

Supporting Information

A Study on the Near-Infrared Luminescent Properties of Xerogel Materials Doped with Dysprosium Complexes

Jing Feng,^{a,b} Liang Zhou,^{a,b} Shu-Yan Song,^{a,b} Zhe-Feng Li,^a Wei-Qiang Fan,^{a,b}

Li-Ning Sun,^a Ying-Ning Yu,^a and Hong-Jie Zhang*^a

^a State Key Laboratory of Rare Earth Resource Utilization, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun 130022, P. R. China

^b Graduate School of the Chinese Academy of Sciences, Beijing, P. R. China

* Author to whom correspondence should be addressed. Phone: +86-431-85262127.
Fax: +86-431-85698041. E-mail: hongjie@ciac.jl.cn.

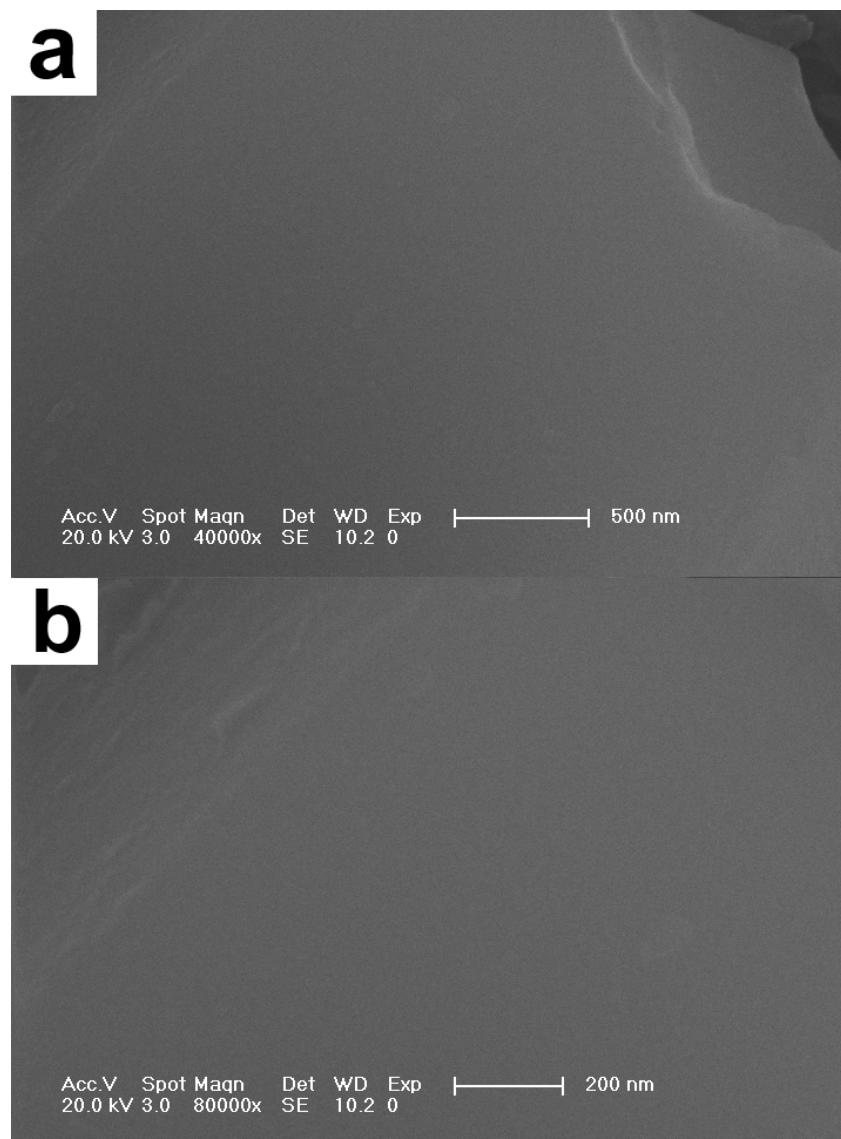


Fig. S1 FE-SEM images of the Dy-A-P xerogel (a) with a magnification of 40000 and (b) with a magnification of 80000.

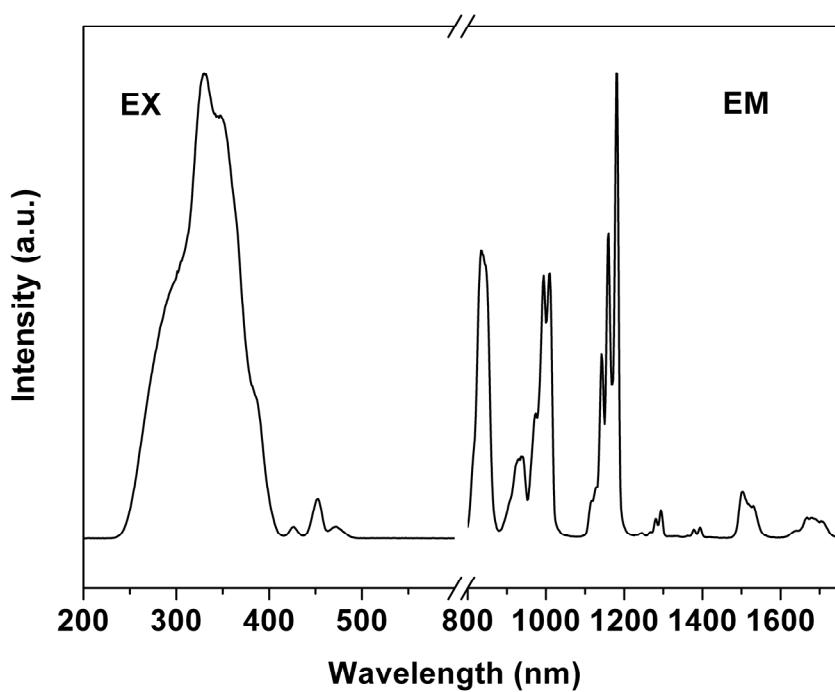


Fig. S2 Normalized excitation ($\lambda_{\text{em}} = 1181$ nm) and emission ($\lambda_{\text{ex}} = 330$ nm) spectra of $\text{Dy}(\text{acac})_3\text{phen}$ complex.

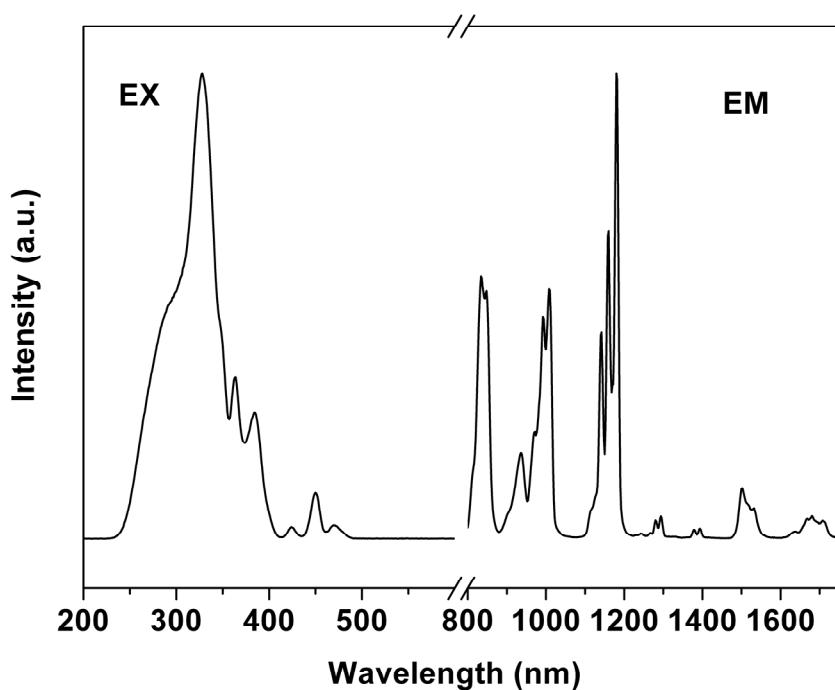


Fig. S3 Normalized excitation ($\lambda_{\text{em}} = 1181$ nm) and emission ($\lambda_{\text{ex}} = 328$ nm) spectra of $\text{Dy}(\text{acac})_3(\text{H}_2\text{O})_2$ complex.

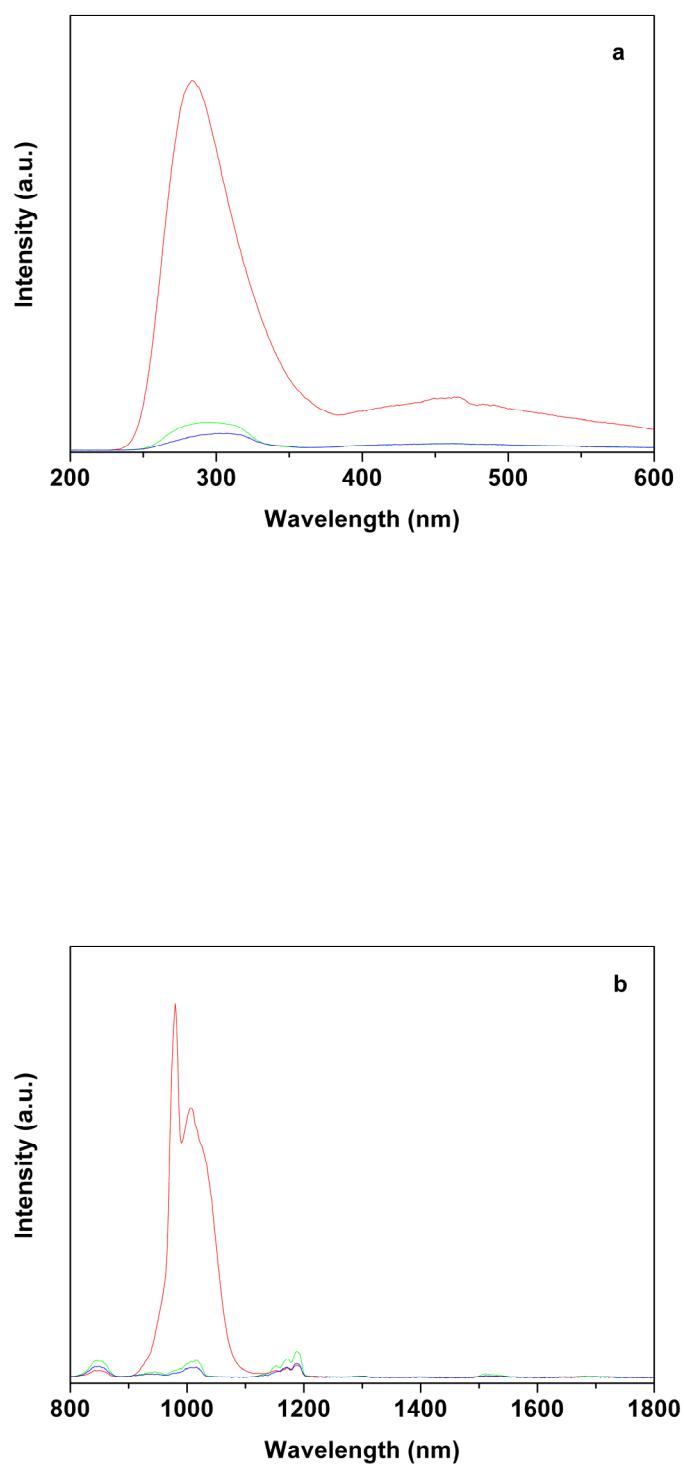


Fig. S4 Excitation (a) and emission (b) spectra of $\text{Dy}(\text{acac})_3(\text{TPPO})_2$ (red line), $\text{Dy}(\text{acac})_3$ complex (green line), and $\text{Dy}(\text{acac})_3\text{phen}$ (blue line) from their 300-nm evaporated films.

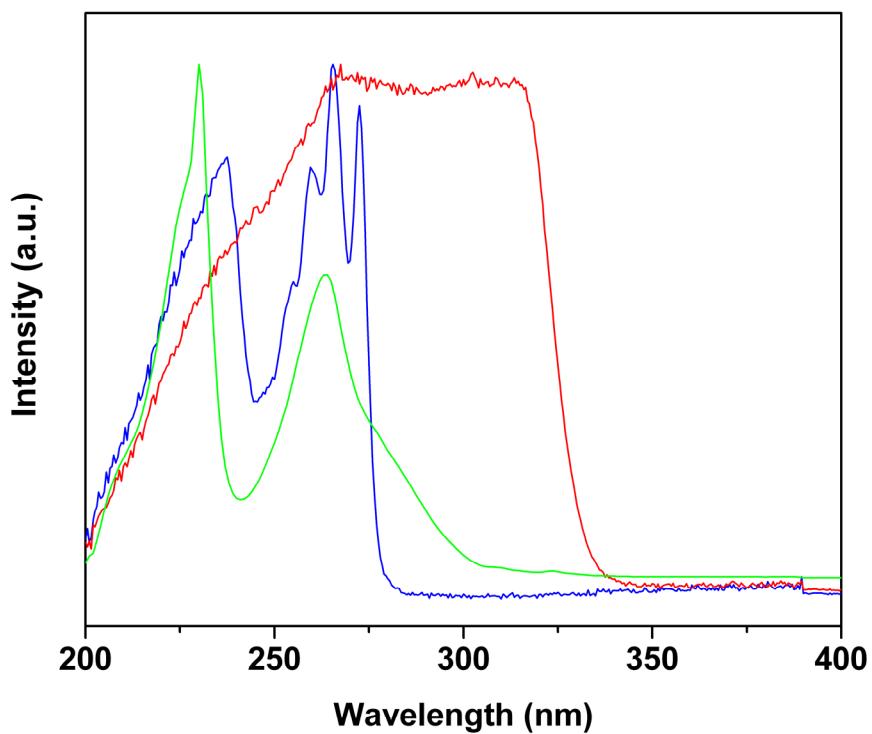


Fig. S5 UV-vis absorption spectra of acac (red line), TPPO (blue line) and phen (green line) ligands in ethanol.