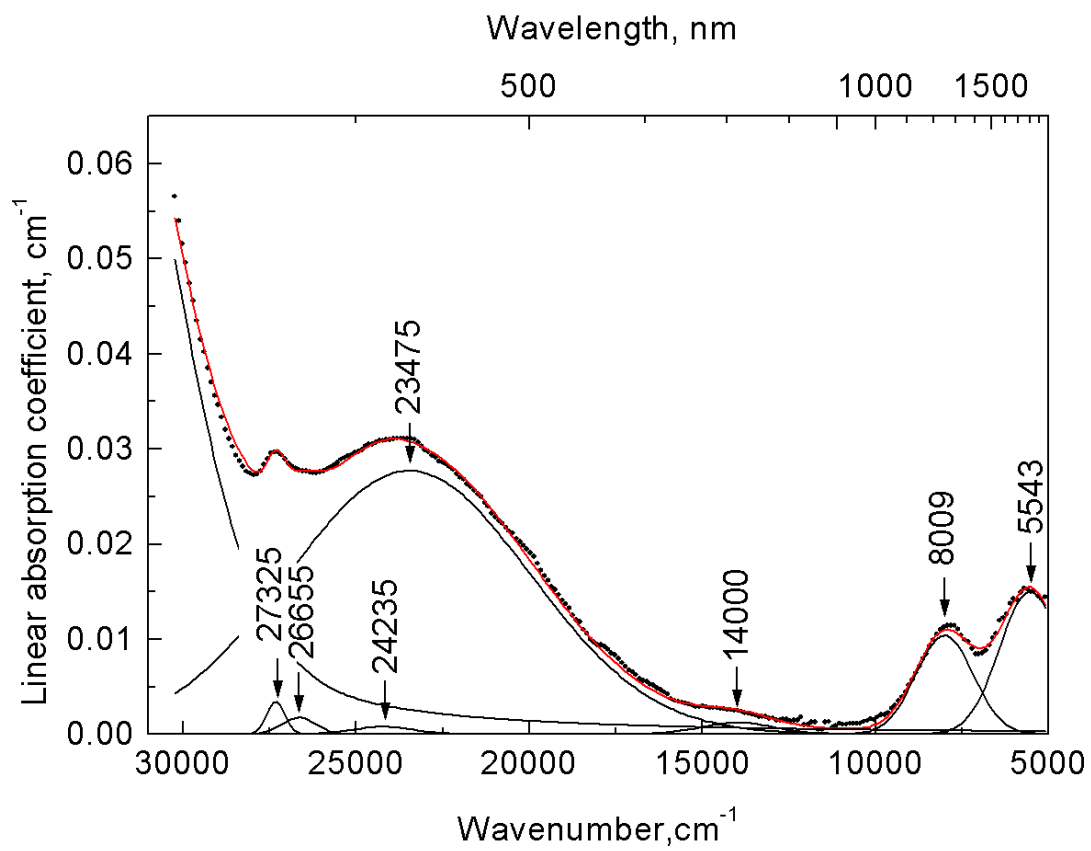
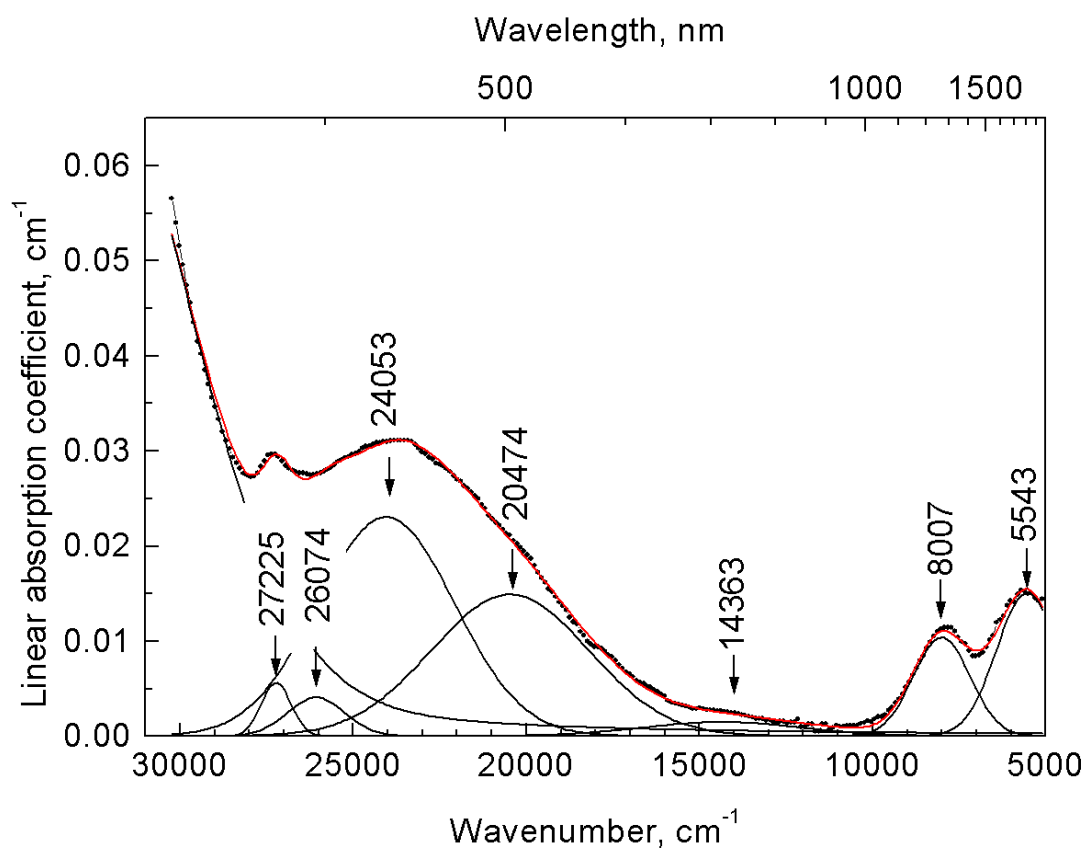


Supplementary Figures (online)

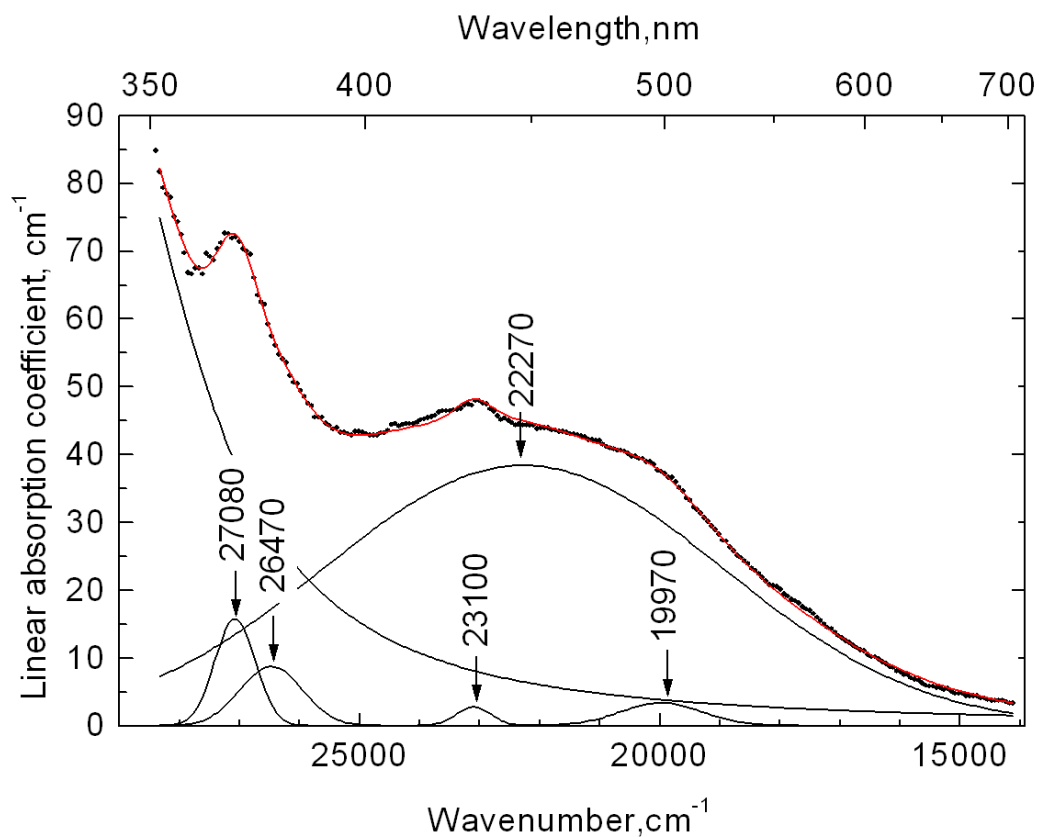


a.)



b.)

**Figure OM1.** Digitalized spectrum made from Figure 1 in Platonov et al. (1991). The garnet was described as sample N25 and was found as an inclusion in diamond from the Mir/Yakutia, USSR, kimberlites. Note that the absorption values are very low and the intensities of the spin-allowed  $\text{Fe}^{2+}$  bands are not typical for garnet. Two fits to the spectrum were made as follows: (a) One single curve (peak center  $23475 \text{ cm}^{-1}$  and FWHM  $8255 \text{ cm}^{-1}$ ) was used to fit the broad IVCT band. (b) Two curves (peak centers  $24053$  and  $20473 \text{ cm}^{-1}$  and FWHM  $5358$  and  $4645 \text{ cm}^{-1}$ , respectively) were used to fit the broad IVCT band.



**Figure OM2.** Spectrum digitalized from Figure 1 in Langer et al. (1993) and its fit as done in this study. The garnet was described as a deep red crystal (no. 1) extracted from a pyroxene-biotite-gneiss 257. The broad IVCT band has a maximum at 22271  $\text{cm}^{-1}$  and a FWHM of 7815  $\text{cm}^{-1}$ .