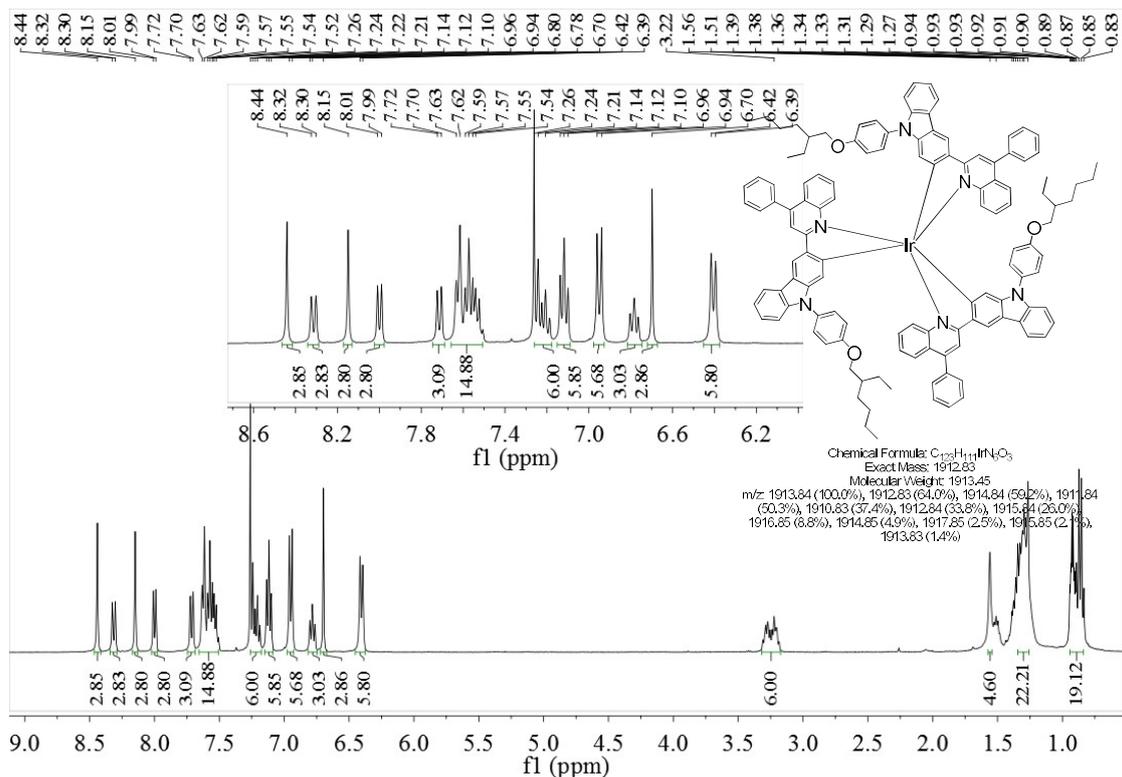


Figure S7. 1H NMR of Ir-PQCz.

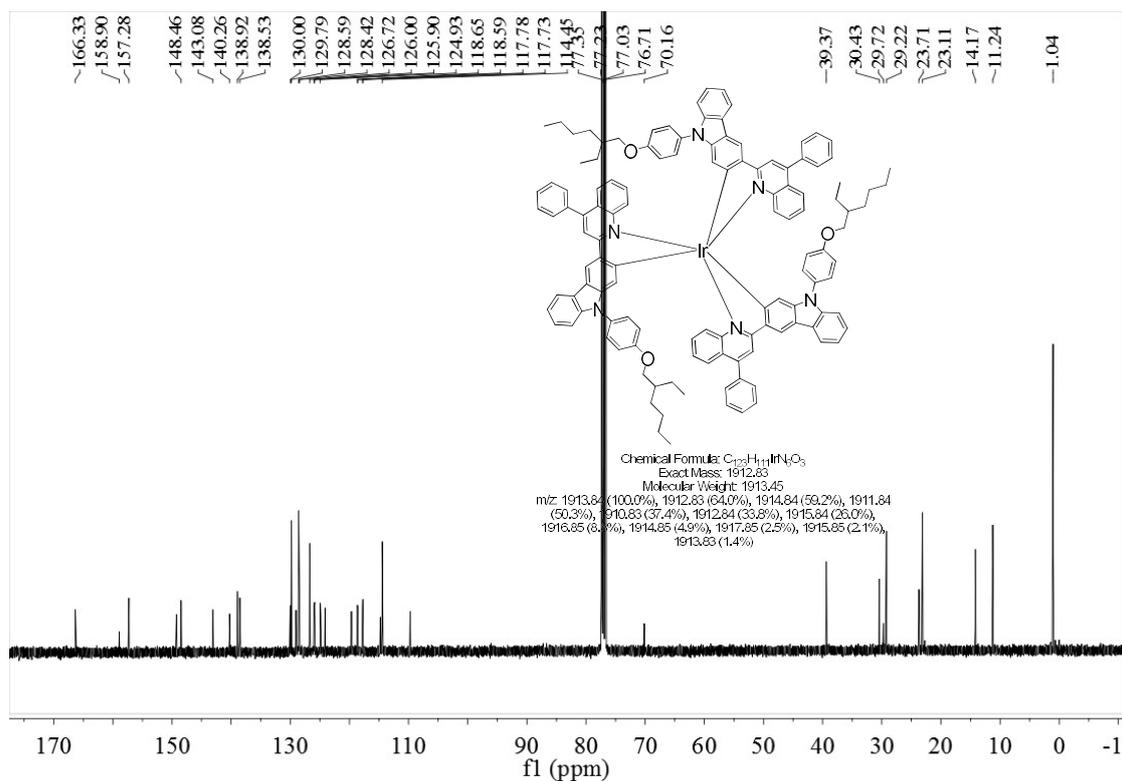


Figure S8. ^{13}C NMR of Ir-PQCz.

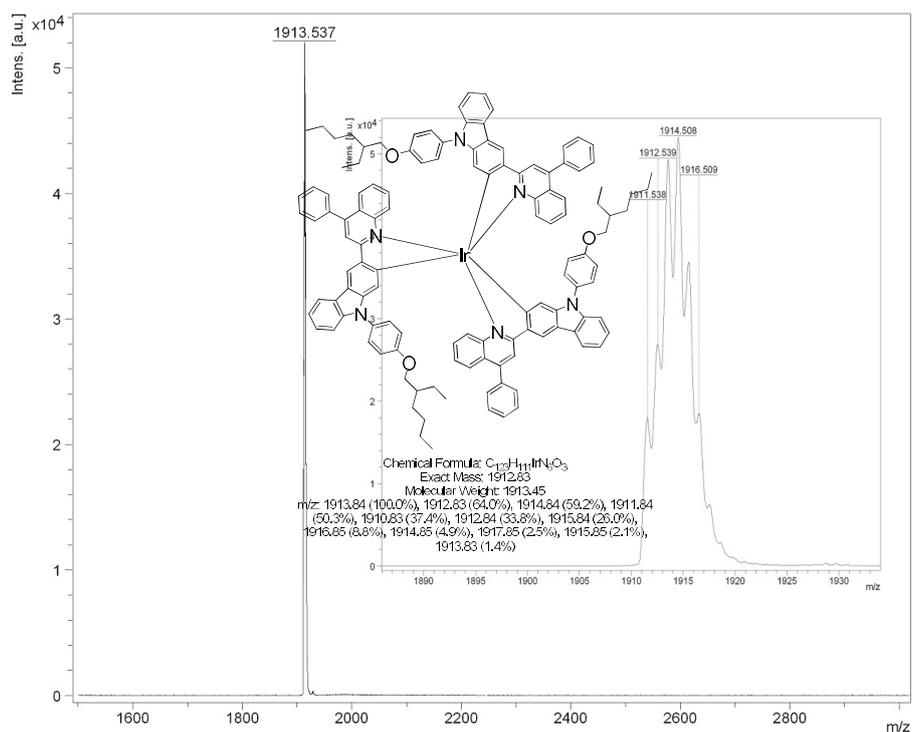


Figure S9. MALDI-TOF mass spectra of Ir-PQCz.

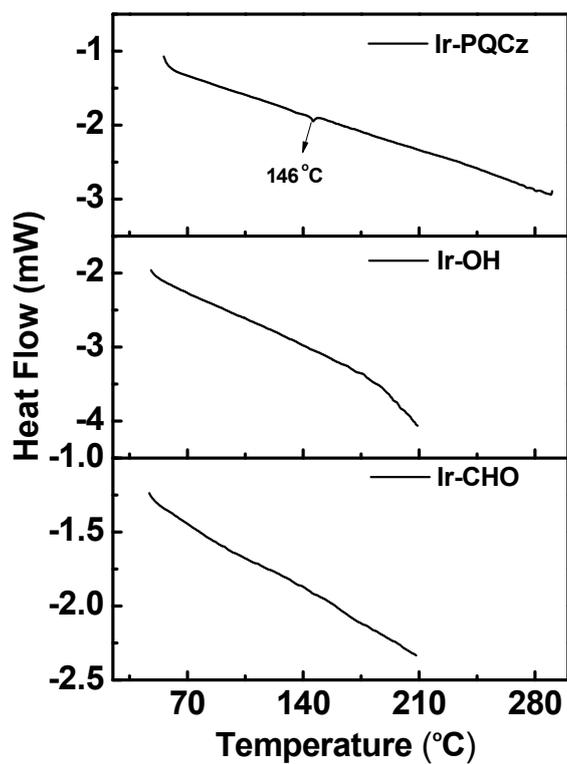


Figure S10. DSC traces of the Ir(III) complexes measured at a scan rate of $10^{\circ}C/min$ under N_2 .

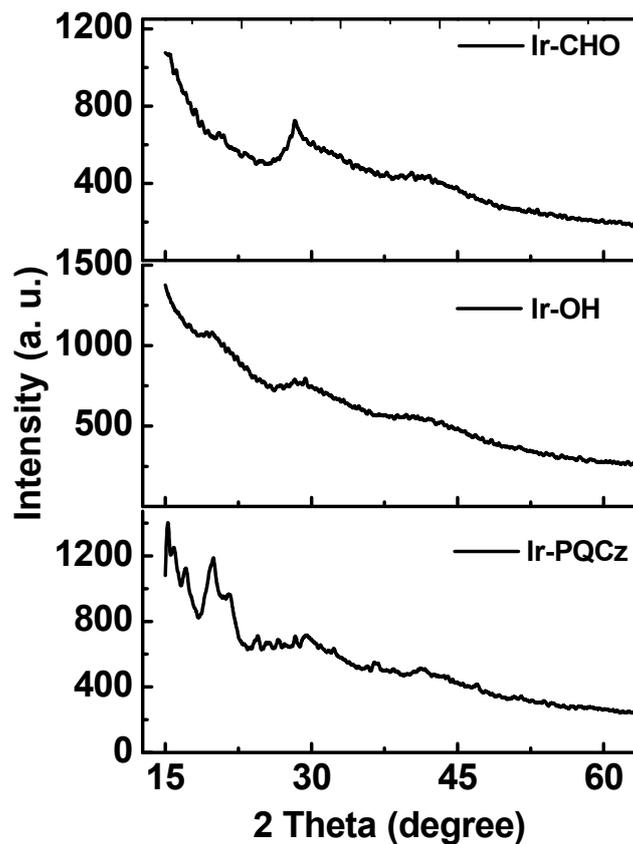


Figure S11. WAXD patterns (15-60°) of the Ir(III) complexes.

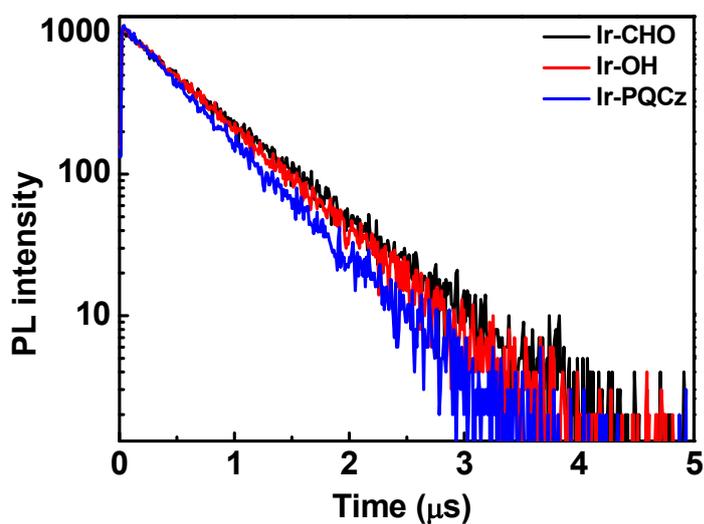


Figure S12. The PL transients of the Ir(III) complexes in N_2 -degassed CH_2Cl_2 at 298 K with 400 nm excitation.

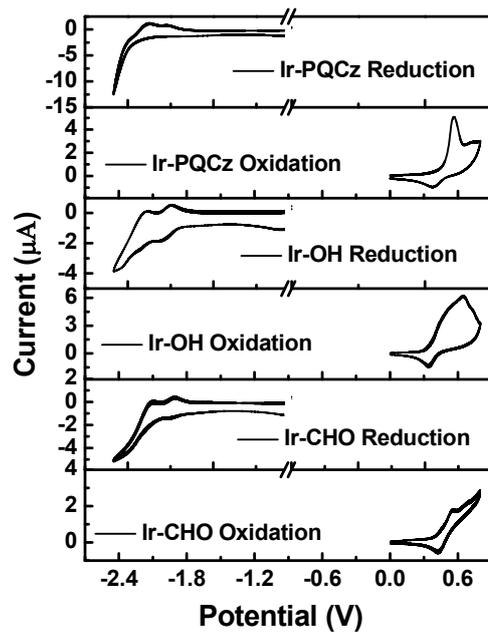


Figure S13. Cyclic voltammograms of the Ir(III) complexes in 0.1 M tetra-*n*-butylammonium hexafluorophosphate (Bu_4NPF_6) with a scanning rate of 50 mV/s.

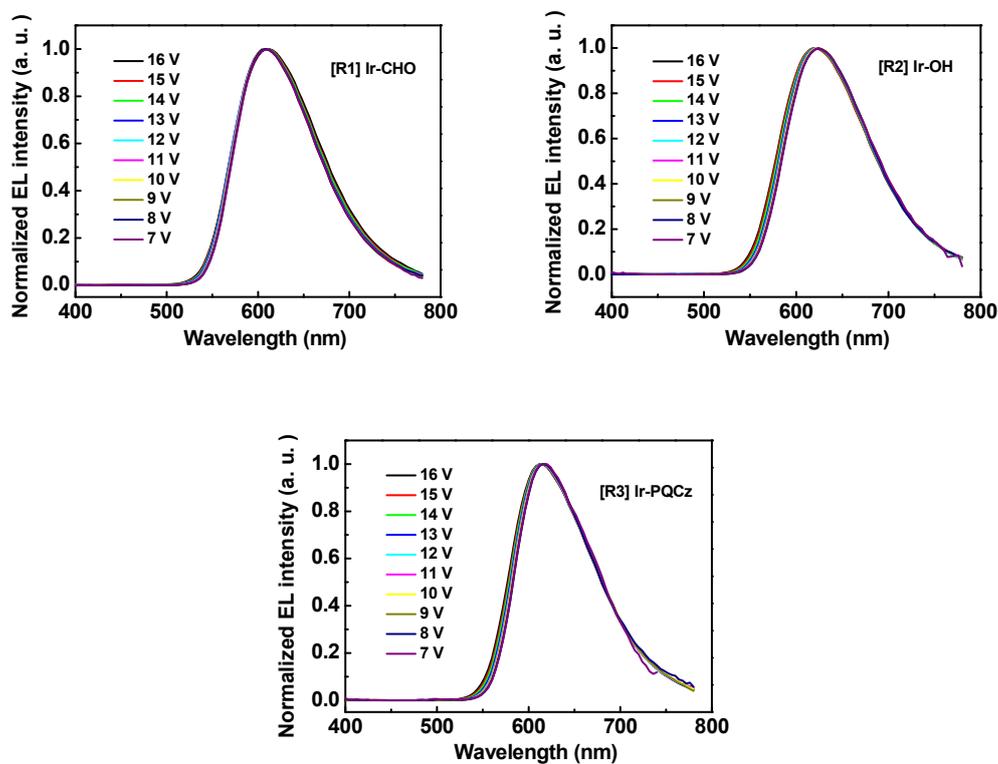


Figure S14. EL spectra of OLEDs with increasing the operating voltage from 7 V to 16 V.

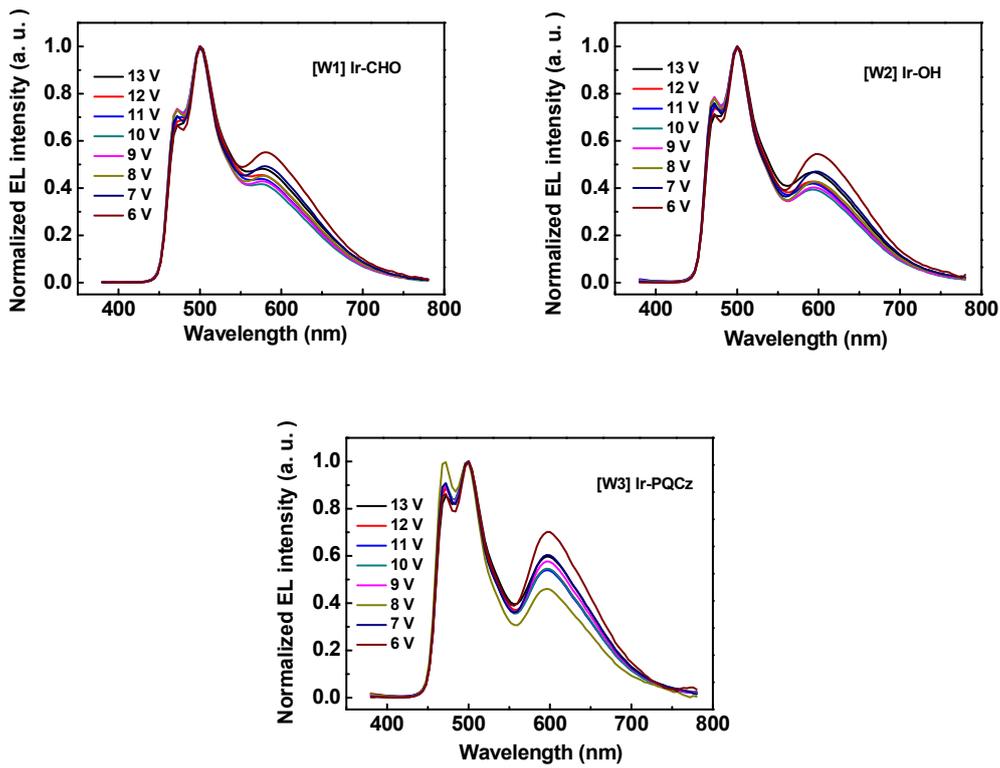


Figure S15. EL spectra of WOLEDs with increasing the operating voltage from 6 V to 13 V.