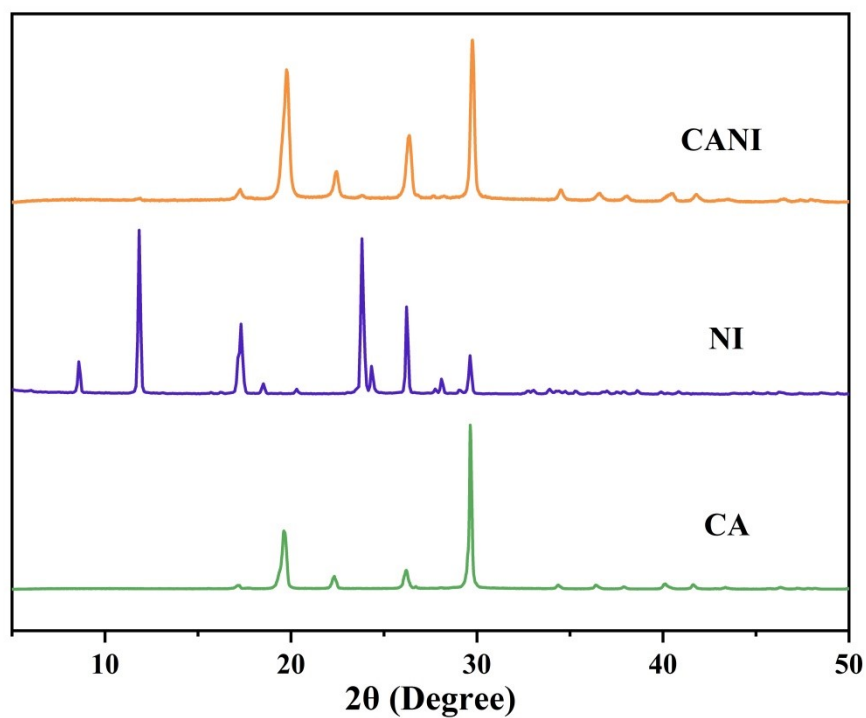


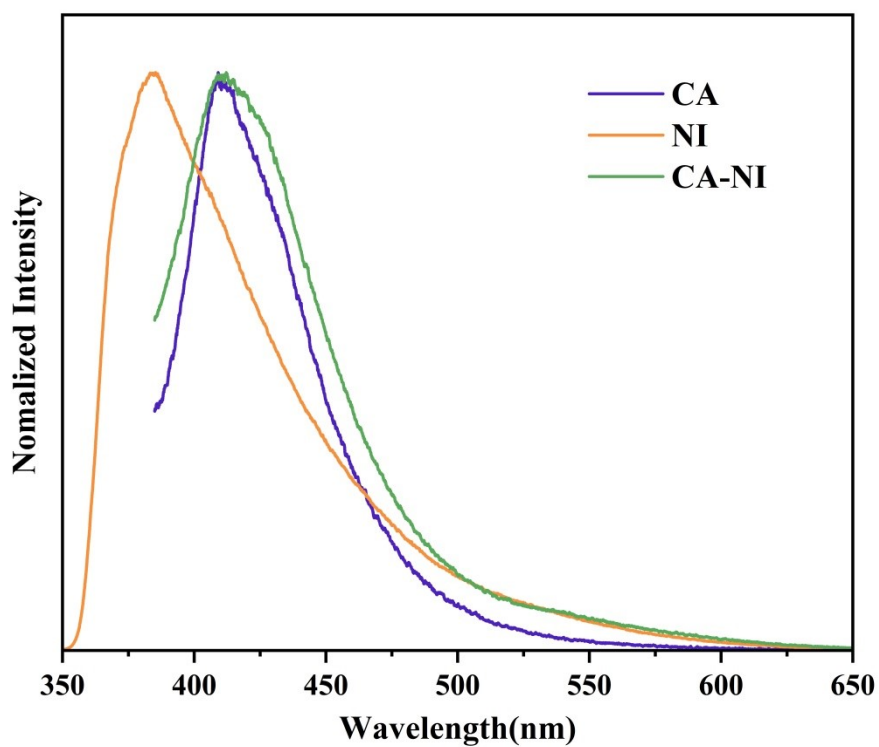
Organic room temperature phosphorescence from grinding to water vapor enhancement for humidity detection and anti-counterfeiting printing

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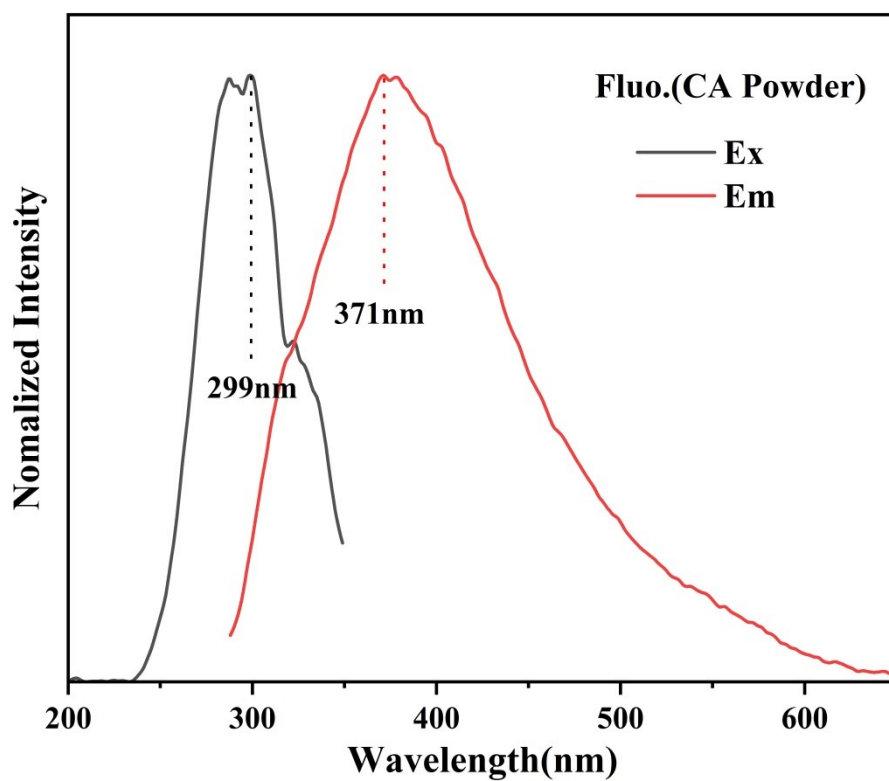
Department of Materials Physics and Chemistry, School of Materials Science and Engineering, University of Science and Technology Beijing, Xueyuan Road 30#, Haidian District, Beijing 100083, China *
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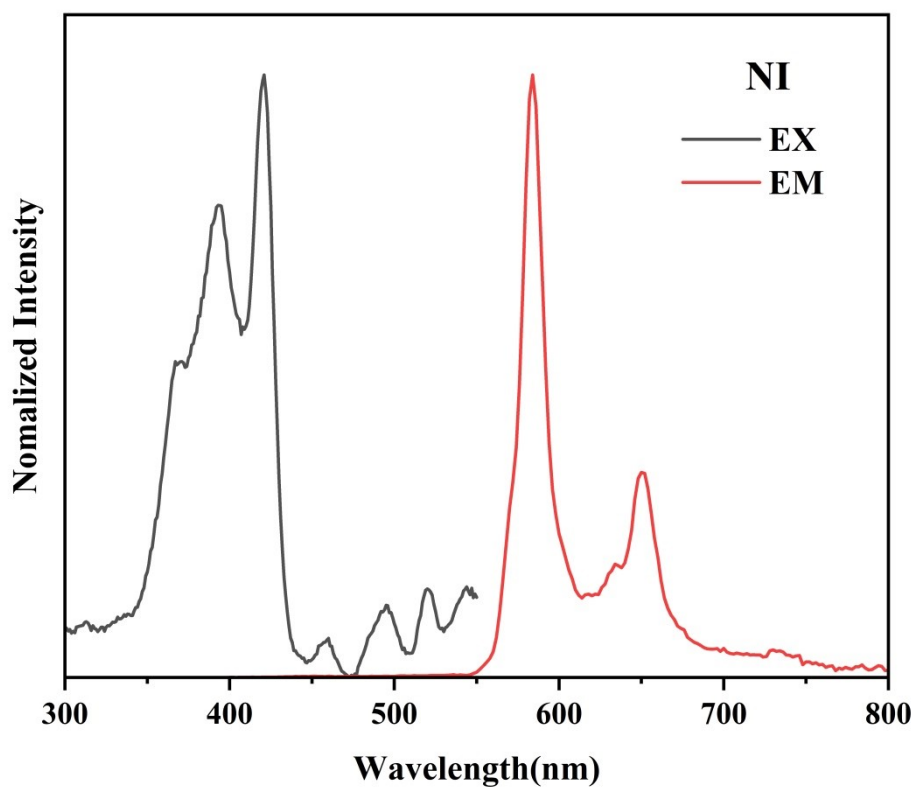
Supplementary Fig. 1 Powder X-ray diffraction (PXRD) patterns of CA, NI and their doped materials.



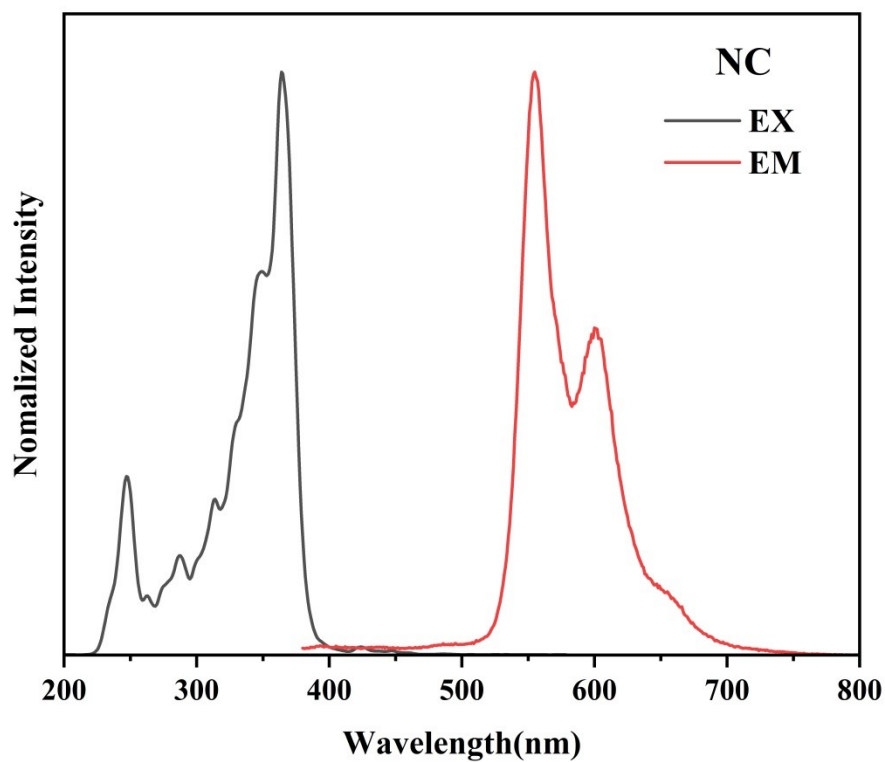
Supplementary Fig. 2 Fluorescence emission spectra of CA, NI, and doped material NC in DMF.



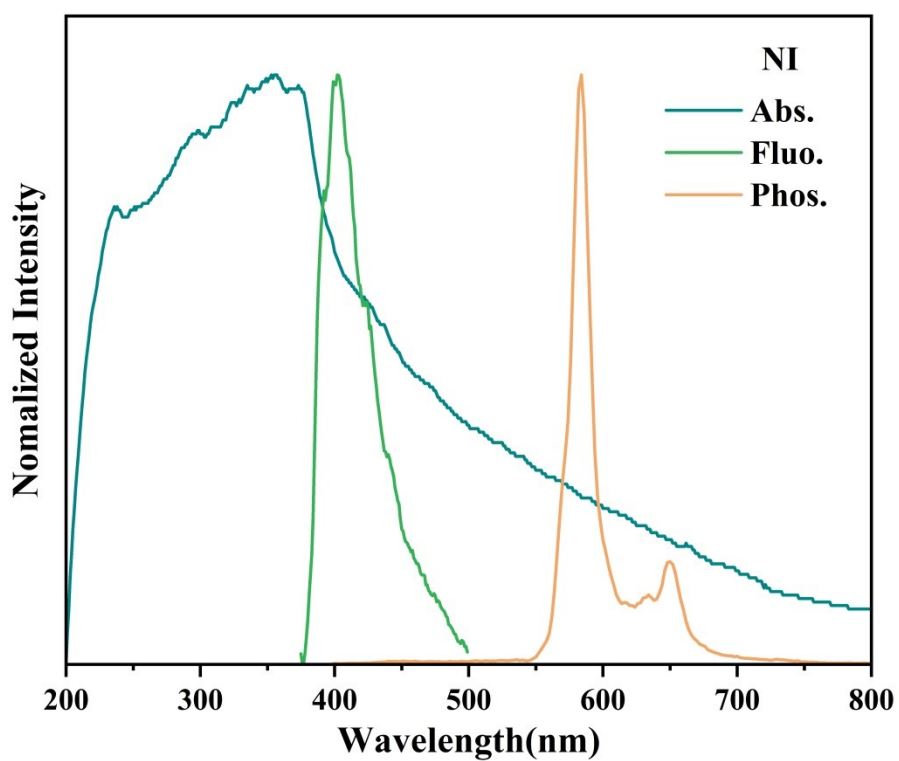
Supplementary Fig. 2 The photoluminescence (PL) and corresponding excitation spectra of CA.



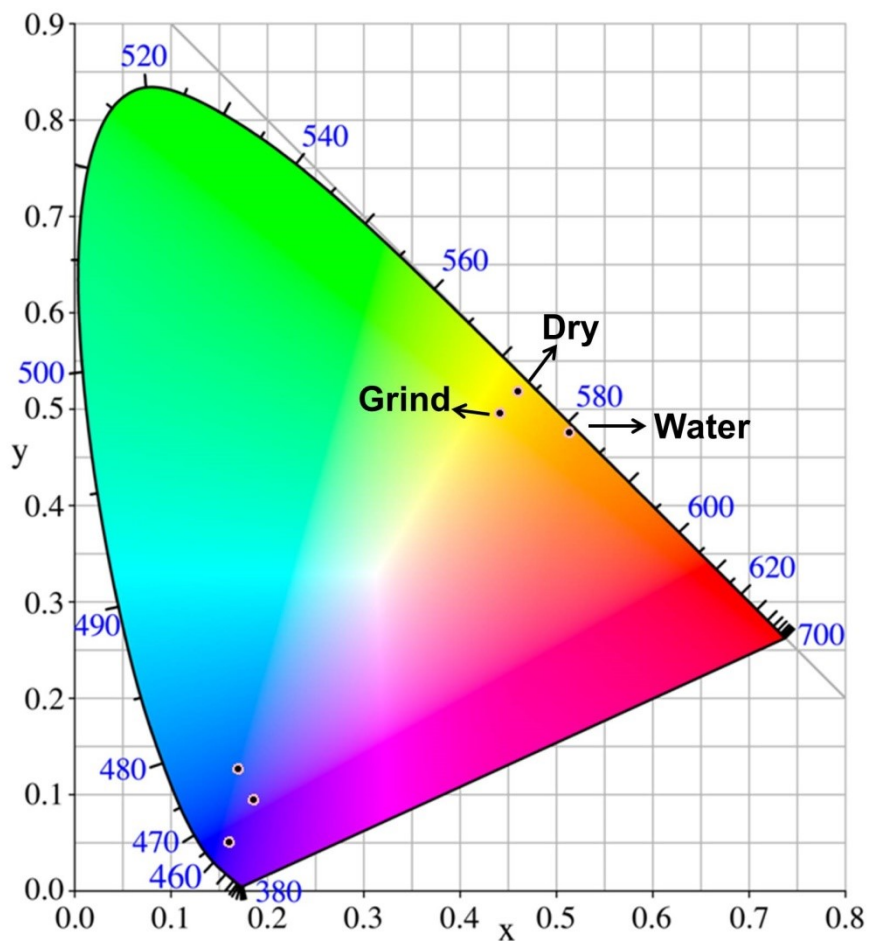
Supplementary Fig. 3 The phosphorescence spectrum and corresponding excitation spectrum of NI at 77K.



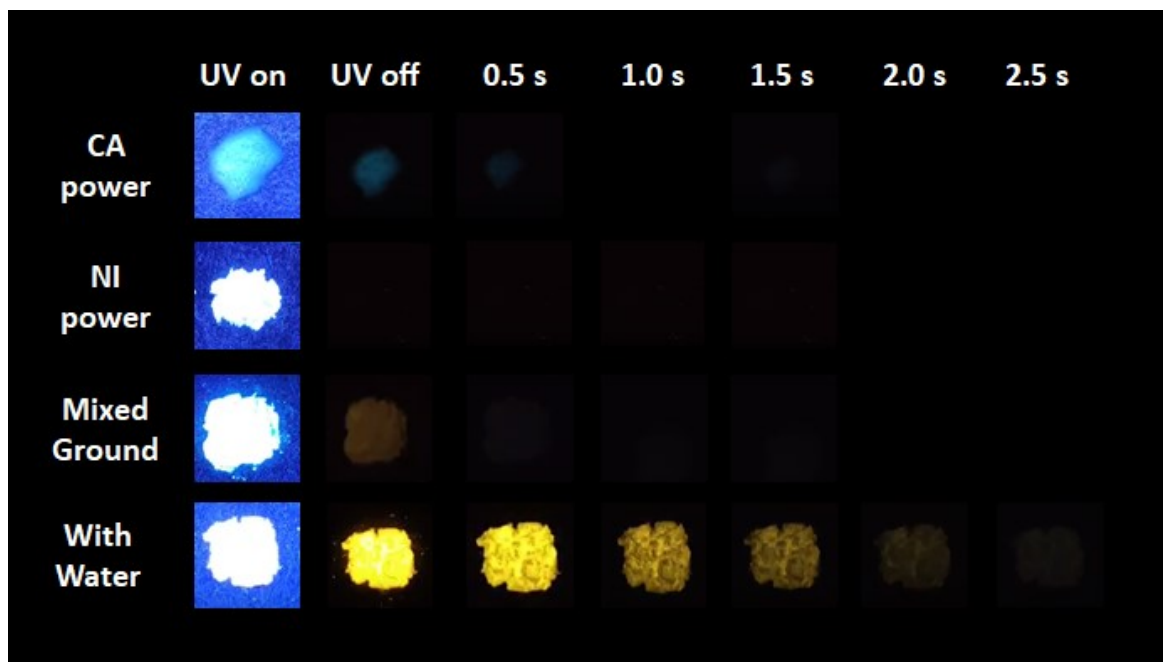
Supplementary Fig. 4 The phosphorescence spectrum and corresponding excitation spectrum of NC.



Supplementary Fig. 5 Solid UV absorption spectra, fluorescence spectra and phosphorescence spectra (77K) of NI.



Supplementary Fig. 6 The phosphorescence CIE coordinates of NC after grinding, adding water, and drying.



Supplementary Fig. 7 Photographs of host material, guest material and their doped materials under and after excitation at room temperature at 365nm.