Abstract

A simple method for the deconvolution of the experimental Rutherford backscattering spectra is described. It is based on the deconvolution of the simulated spectrum which takes into account the straggling effect and the detector resolution. The deconvolution process leads to the calculation of successive derivates of the simulated spectrum for each point. The spurious oscillations which occurred in the deconvoluted spectrum are reduced by introducing a number of neighbour points for each point during the computation of the derivates. The method is applied to determine the doses of As^+ and Sb^+ implanted into silicon.