

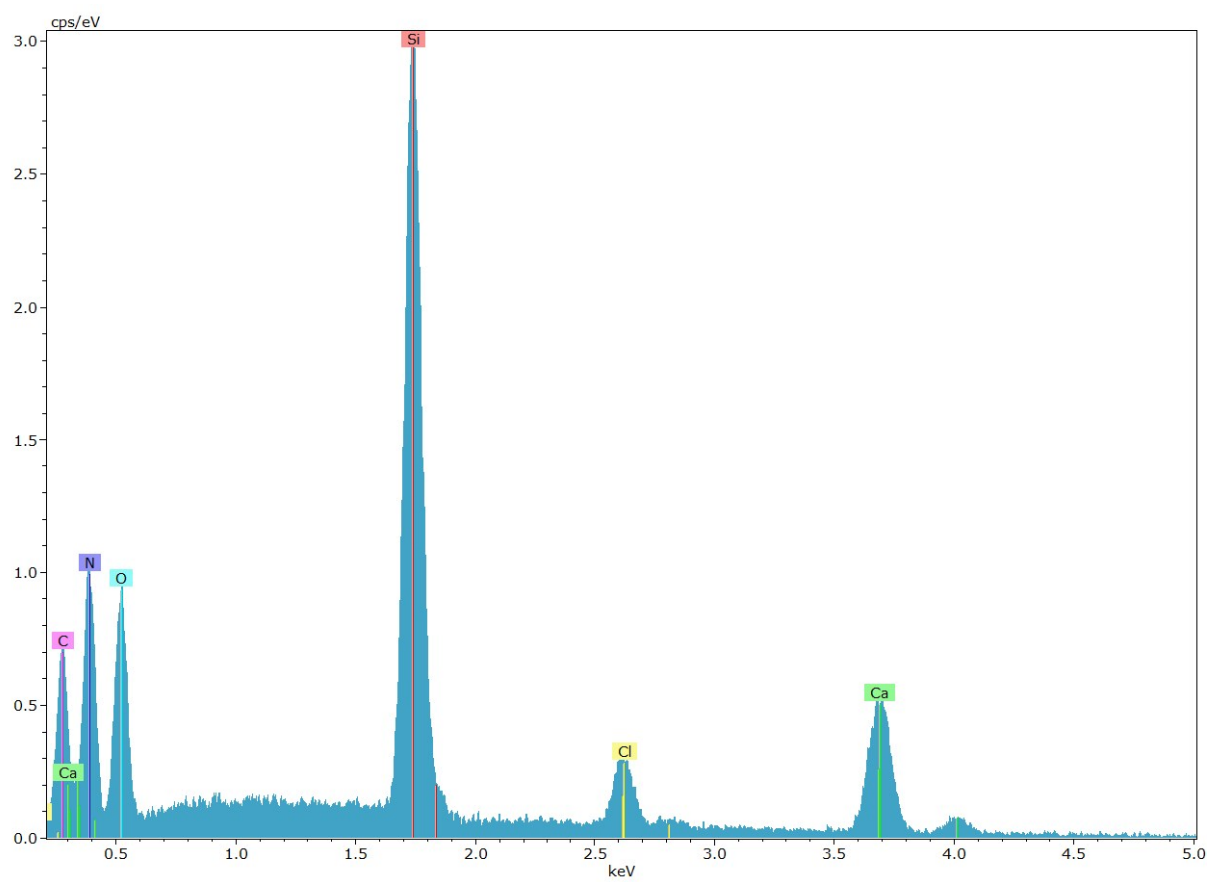
## Supporting Information

### **Synthesis, Structure and Properties of a Calcium Oxonitridosilicate Phosphor Showing Green or Red Luminescence upon Doping with $\text{Eu}^{2+}$ or $\text{Ce}^{3+}$**

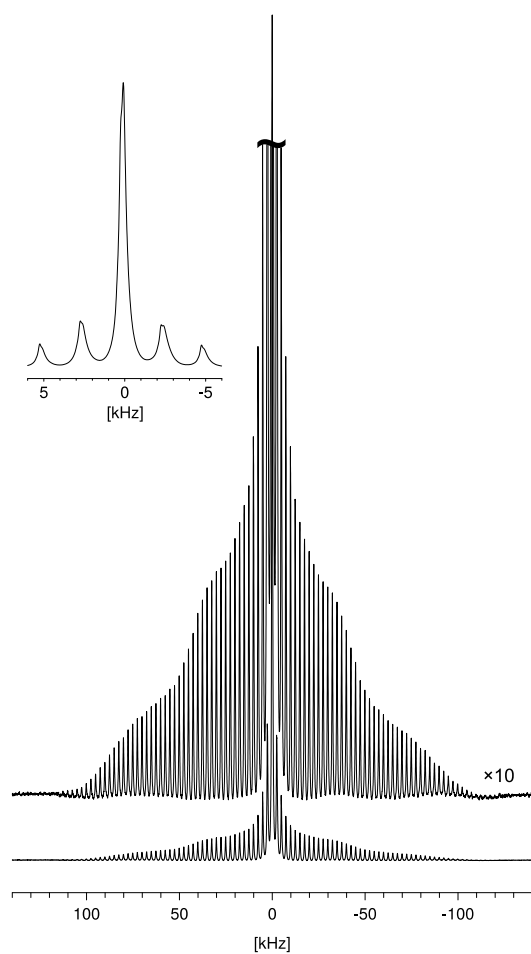
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**Figure S1.** Exemplary EDX-Spectra of  $\text{Li}_x\text{Ca}_{16-x}\text{Si}_{17}\text{N}_{32-x}\text{O}_{2+x}$ .



**Figure S2.**  ${}^7\text{Li}$  MAS NMR spectrum of  $\text{Li}_x\text{Ca}_{16-x}\text{Si}_{17}\text{N}_{32-x}\text{O}_{2+x}$  obtained at 116.64 MHz and a spinning rate of 2.5 kHz. The upper trace shows the satellite transitions, vertically enhanced ten times and cut-off at the heights indicated ( $\sim$ ). The inset shows the isotropic region, with two isotropic peaks at 1.9 and 0.8 ppm.