



Infrared transmission (a) and reflection (b) spectra on heating detailing the Si-O (960-1190 cm<sup>-1</sup>) and Si-C (1275 cm<sup>-1</sup>) regions. The bulk material (a) shows changes in Si-O bonding upon heating indicating linking of adjacent Si-OH units, reflection measurements show smaller changes at the surface of the material. Relative Si-O to Si-C intensity does not change below 400° C in bulk measurements (a) but a slight reduction in the relative intensity of the Si-C band is visible in surface measurements (b). As described in the article text no bands are visible in the C=O region, even in reflection (c).