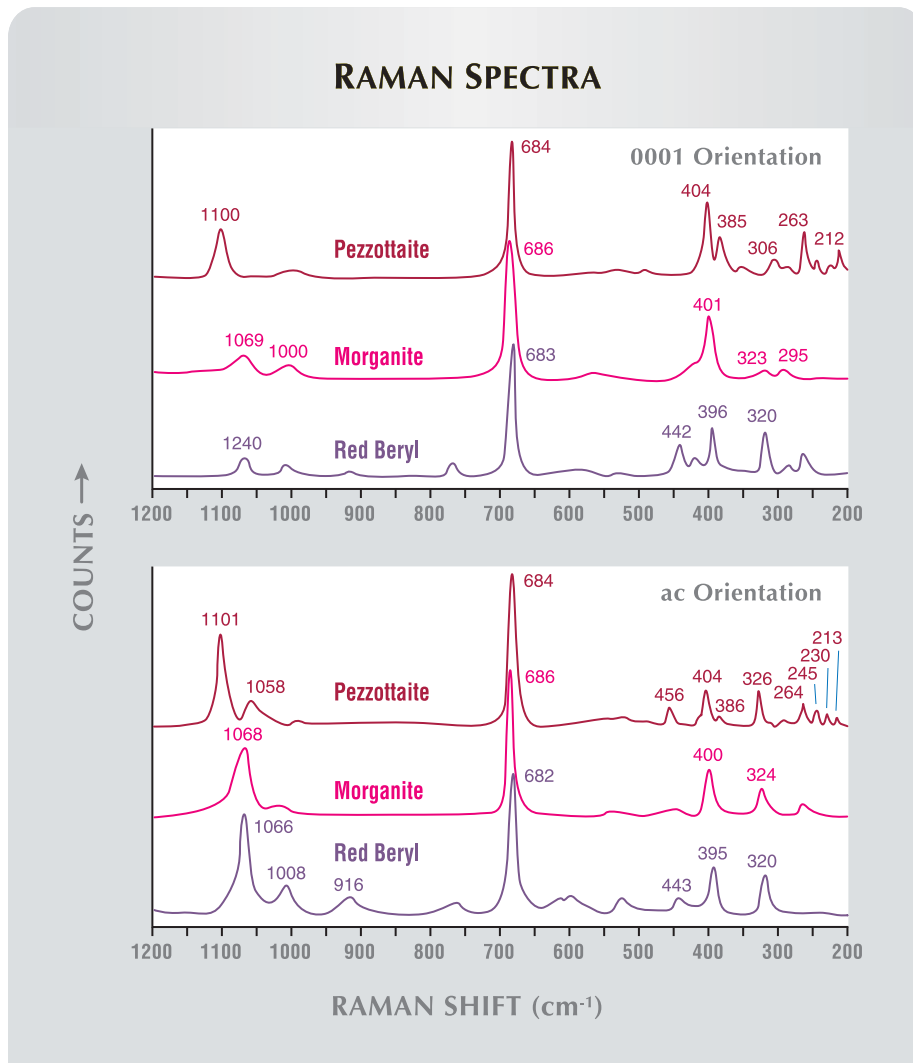
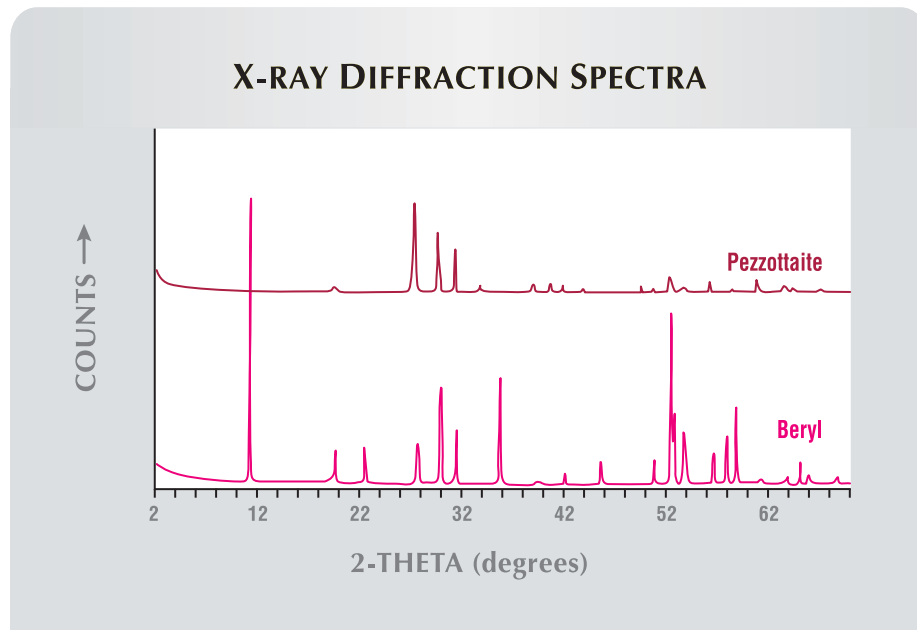


Depository Figure 1. The ATR infrared spectra of pezzottaite, morganite, and red beryl show similar patterns of absorption features, but most of the peaks are shifted relative to one another. The spectra are offset vertically for comparison. [Supplied by G. R. Rossman]



Depository Figure 2. These representative Raman spectra were obtained on oriented samples of pezzottaite, morganite, and red beryl. They have been compiled from baseline-corrected spectra that were generated using both 514.5 and 782 nm laser excitation. Except for their baselines (due to fluorescence), the respective spectra were essentially identical irrespective of the laser wavelength. Spectra on the top were collected from the (0001) face, and on the bottom from a face containing the c-axis (ac face). The 1100 cm⁻¹ band is a characteristic feature of pezzottaite, whereas the 916 cm⁻¹ band in the red beryl may be due to a foreign phase. The spectra are offset vertically for comparison. [Supplied by G. R. Rossman]



Depository Figure 3. In these X-ray diffraction patterns, some significant peaks in beryl (here, aquamarine from the Erongo Mountains, Namibia) are missing from pezzottaite. [Supplied by W. B. Simmons]