

Supporting Information

Conformation Changes and Luminescent Properties of Au-Ln (Ln = Nd, Eu, Er, Yb) Arrays with 5-Ethynyl-2,2'-Bipyridine

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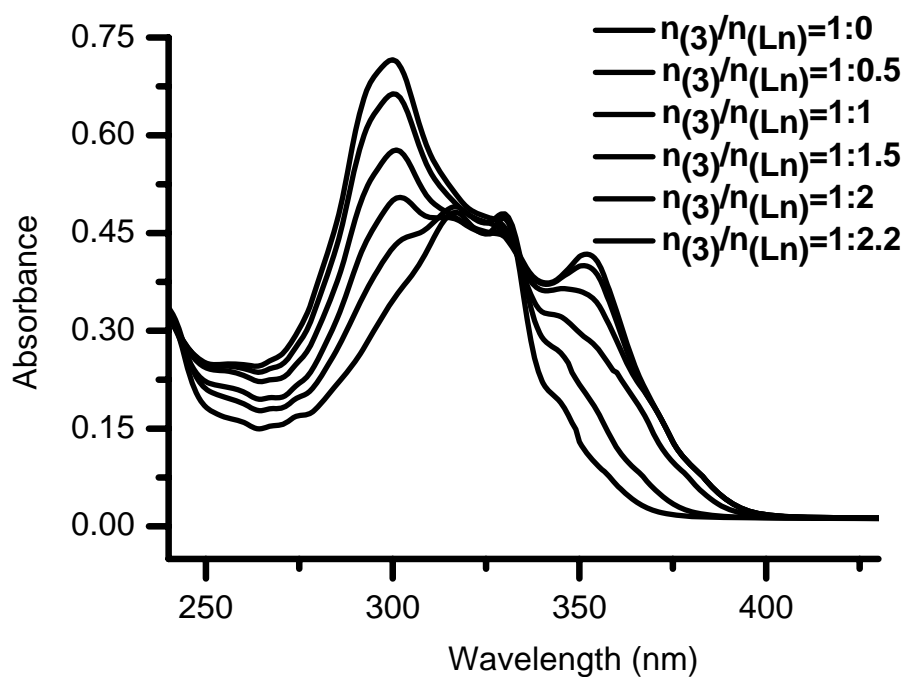


Figure S1. Titration of **3** with $\text{Er}(\text{hfac})_3(\text{H}_2\text{O})_2$ in dichloromethane solution, showing a red shift absorption band from $\text{Au}_2(\text{dppb})(\text{acetylide})_2$ chromophore.

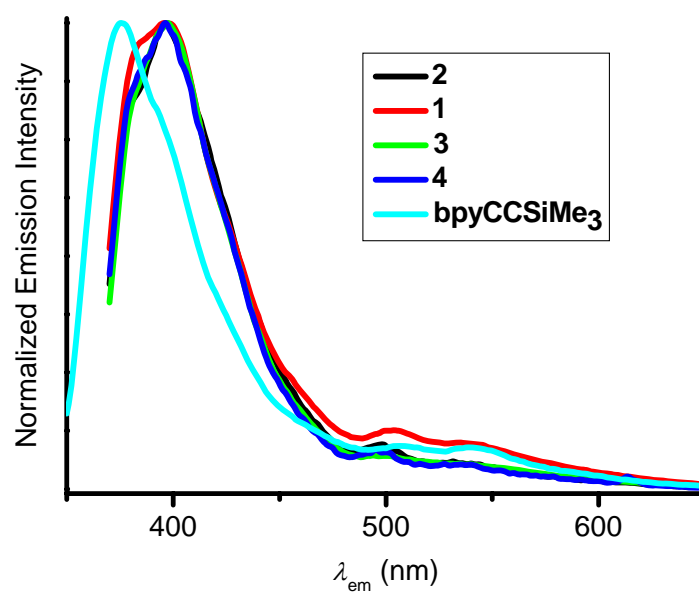


Figure S2. Emission spectra of **1–4** and $\text{bpyC}\equiv\text{CSiMe}_3$ in dichloromethane at 298 K.

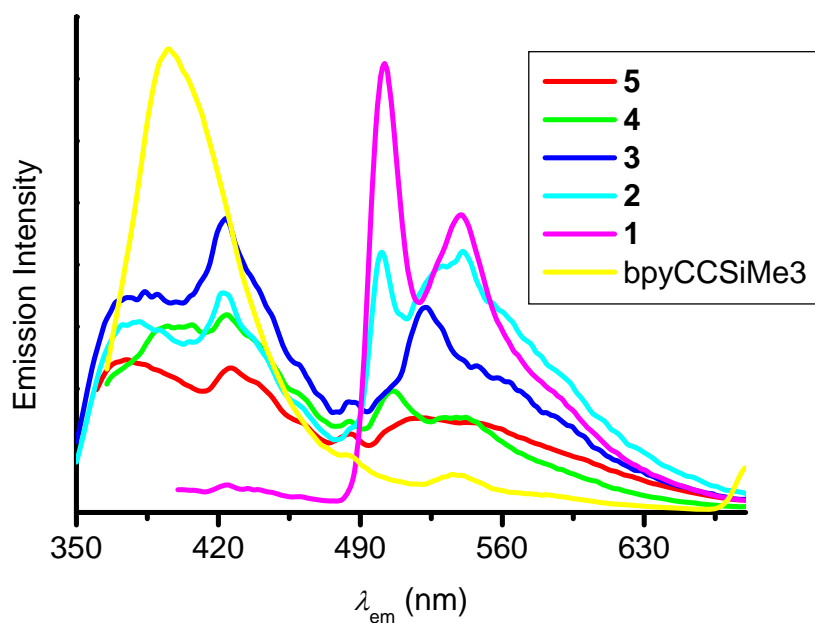


Figure S3. Emission spectra of **1–5** and $\text{bpyC}\equiv\text{CSiMe}_3$ in the solid states at 77 K.

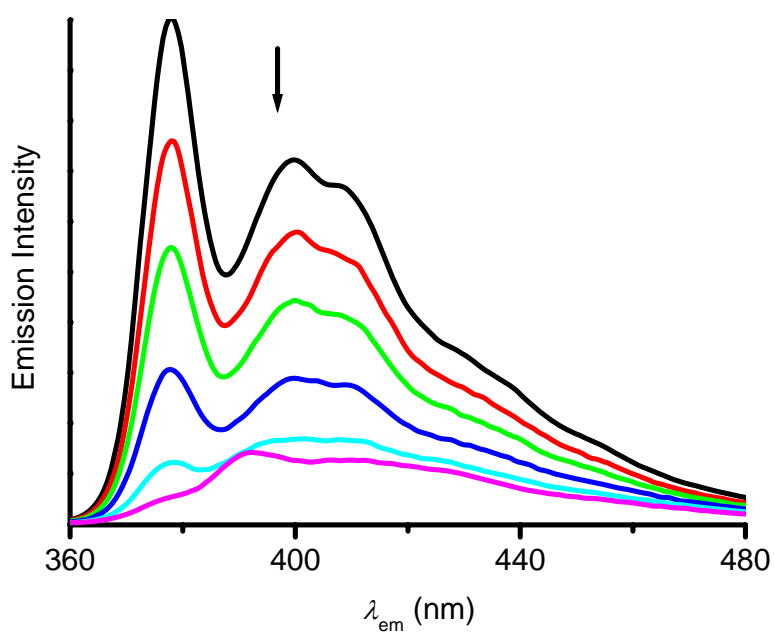


Figure S4. Titration of **3** with $\text{Yb}(\text{hfac})_3(\text{H}_2\text{O})_2$ in dichloromethane solutions, showing the decreasing of $\text{bpyC}\equiv\text{CSiMe}_3$ -centered emission from the $^1(\pi\pi^*)$ state.