

Abstract

Method for producing semiconductor wafers

A method for producing semiconductor wafers, where a single-crystal ingot of silicon is provided, the ingot is cut into crystal ingot segments, and a test wafer is cut from an ingot segment, where the test wafer is optionally subjected to a first thermal treatment method and thereafter a second thermal treatment method takes place, which comprises a heating phase, a holding phase at holding temperature T_h , and a cooling phase and which causes a radial temperature gradient ΔT on the test wafer, followed by analysis of the wafer of semiconductor material in respect of stress fields, and the further-processing of the semiconductor wafers cut from the ingot segment in accordance with further-processing steps which are selected in dependence on the result of the analysis of the test wafer.