

Supporting Information for:

Study of the Coordination Modes of Hybrid NNCp Cyclopentadienyl/Scorpionate Ligands in Ir Compounds

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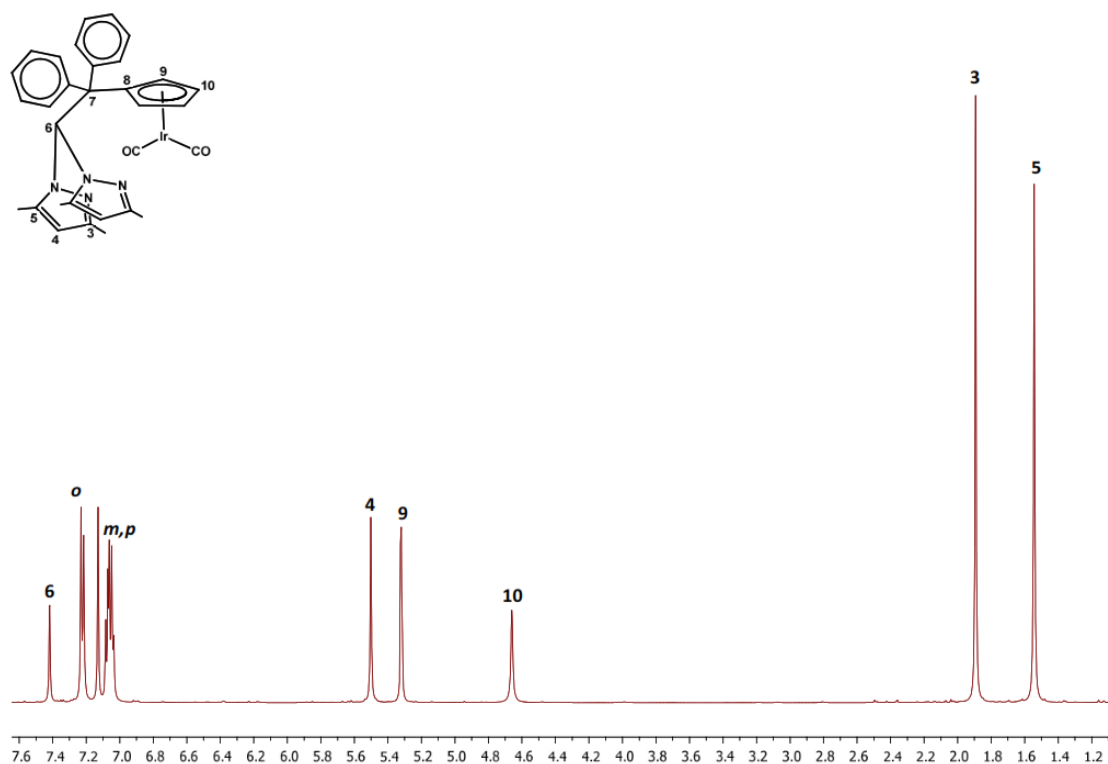


Figure S1. ^1H NMR spectrum of $[\text{Ir}(\eta^5\text{-Cp-bpzcp})(\text{CO})_2]$ (5) in CDCl_3 .

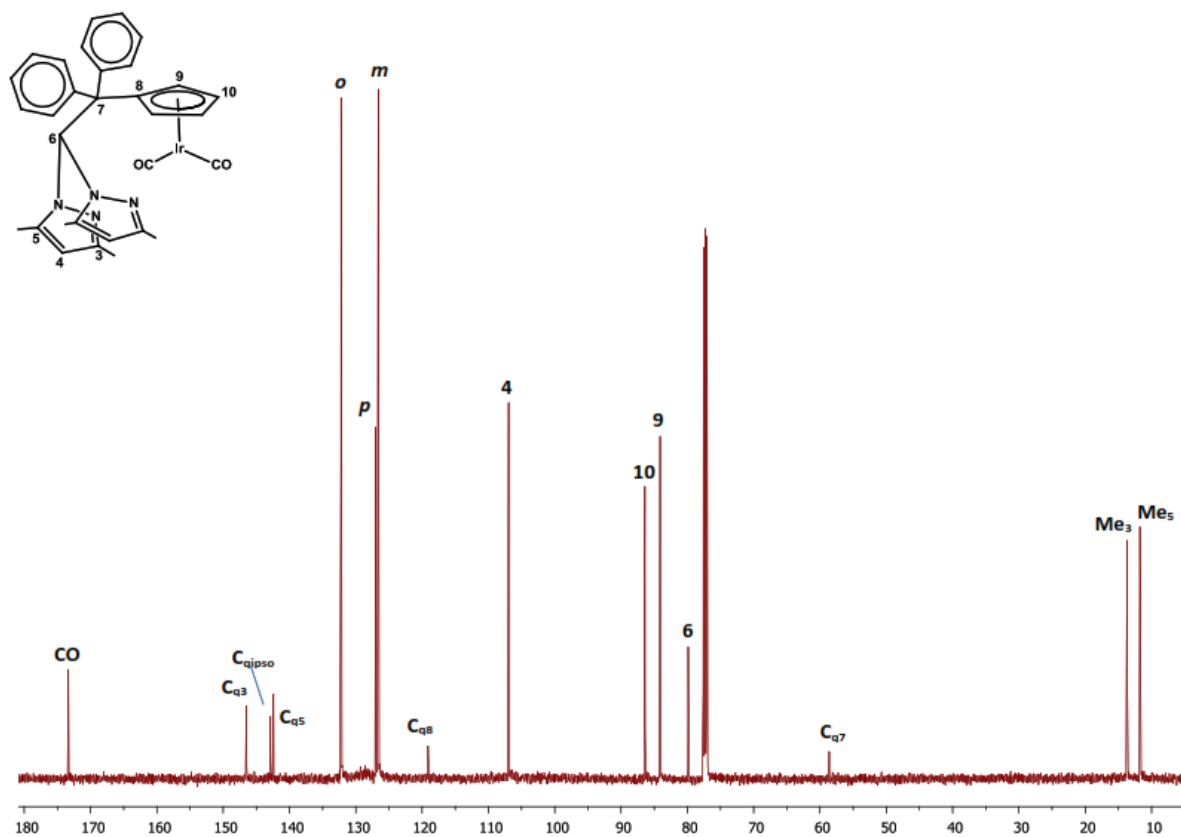


Figure S2. $^{13}\text{C}\{^1\text{H}\}$ -NMR spectrum of $[\text{Ir}(\eta^5\text{-Cp-bpzcp})(\text{CO})_2]$ (5) in CDCl_3 .

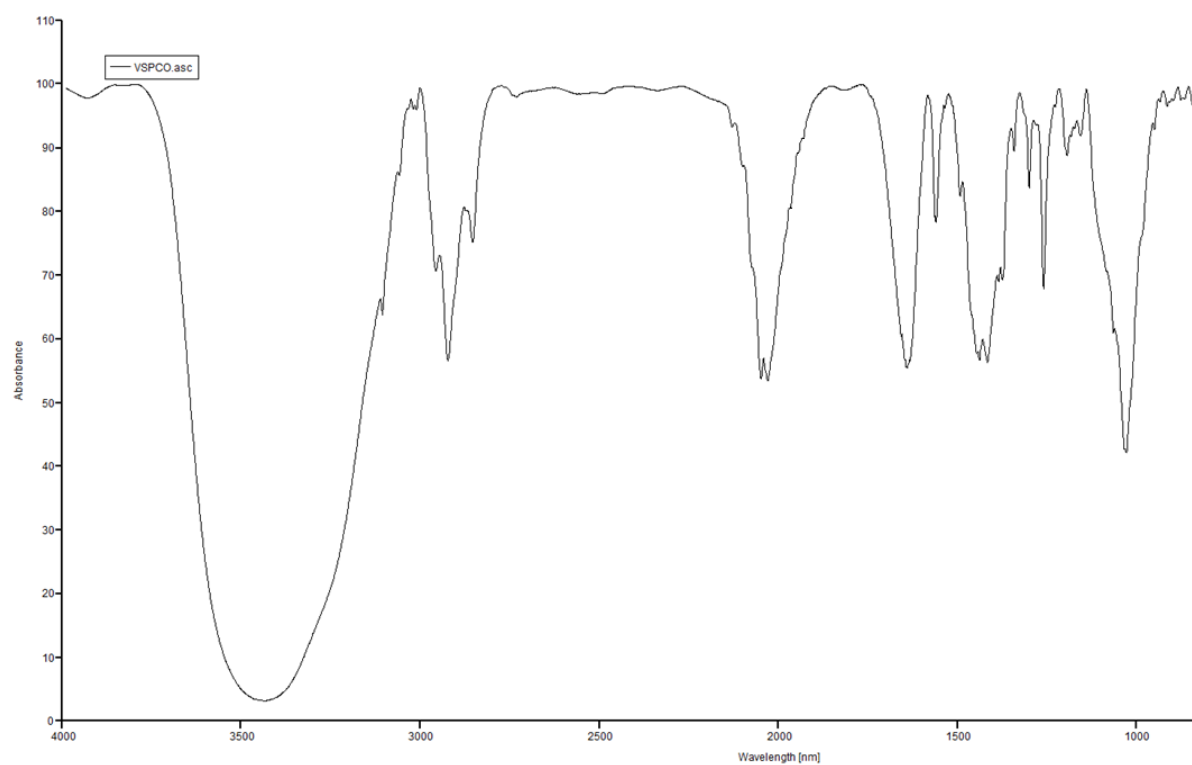


Figure S3. IR spectrum of $[\text{Ir}(\eta^5\text{-Cp-bpzcp})(\text{CO})_2]$ (5).

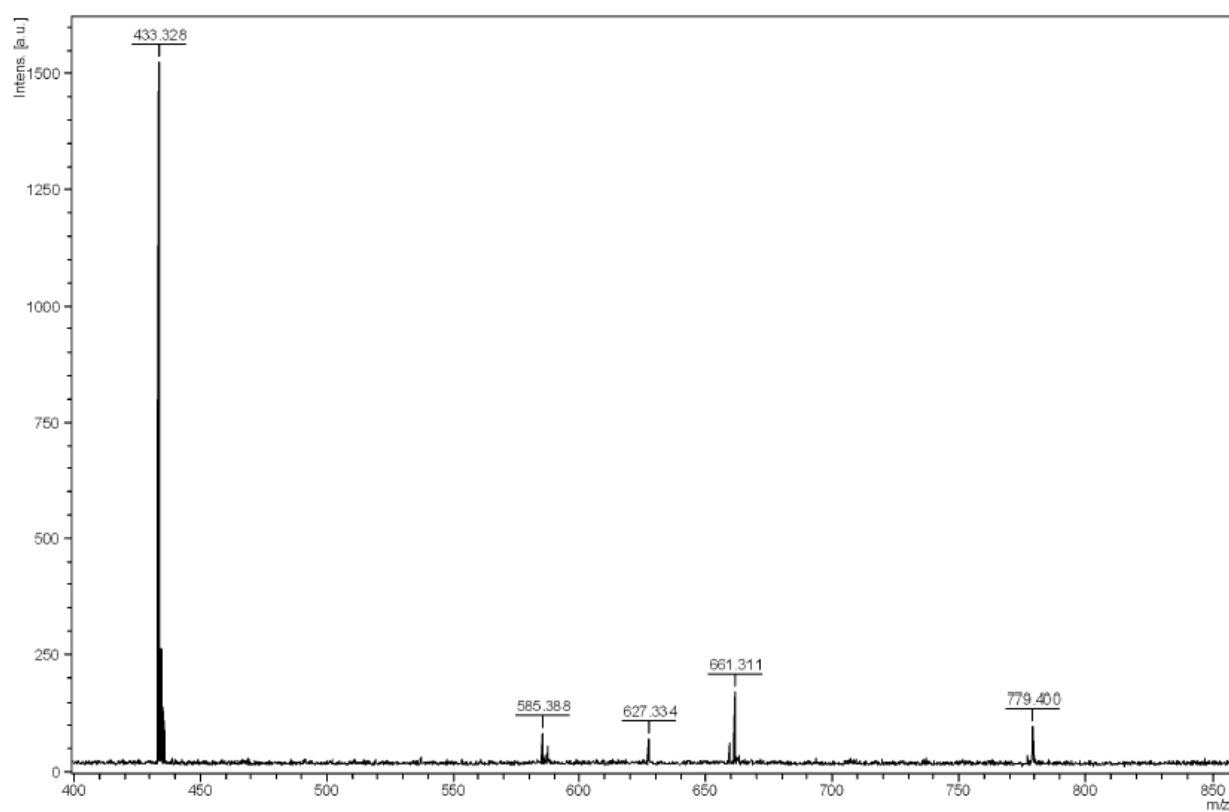


Figure S4. MALDI-ToF spectrum of $[\text{Ir}(\eta^5\text{-Cp-bpzcp})\{\eta^4\text{-CH}_2\text{=C(Me)C(Me)=CH}_2\}]$ (2).

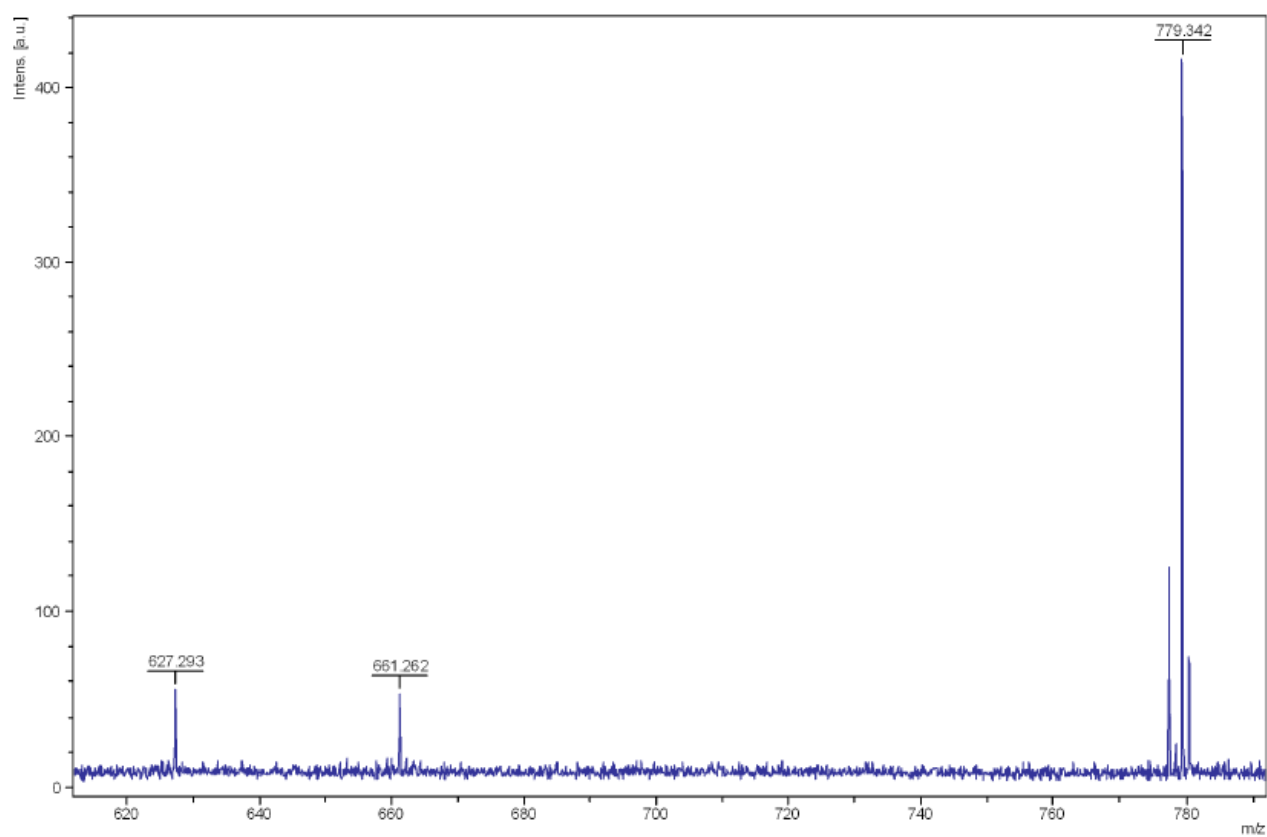


Figure S5. MALDI-ToF spectrum of $[\text{Ir}(\eta^5\text{-Cp-bpzcp})(\eta^2\text{-coe})_2]$ (**3**).

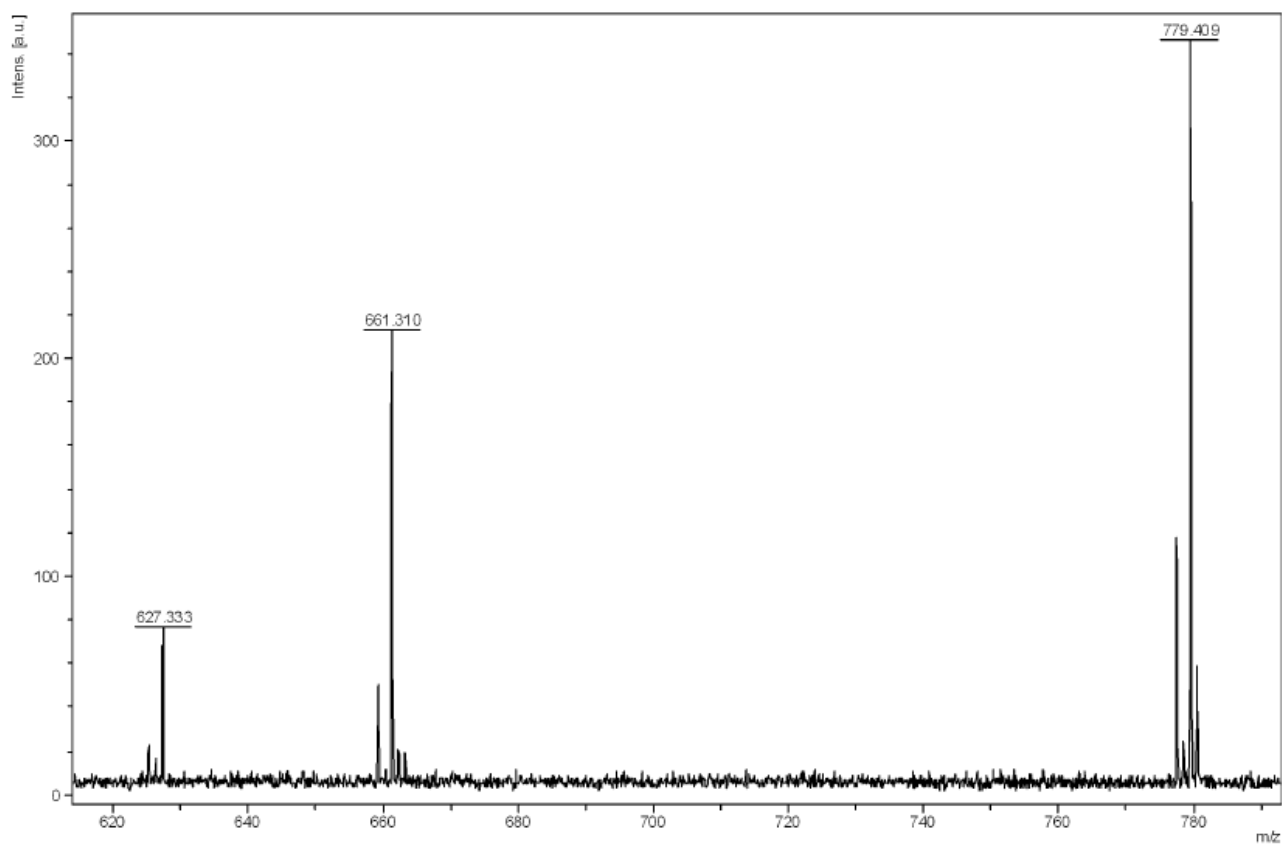


Figure S6. MALDI-ToF spectrum of $[\text{Ir}(\eta^5\text{-Cp-bpzcp})(\eta^2\text{-CH}_2\text{=CH}_2)_2]$ (**4**).

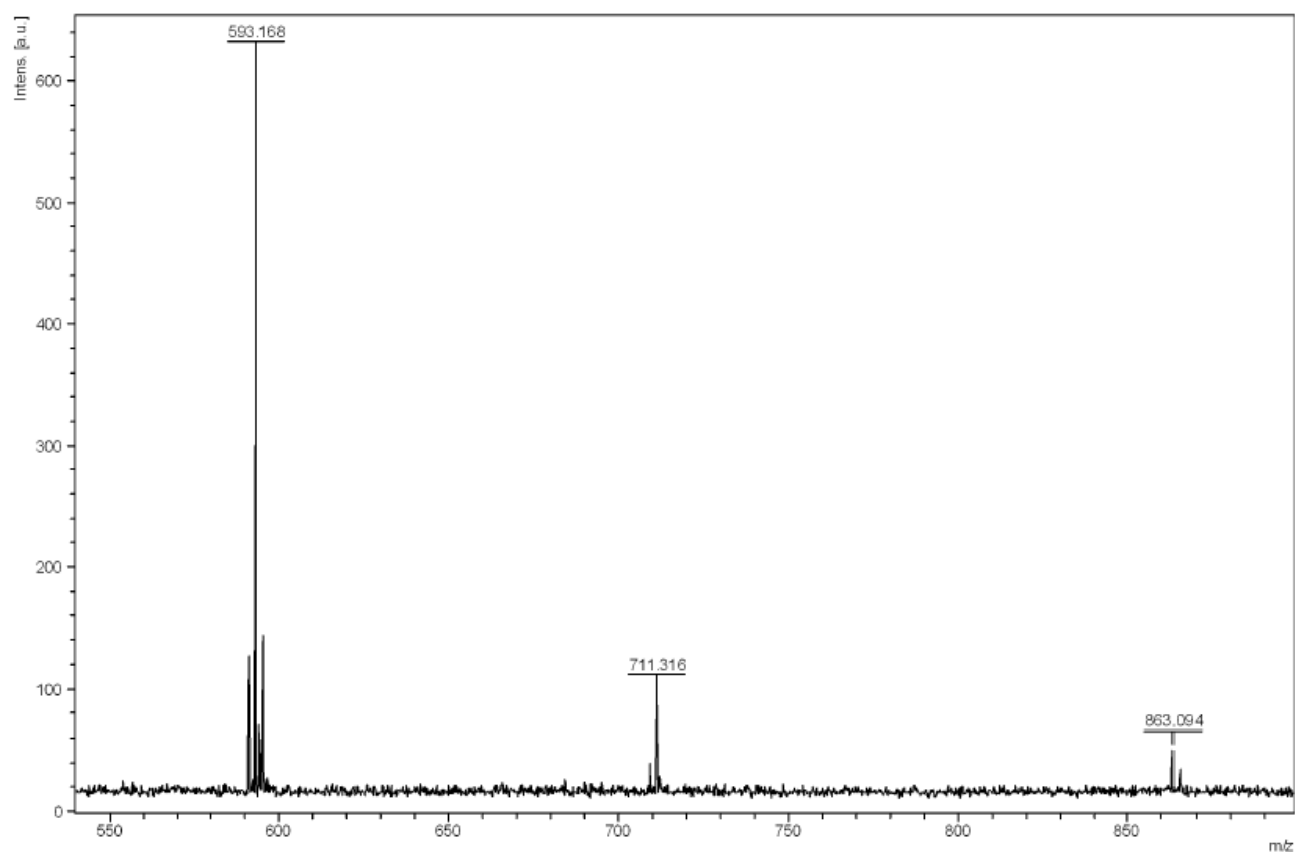


Figure S7. MALDI-ToF spectrum of $[\text{Ir}(\kappa\text{-N-}\eta^5\text{-Cp-bpzcpBr}_2)\text{Br}_2]$ (6).

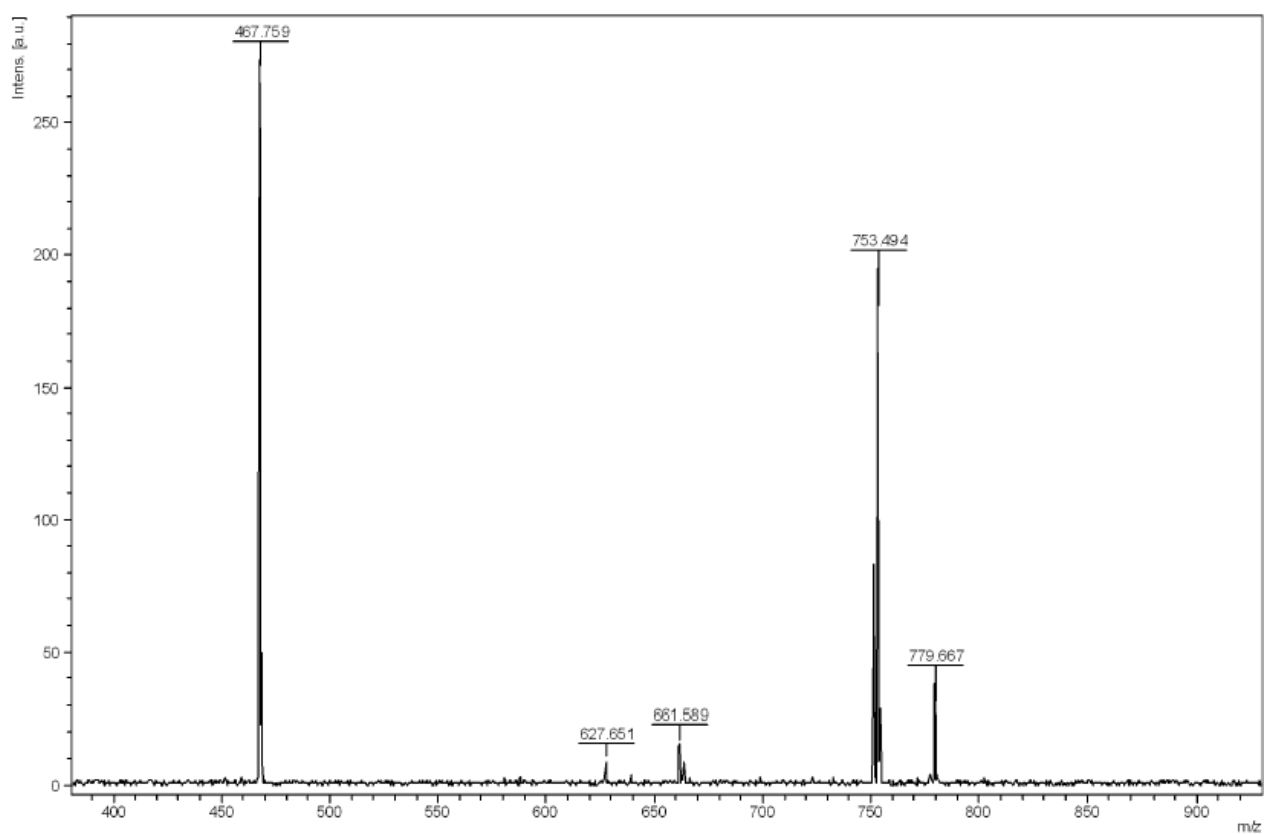


Figure S8. MALDI-ToF spectrum of $[\text{Ir}(\eta^5\text{-Cp-bpzcp})(\eta^2\text{-coe})_2](\mu\text{-bpzcp})\{\text{CuI}(\kappa^2\text{-NN-bpzcp})\}$ (8).

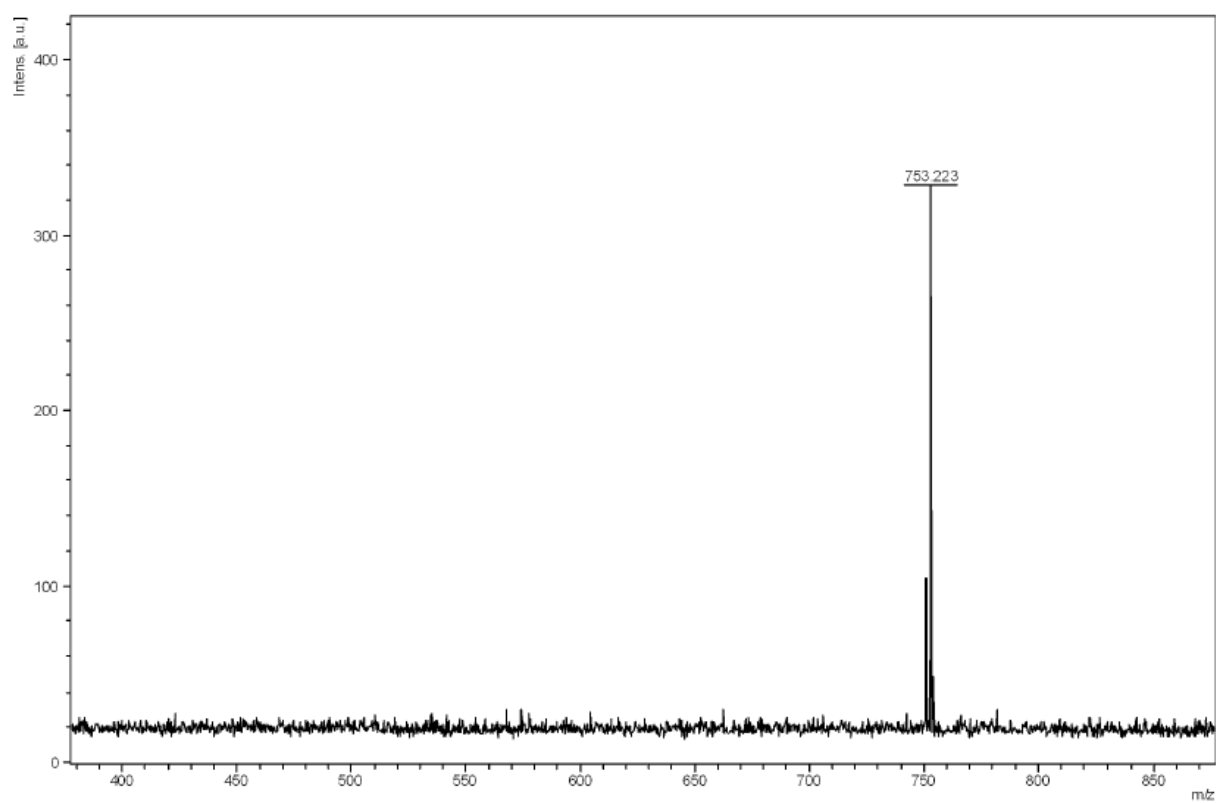


Figure S9. MALDI-ToF spectrum of $[\text{Ir}(\eta^5\text{-Cp-bpzcp})(\eta^2\text{-CH}_2\text{=CH}_2)_2](\mu\text{-bpzcp})\{\text{CuI}(\kappa^2\text{-NN-bpzcp})\}$ (9).