Fig. S1 Scheme of the Raman measurements in confocal mode using a two-compartment cell.

Fig. S2 Experimental Raman spectra of different nitrate salts. Intensity normalized to 1 mol.L⁻¹.

Fig. S3 Experimental Raman spectra within the 800-1100 cm⁻¹ region of 15.2 mol.L⁻¹ (blue), 18.9 mol.L⁻¹ (red) and 24 mol.L⁻¹ (green) nitric acid solutions.

Fig. S4 Experimental Raman spectra within the 550-700 cm⁻¹ region of 15.2 mol.L⁻¹ (blue), 18.9 mol.L⁻¹ (red) and 24 mol.L⁻¹ (green) nitric acid solutions.