Supplementary material (ESI) for Journal of Materials Chemistry

Supporting Information

$Ir(ppy)_3$ phosphorescent microrods and nanowires: a promising micro-phosphor

Hao Wang,[a,b] Qing Liao,[a] Hongbing Fu, *[a] Yi Zeng,[a,b] Ziwen Jiang,[a,b] Jinshi Ma,[a] and Jiannian Yao*[a]

[a] Beijing National Laboratory for Molecular Sciences (BNLMS), Key Laboratory of Photochemistry, Institute of Chemistry, Chinese Academy of Sciences, Zhongguancun, Beijing 100190, People's Republic of China.

[b] Graduate University of the Chinese Academy of Sciences (GUCAS), Beijing 100049, People's Republic of China.

E-mail: (H.F.) hongbing.fu@iccas.ac.cn, (J.Y.) jnyao@iccas.ac.cn

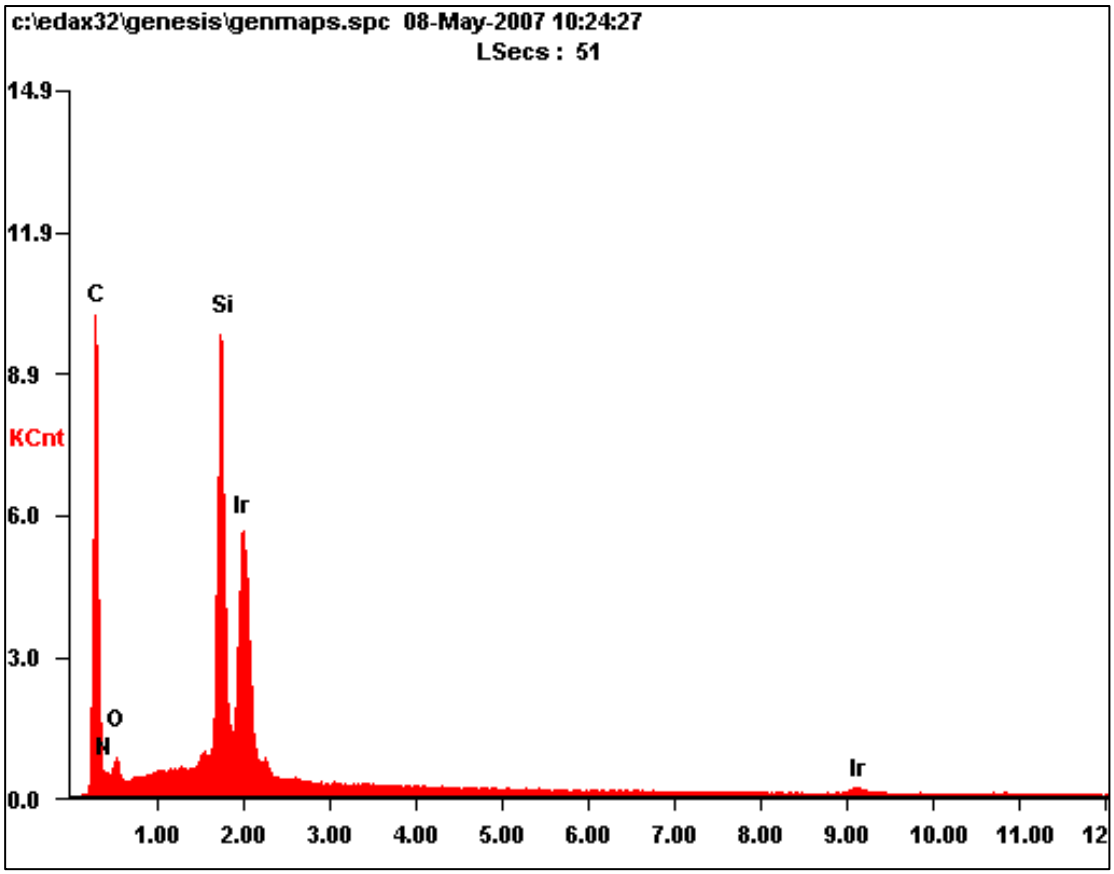


Fig. S1 The energy dispersive X-ray (EDX) spectrum of the microrods. The peak of Si arises from the Si grid for SEM characterization. The presence of O comes mainly from atmospheric contamination due to exposure of the sample to air.

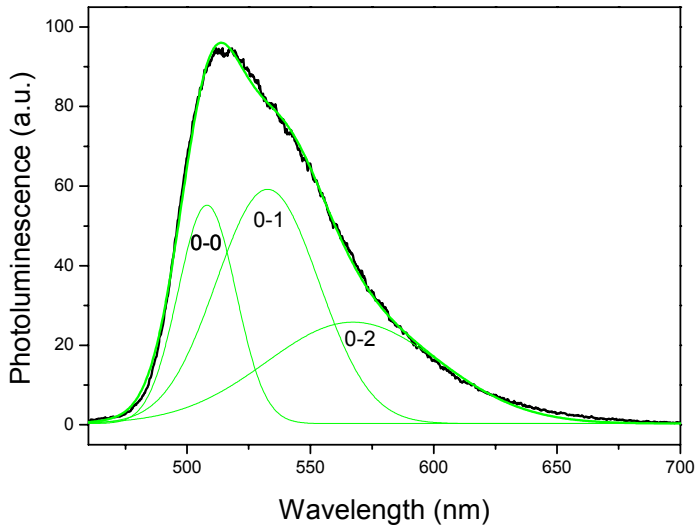
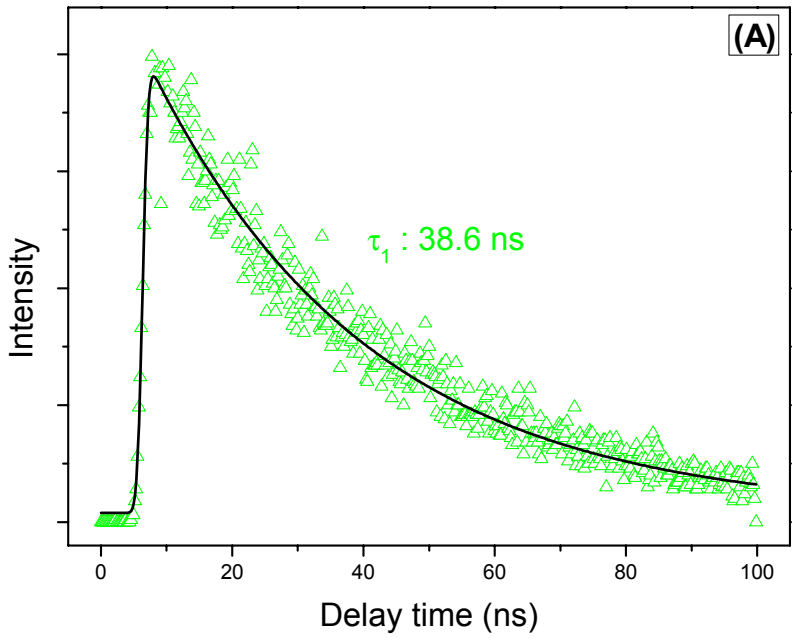
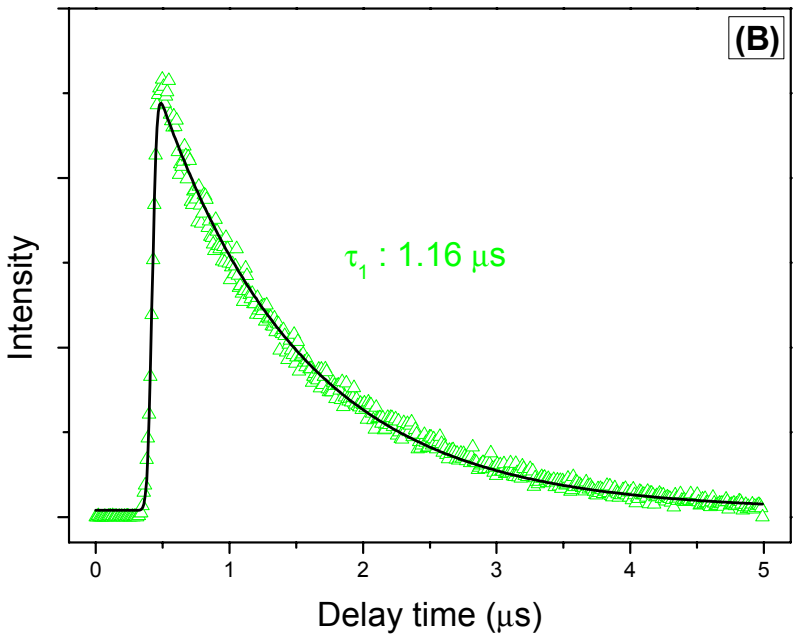


Fig. S2 Measured (black) and calculated (green) PL spectra of $Ir(ppy)_3$ in in dichloromethane. The sum spectrum was obtained by sum of the calculated zero (0-0), one (0-1), and two (0-2) phonon bands.





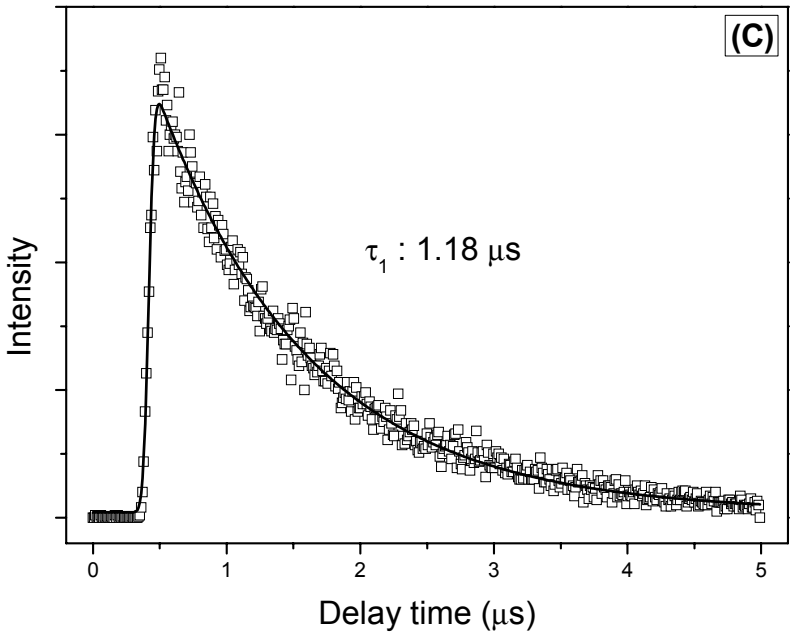


Fig. S3 The PL signal decay curves for $Ir(ppy)_3$ in air saturated toluene solution (A), $Ir(ppy)_3$ in degassed toluene solution (B) and $Ir(ppy)_3$ doped in PMMA film (C).