

Supporting Information

Polarization-dependence of the Raman response of free-standing strained Ce_{0.8}Gd_{0.2}O₂ membranes

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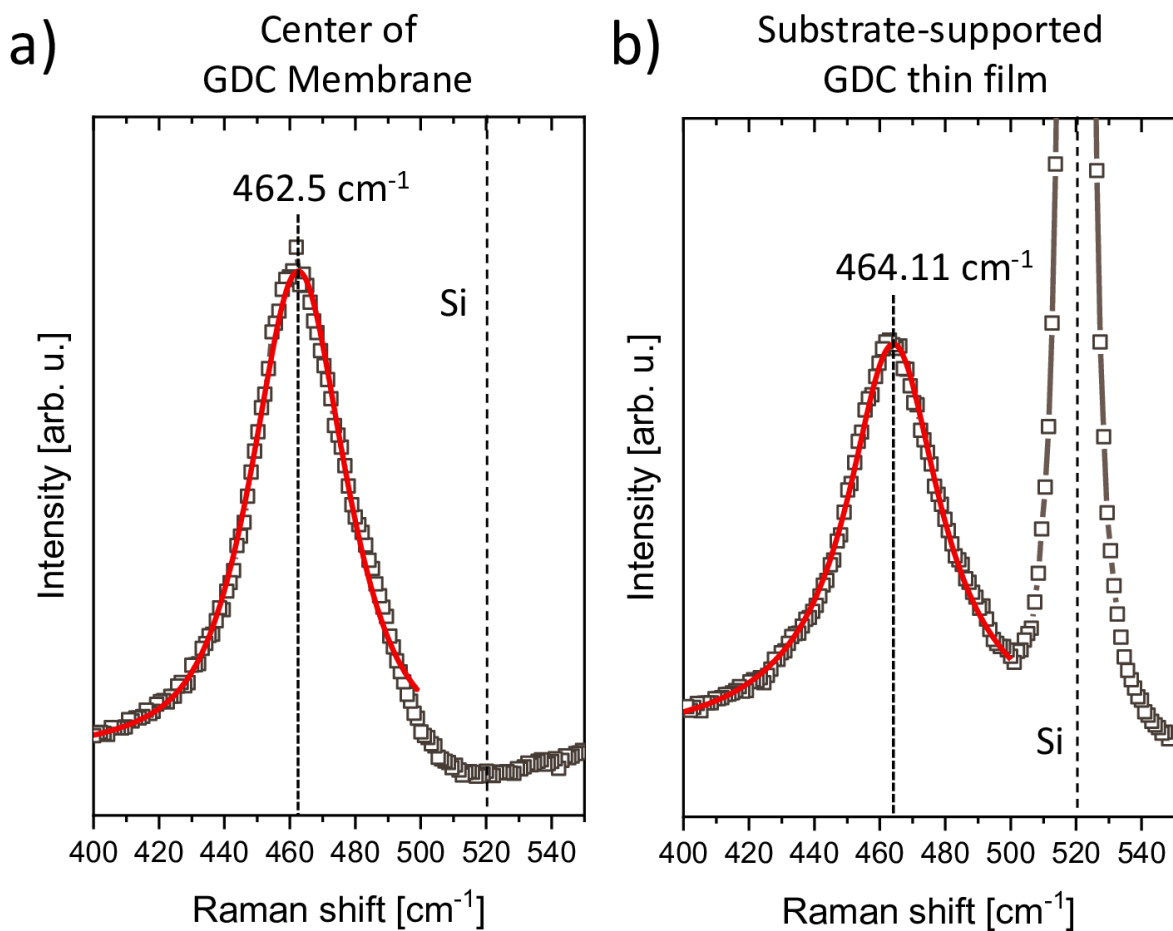


Figure S1: a) Raman spectra of the center of the free-standing membrane. b) Raman spectra of the substrate-supported thin film. The Raman mode at 520 cm^{-1} is the characteristic F_{2g} mode of Si. Fits of the Raman spectra using a pseudo-Voigt profile are shown as solid lines.

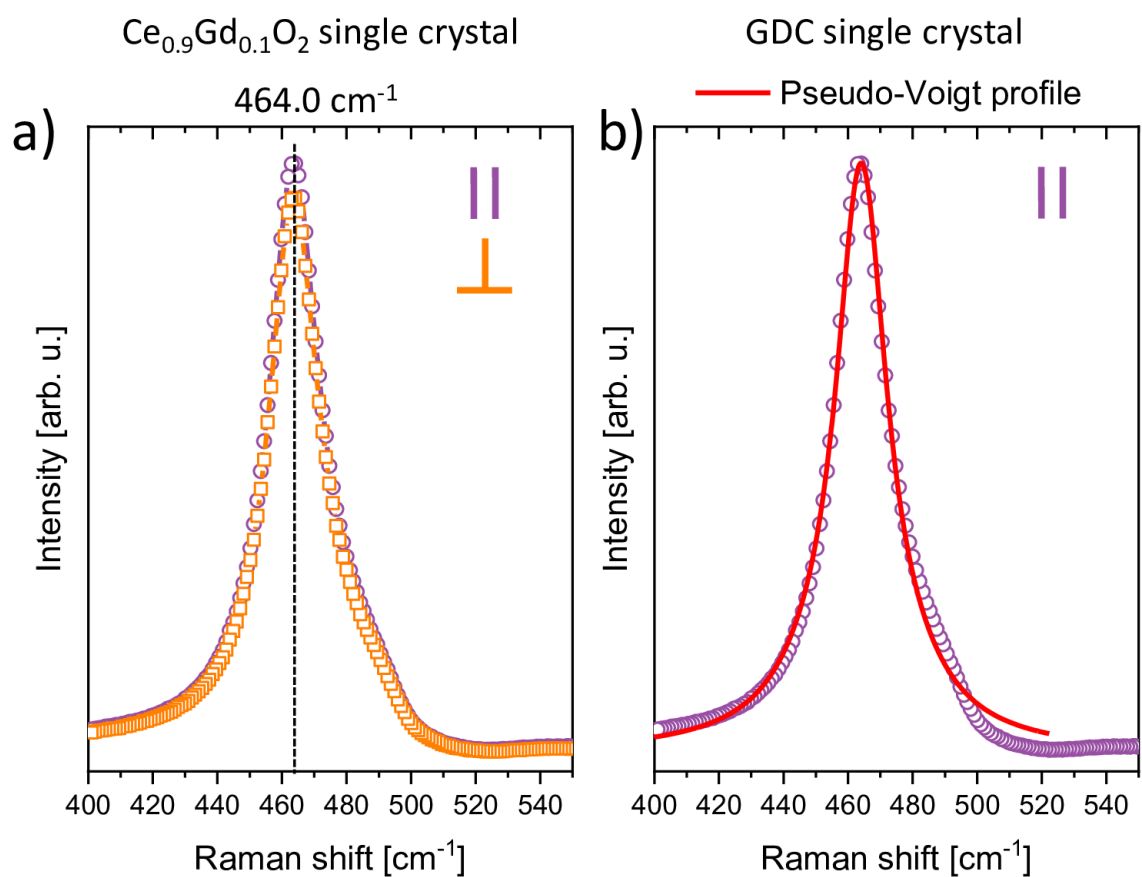


Figure S2: a) Raman spectra of a $\text{Ce}_{0.9}\text{Gd}_{0.1}\text{O}_2$ single crystal for parallel (red) and perpendicular (orange) measurements geometry. b) Fit of the Raman spectrum using a pseudo-Voigt profile.