

Surface Structure and Current Transport Property of Boron and Phosphorous Co-doped Silicon Nanocrystals

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(a) Determination of integral intensities

The integral intensities are estimated after the subtraction of background spectra. The integration ranges of Si-O-Si, B-O-B, Si-H and H-O-H modes are 915 – 1220, 1300 – 1500, 2000 – 2300 and 1550 – 1800 cm^{-1} , respectively.

(b) IR absorption spectra of the Si-O-Si modes at room temperature and at 90°C.

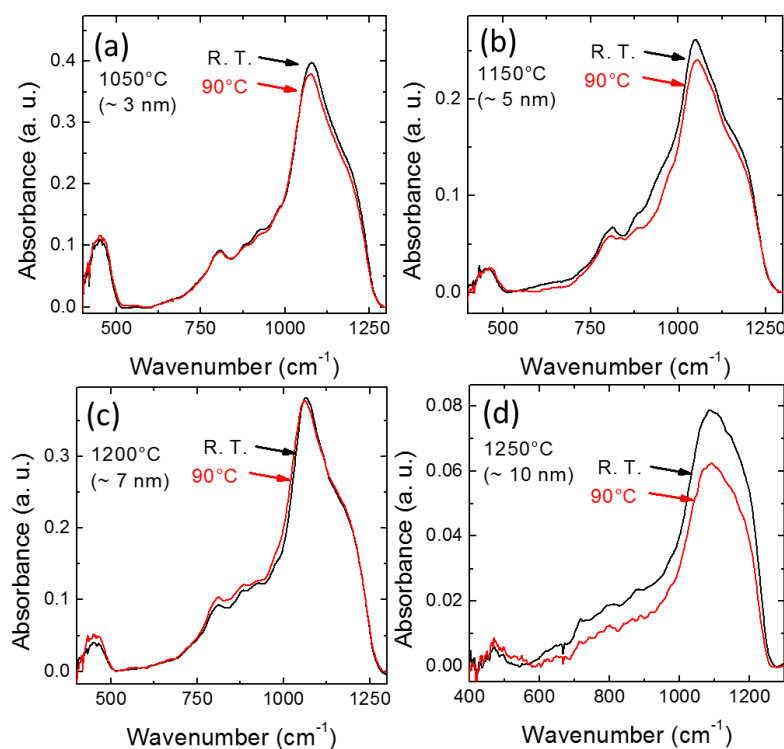


Figure S1. IR absorption spectra (Si-O-Si asymmetric stretching mode) of Si-NC film at room temperature (black curves) and at 90°C (red curves) grown at (a) 1050°C, (b) 1150°C, (c) 1200°C and (d) 1250°C.

In Figs. S1, IR absorption spectra of the Si-O-Si modes at room temperature and at 90°C are compared. In all the samples grown at different temperatures, no significant change of the intensity is observed.