

Supporting Information

Rare-Earth Doped Fluoride Phosphate Glasses: Structural
Foundations of Luminescence Properties

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Pulsed Electron Paramagnetic Resonance spectroscopy. Figures S1-S5 show electron spin echo envelope modulation (ESEEM) spectra respectively for the glass samples 5SrPF, 5SrPF bifluorinated (5SrPF_B), 10SrPF, 20SrPF and 40SrPF, obtained with the three-pulse sequence $(t_p) - \tau - (t_p) - T - (t_p) - echo$ at 700 mT. The ESEEM spectra were obtained for three different τ values in order to explore the occurrence of blind-spots. Spectra resulting from the co-addition of the spectra for different τ values are also shown in Figures S1-S5.

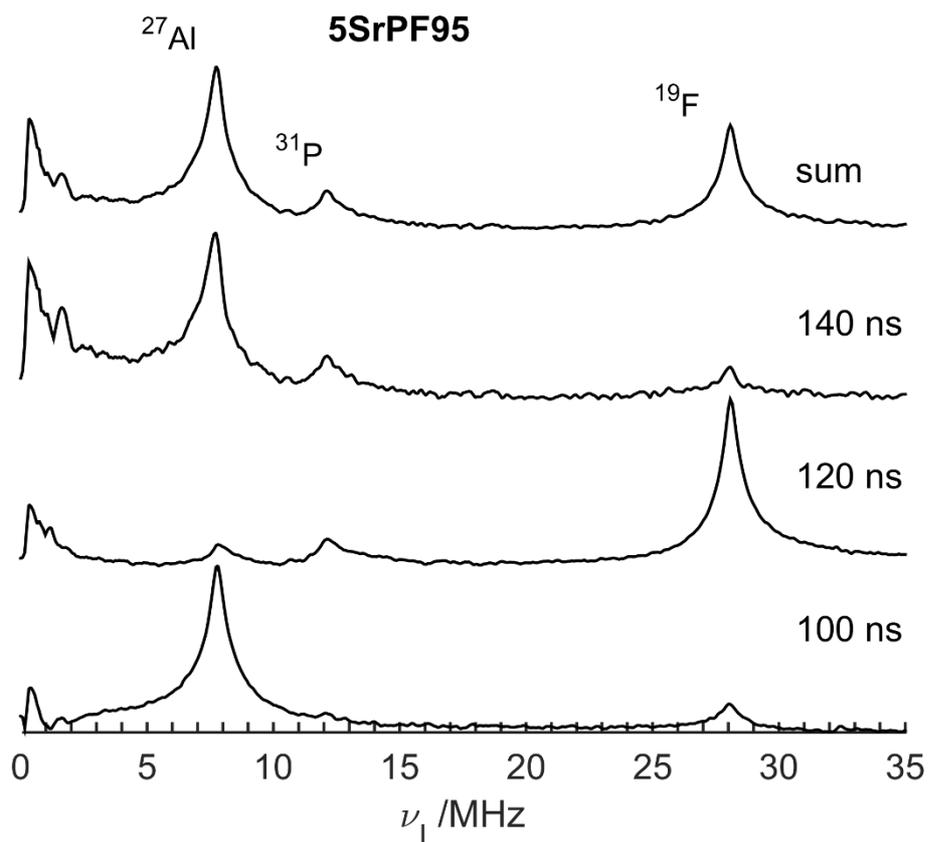


Figure S1. ESEEM EPR spectra for the glass sample 5SrPF measured at 700 mT for $\tau = 100$ ns, 120 ns and 140 ns, where τ is the delay between the two first pulses in the ESEEM pulse sequence. The spectrum resulting from the sum of the spectra for different τ values is also shown.

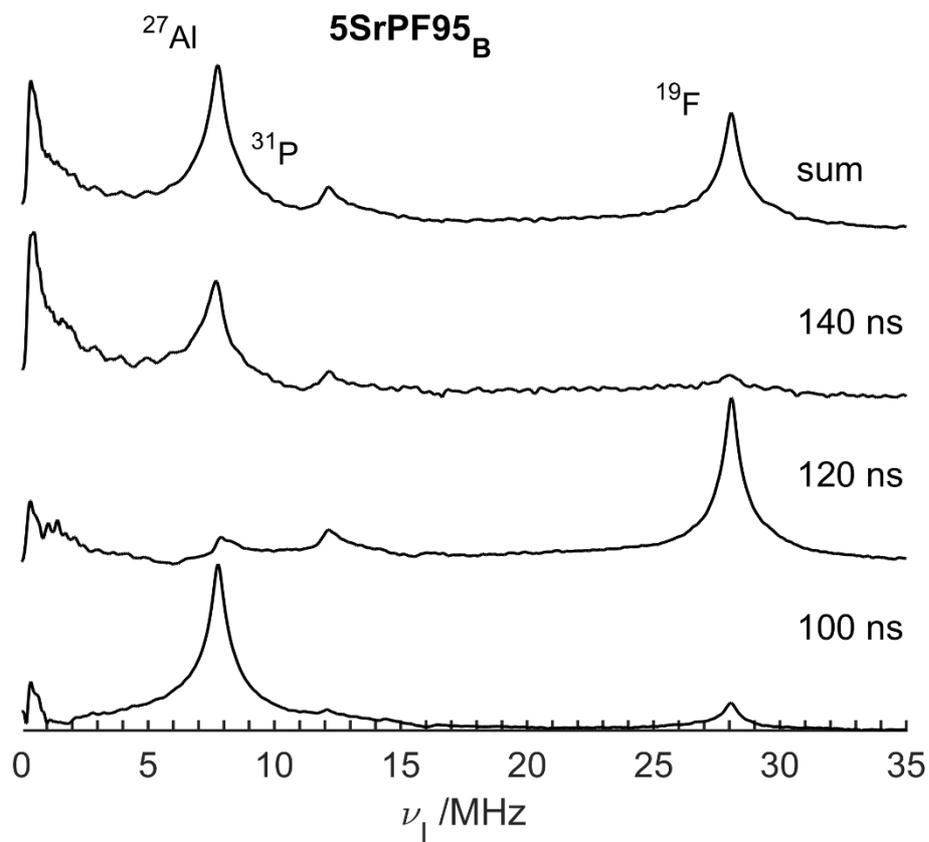


Figure S1. ESEEM EPR spectra for the glass sample 5SrPF bifluorinated measured at 700 mT for $\tau = 100$ ns, 120 ns and 140 ns, where τ is the delay between the two first pulses in the ESEEM pulse sequence. The spectrum resulting from the sum of the spectra for different τ values is also shown.

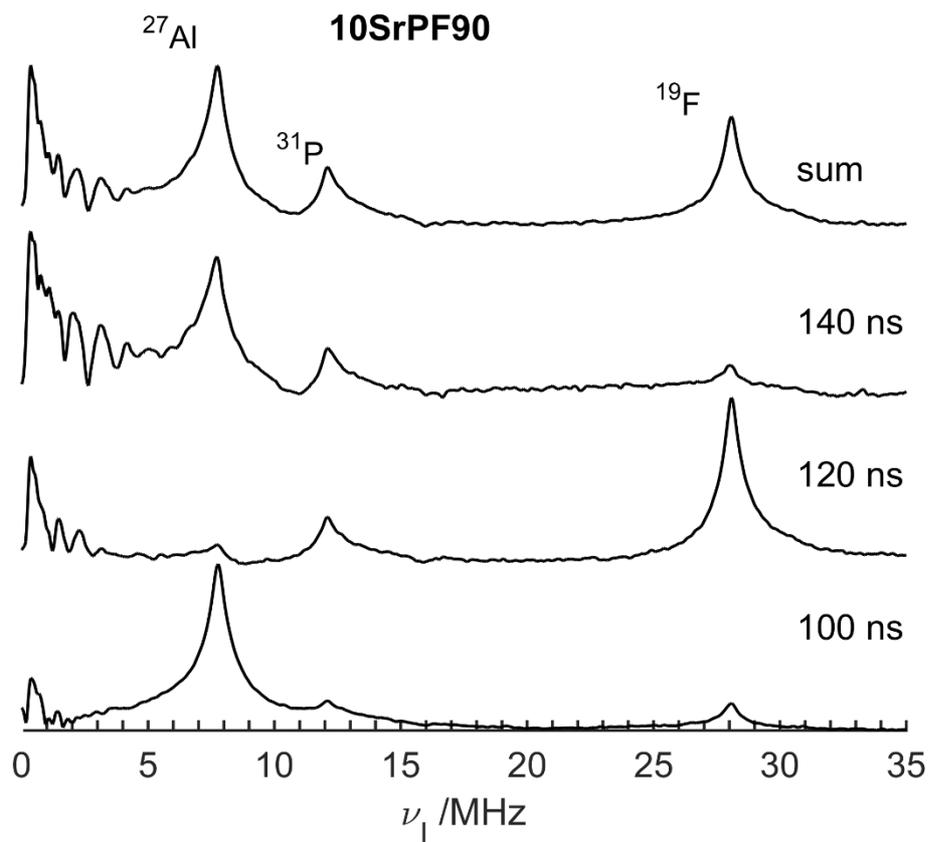


Figure S1. ESEEM EPR spectra for the glass sample 10SrPF measured at 700 mT for $\tau = 100$ ns, 120 ns and 140 ns, where τ is the delay between the two first pulses in the ESEEM pulse sequence. The spectrum resulting from the sum of the spectra for different τ values is also shown.

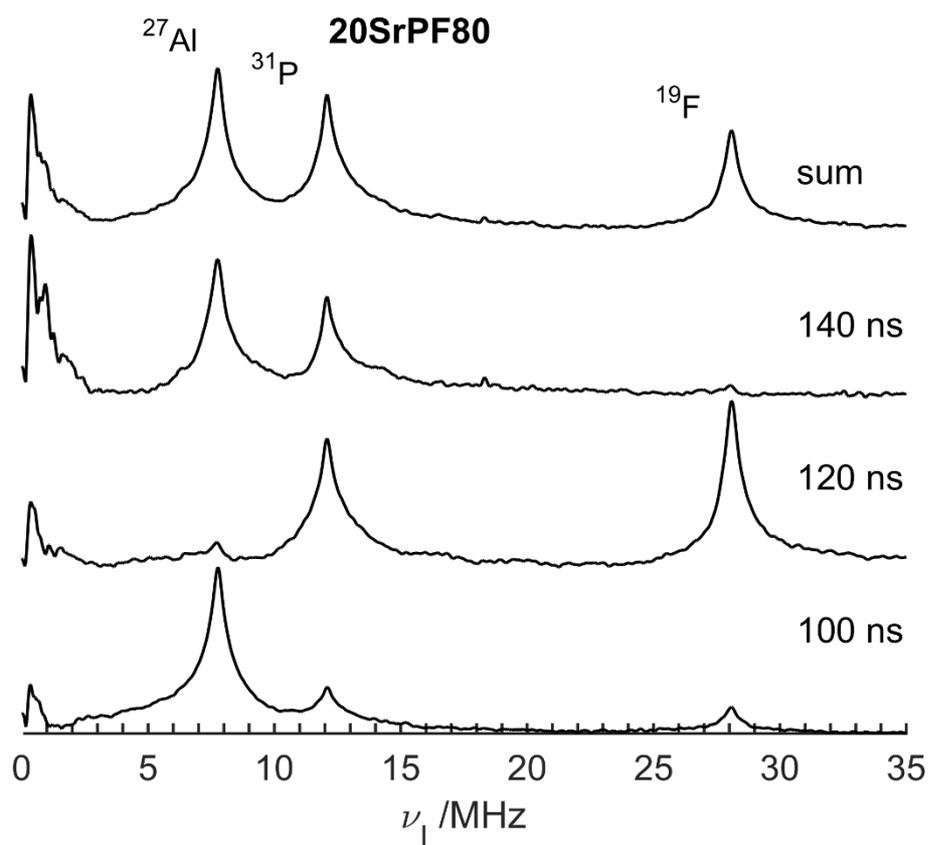


Figure S1. ESEEM EPR spectra for the glass sample 20SrPF measured at 700 mT for $\tau = 100$ ns, 120 ns and 140 ns, where τ is the delay between the two first pulses in the ESEEM pulse sequence. The spectrum resulting from the sum of the spectra for different τ values is also shown.

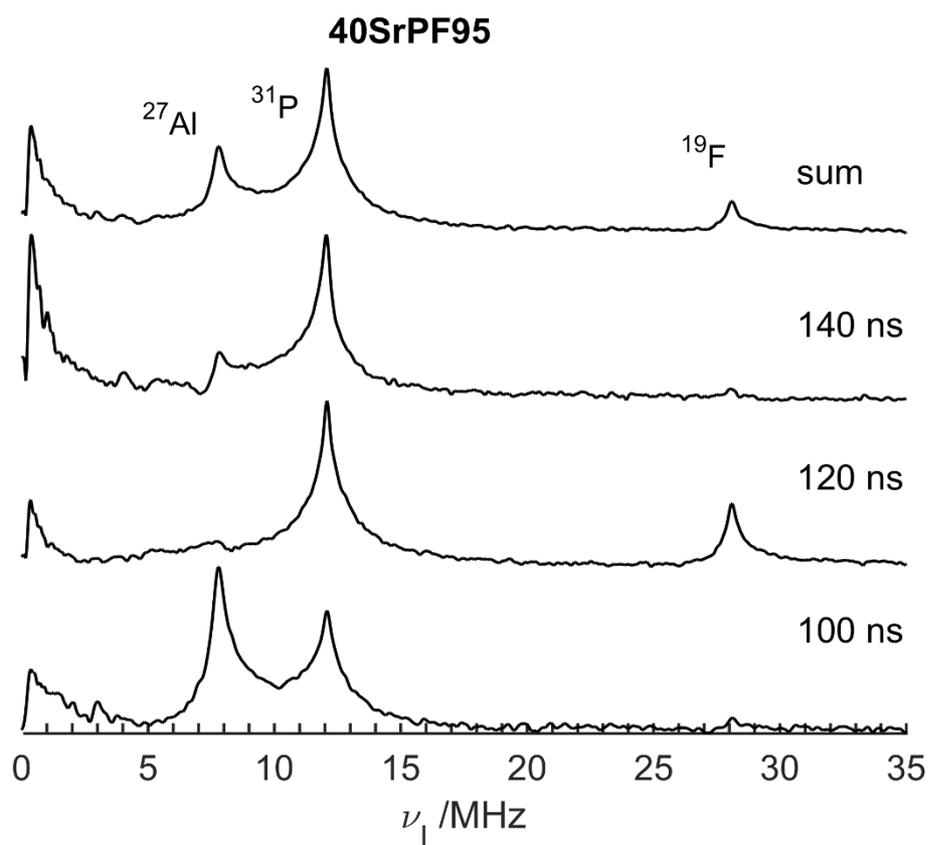


Figure S1. ESEEM EPR spectra for the glass sample 40SrPF measured at 700 mT for $\tau = 100$ ns, 120 ns and 140 ns, where τ is the delay between the two first pulses in the ESEEM pulse sequence. The spectrum resulting from the sum of the spectra for different τ values is also shown.