

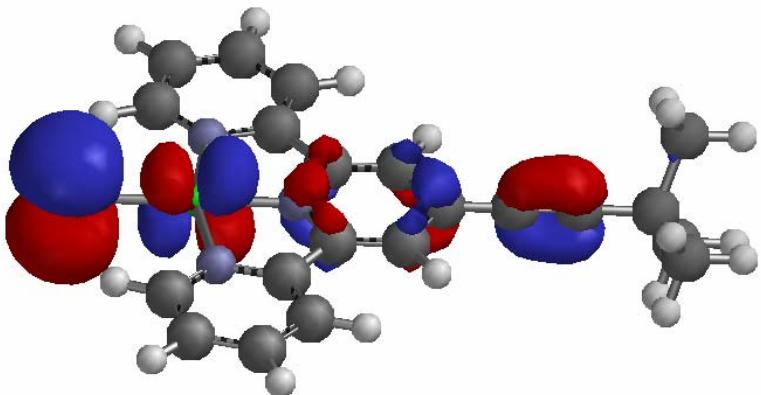
ESI for Room temperature photoluminescence from $[\text{Pt}(4'\text{-CCR-tpy})\text{Cl}]^+$ complexes

Maria L. Muro and Felix N. Castellano*

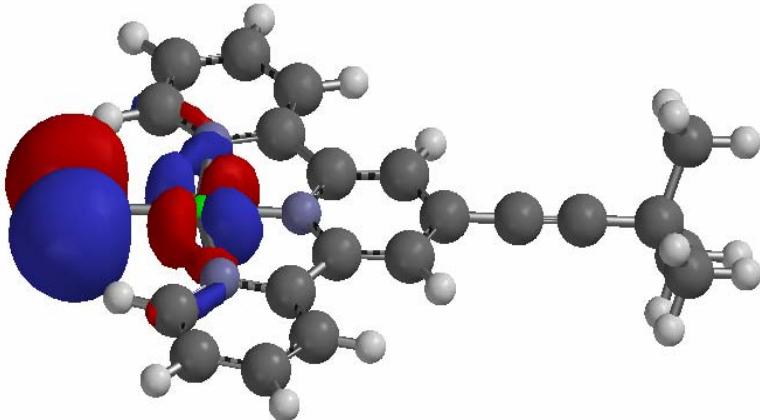
Department of Chemistry and Center for Photochemical Sciences, Bowling Green State University, Bowling Green, Ohio 43403, USA

Fig. S1 Representative molecular orbitals calculated for tBuCCtpyPtCl⁺ (**1**).

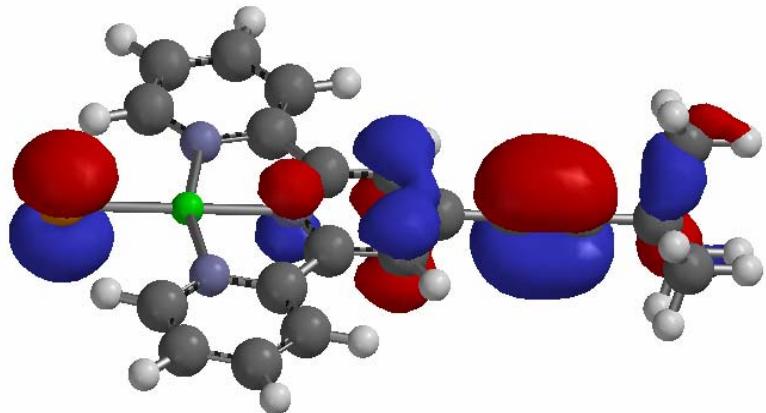
HOMO



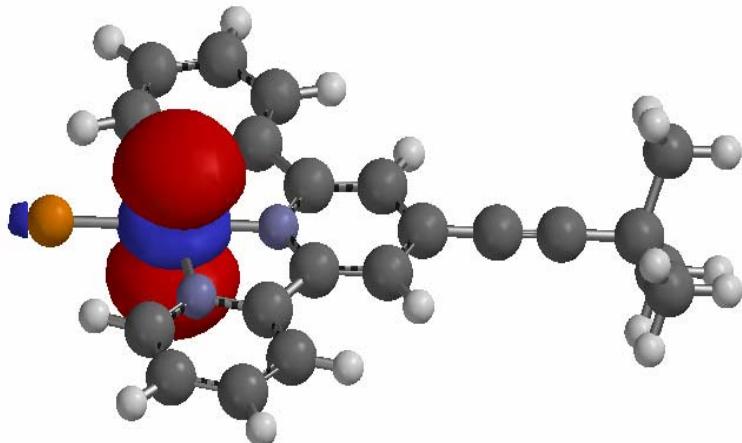
HOMO -1



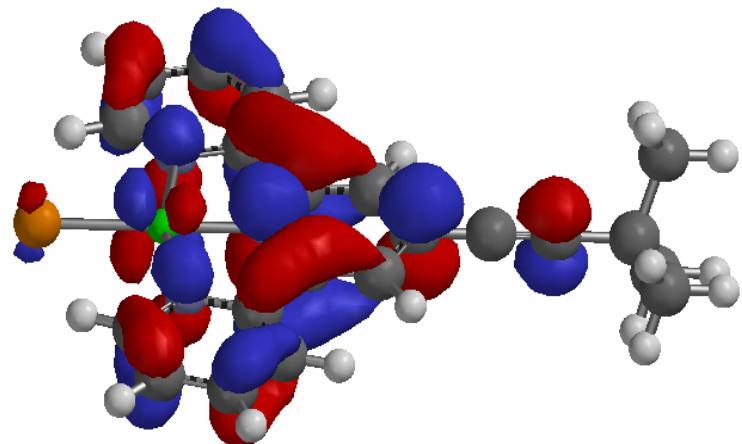
HOMO-2



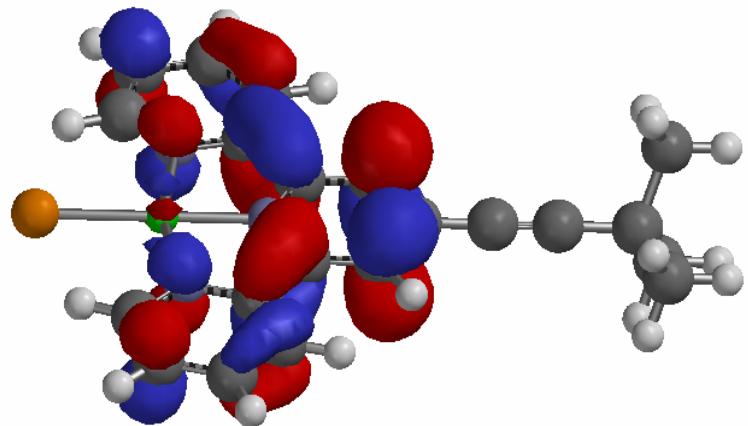
HOMO-3



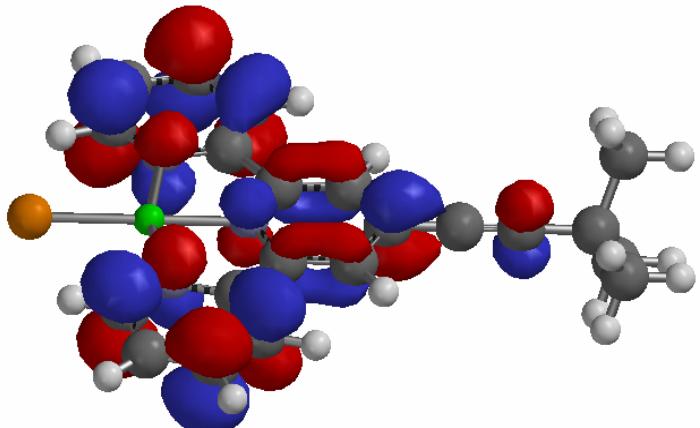
LUMO



LUMO+1



LUMO+2



LUMO+3

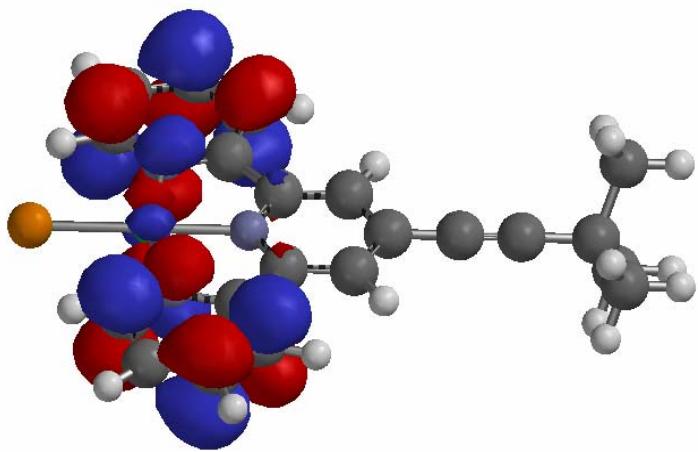
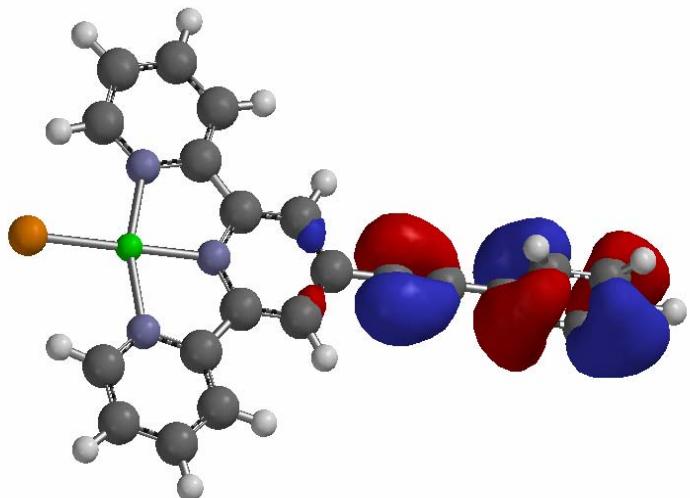
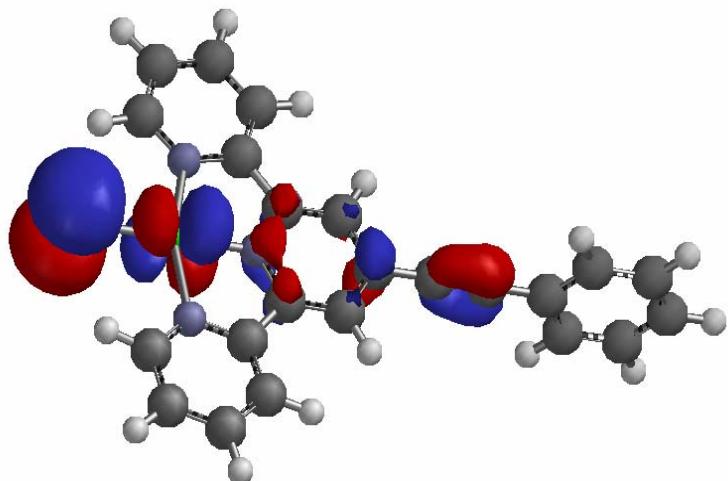


Fig. S2 Representative molecular orbitals calculated for PhCCtpyPtCl⁺ (**2**)

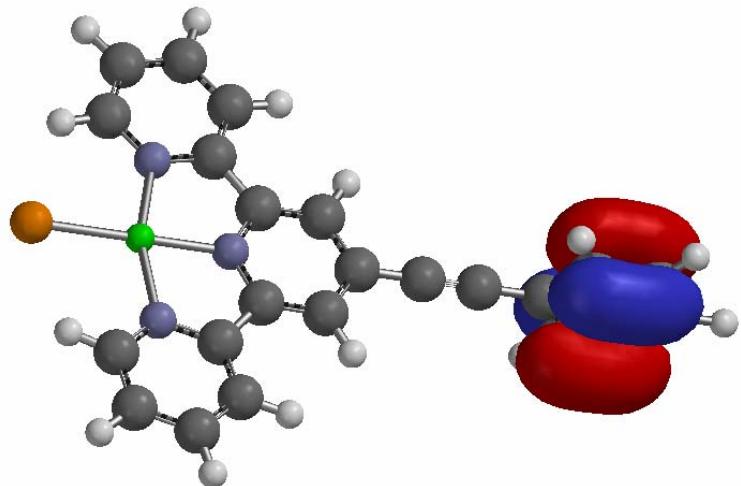
HOMO



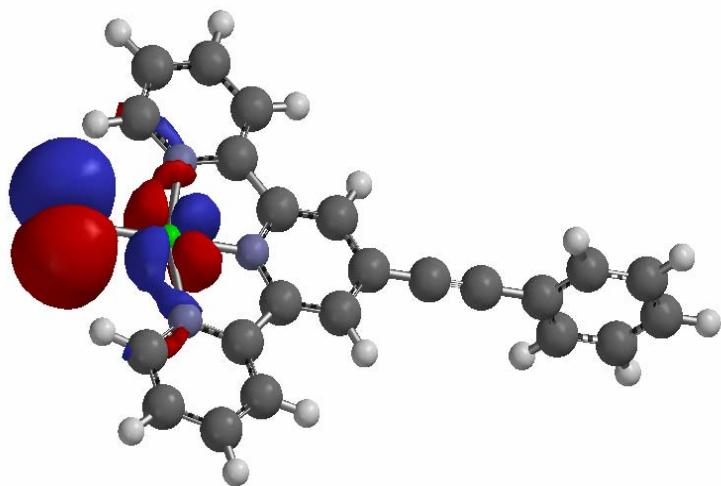
HOMO-1



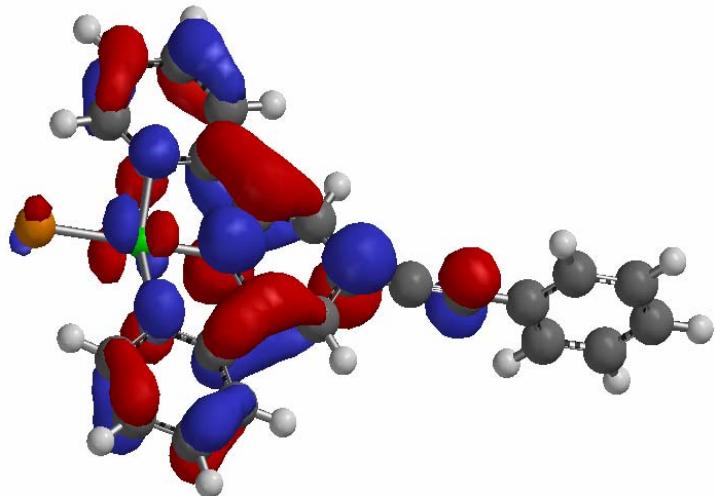
HOMO-2



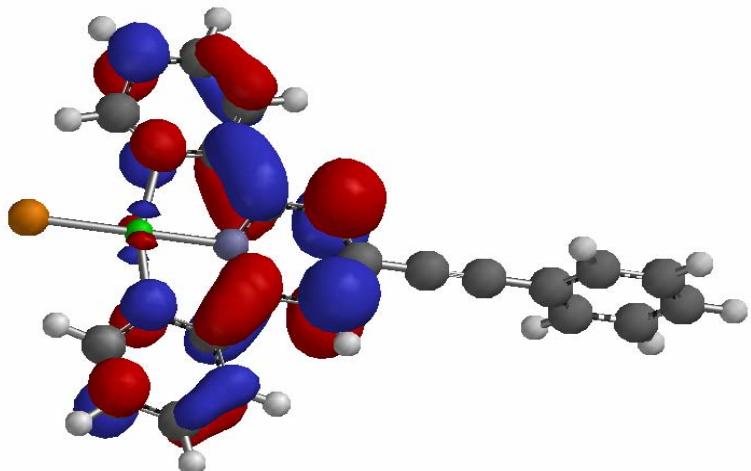
HOMO-3



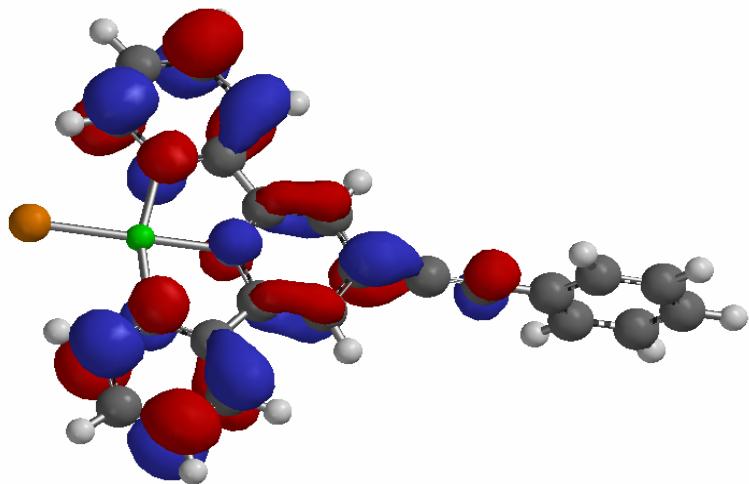
LUMO



LUMO+1



LUMO+2



LUMO+3

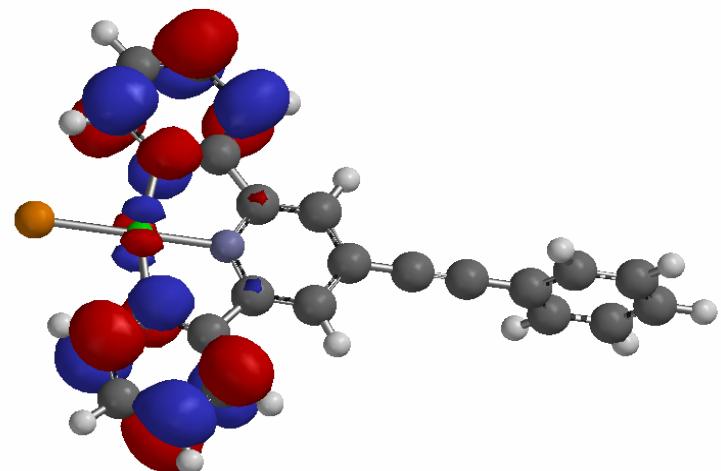
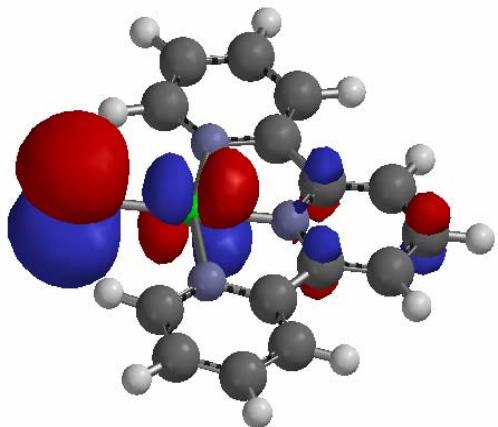
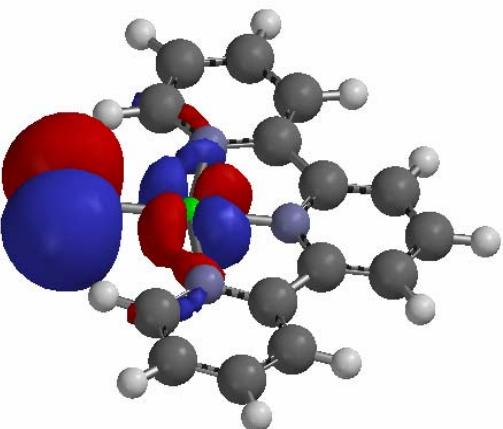


Fig. S3 Representative molecular orbitals calculated for tpyPtCl⁺

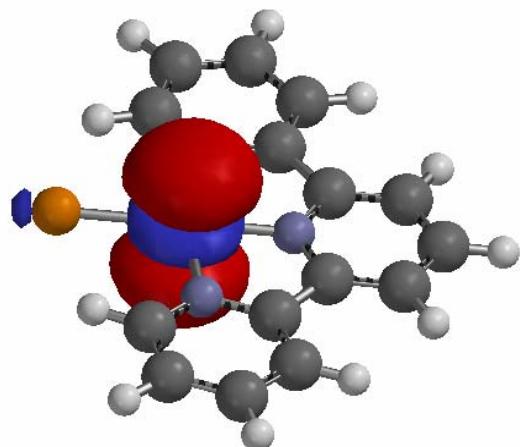
HOMO



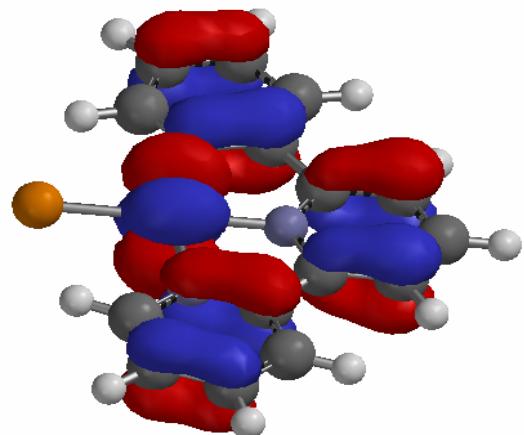
HOMO-1



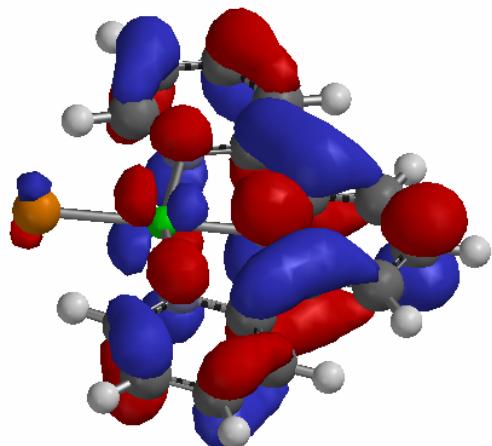
HOMO-2



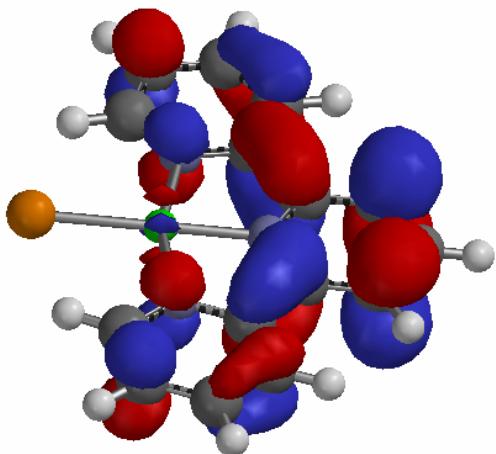
HOMO-3



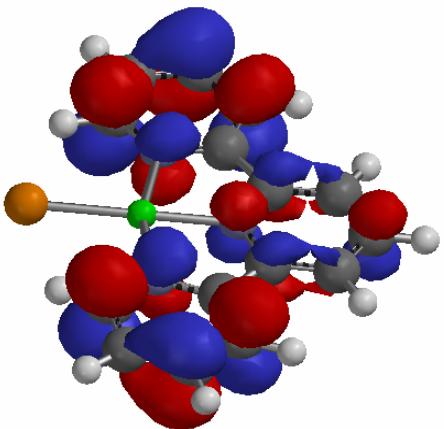
LUMO



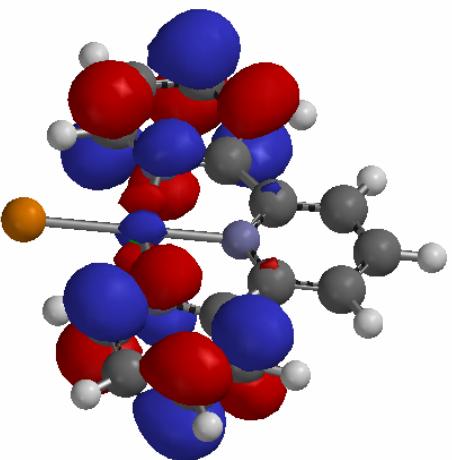
LUMO+1



LUMO+2



LUMO+3



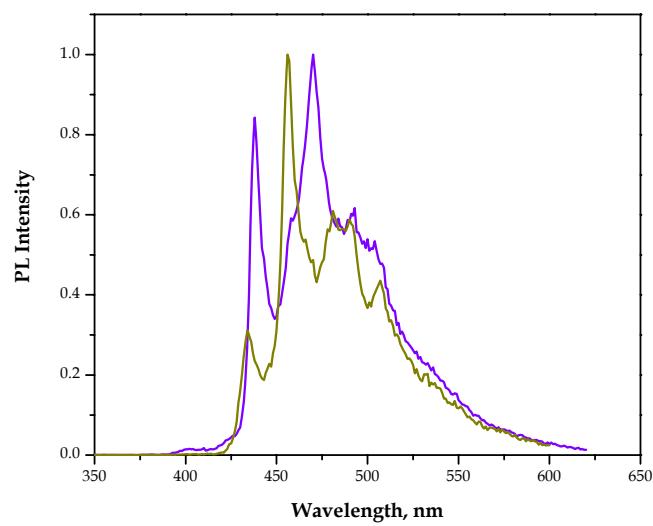


Fig. S4 Phosphorescence measurements in 4:1 EtOH/MeOH matrices at 77 K for 4'-C≡CtBu-tpy (violet line) and 4'-C≡CPh-tpy (dark yellow line).