
**Surface chemical analysis —
Secondary-ion mass spectrometry —
Method for depth profiling of boron in
silicon**

*Analyse chimique des surfaces — Spectrométrie de masse des
ions secondaires — Dosage du bore dans le silicium par profilage
d'épaisseur*

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Foreword

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The committee responsible for this document is ISO/TC 201, *Surface chemical analysis*, Subcommittee SC 6, *Secondary ion mass spectrometry*.

[Annex A](#) of this International Standard is for information only.

This second edition cancels and replaces the first edition (ISO 17560:2002), which has been technically revised. The revision also includes editorial correction.

Introduction

This International Standard was prepared for the quantitative depth profiling of boron in silicon by secondary-ion mass spectrometry (SIMS).

For quantitative depth profiling, calibration is necessary both for the concentration and the depth scales of the profile measured. A procedure for the determination of boron in silicon has been established as an International Standard, ISO 14237. Thus, the calibration of boron atomic concentration is performed by following ISO 14237.

This International Standard describes standard procedures for depth profiling of boron in single-crystal, poly-crystal, or amorphous silicon using SIMS and for depth scale calibration using stylus profilometry or optical interferometry.

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