BS ISO 20903:2019

BSI Standards Publication

Surface chemical analysis — Auger electron spectroscopy and X-ray photoelectron spectroscopy — Methods used to determine peak intensities and information required when reporting results

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National foreword

This British Standard is the UK implementation of ISO 20903:2019. It supersedes BS ISO 20903:2011, which is withdrawn.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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Foreword

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This document was prepared by Technical Committee ISO/TC 201, *Surface chemical analysis*, Subcommittee SC 7, *Electron spectroscopies*.

This third edition cancels and replaces the second edition (ISO 20903:2011), which has been technically revised. The main changes compared to the previous edition are as follows:

— subclause 6.3 has been replaced to include modern methods for dealing with co-existing chemical states;

— minor editorial changes have been introduced for clarity.

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Introduction

An important feature of Auger electron spectroscopy (AES) and X-ray photoelectron spectroscopy (XPS) is the ability to obtain a quantitative analysis of the surface region (≈1 nm to 10 nm) of a solid sample. Such an analysis requires the determination of the intensities of spectral components.

There are several methods of peak-intensity measurement that are applicable to AES and XPS. In practice, the choice of method will depend upon the type of sample being analysed, the capabilities of the instrumentation used, and the methods of data acquisition and treatment available.

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