

Supporting Information for

Constructing lanthanide [Nd(III), Er(III) and Yb(III)] complexes using a tridentate N,N,O-ligand for near-infrared organic light-emitting diodes

5 **Huibo Wei,^a Gang Yu,^a Zifeng Zhao,^a Zhiwei Liu,^a Zuqiang Bian*^a and Chunhui Huang^a**

^a *Beijing National Laboratory for Molecular Sciences, State Key Laboratory of Rare Earth Materials Chemistry and Applications, College of Chemistry and Molecular Engineering, Peking University, Beijing, 100871, China,
E-mail: bianzq@pku.edu.cn; Tel: +86-10-6275-3544 Fax: 86-10-6275-7156*

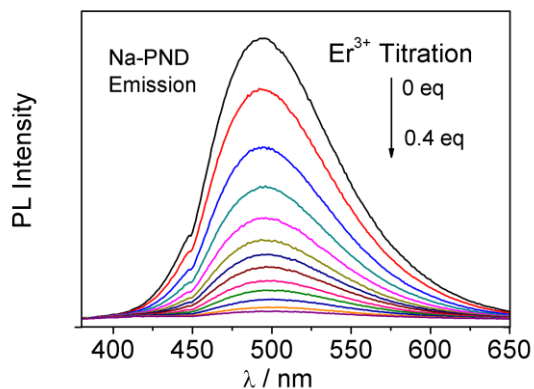


Fig. S1 Spectroscopic titration by dropping Er^{3+} solution to deprotonated Na-PND ligand (by adding 1 eq NaOH to HPND) in methanol solution (1×10^{-4} M).

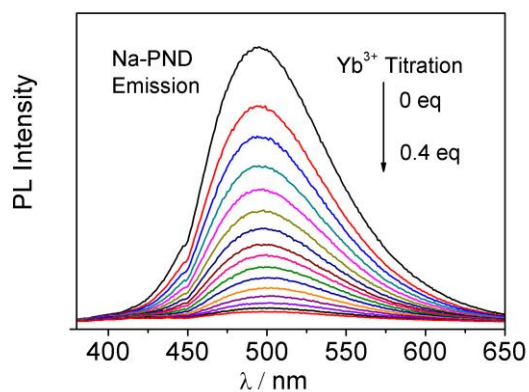


Fig. S2 Spectroscopic titration by dropping Yb^{3+} solution to deprotonated Na-PND ligand (by adding 1 eq NaOH to HPND) in methanol solution (1×10^{-4} M).

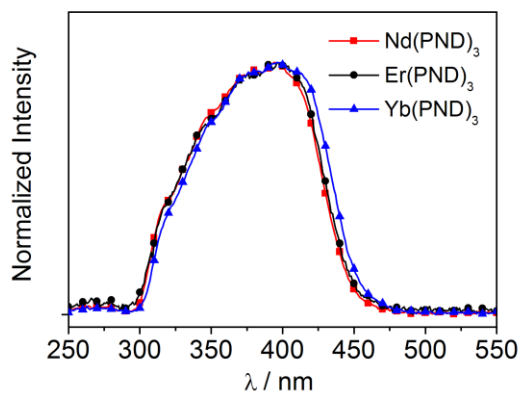


Fig. S3 Excitation spectra of $\text{Ln}(\text{PND})_3$ ($\text{Ln} = \text{Nd}, \text{Er}$ and Yb) in CH_3CN (10% MeOH, 1×10^{-4} M) solutions at room temperature.

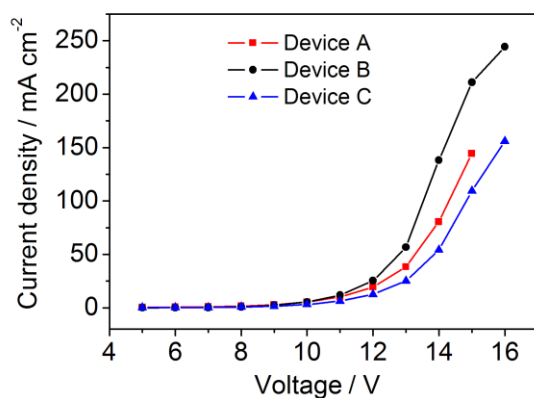


Fig. S4 Current density versus voltage curve of the EL devices.

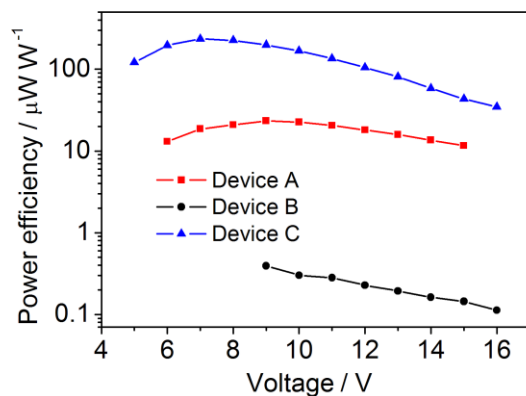


Fig. S5 Power efficiency versus voltage curve of the EL devices.

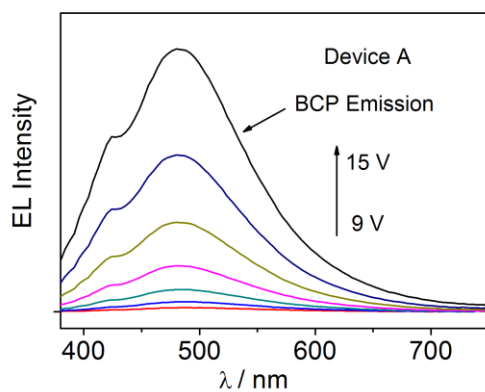


Fig. S6 EL spectra of Device A in the visible region.