

## Spectral properties and luminescence mechanism of red emitting BCNO phosphors

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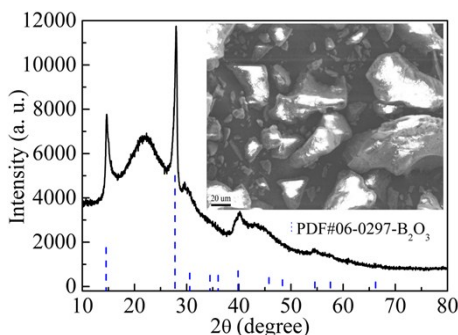


Fig. S1. XRD pattern and SEM image of BCNO phosphor sintered at 650 °C for 12 with  $R_{B/H}=1:1$ .

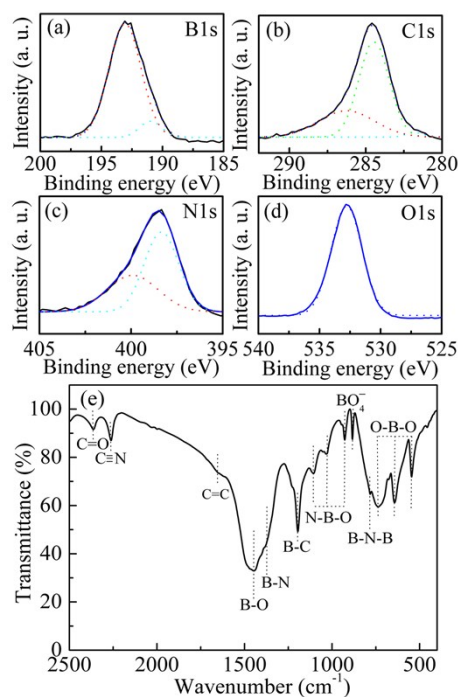


Fig. S2. XPS spectra with fitted curves for (a) B1s, (b) C 1s, (c) N1s, (d) O1s, and (e) FTIR spectrum of BCNO phosphor prepared at 650 °C for 12 h with  $R_{B/H}=1:1$ .