BS ISO 17560:2014

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

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National foreword

This British Standard is the UK implementation of ISO 17560:2014. It supersedes BS ISO 17560:2002 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CII/60, Surface chemical analysis.

A list of organizations represented on this committee can be obtained on request to its secretary.

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ISBN 978 0 580 85636 5

ICS 71.040.40

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 September 2014.

Amendments issued since publication

Date	Text affected

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INTERNATIONAL STANDARD

ISO 17560

Second edition
2014-09-15

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

Reference number
ISO 17560:2014(E)

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Published in Switzerland

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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.

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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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