INTERNATIONAL STANDARD

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Surface chemical analysis — Auger electron spectroscopy — Description of selected instrumental performance parameters

Analyse chimique des surfaces — Spectroscopie d'électrons Auger — Description de certains paramètres relatifs à la performance instrumentale

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Cor	ntents	S	Page
Fore	word		iv
Introduction			v
1	Scone	2	1
_	-		
2		native references	
3		s and definitions	
4	Symb	ols and abbreviated terms	1
5	Description of selected instrumental performance parameters		1
	5.1	Method of analysis	
	5.2	Samples	2
	5.3	System configuration	
	5.4	Electron gun cathode	
		5.4.1 Cathode type	
		5.4.2 Cathode lifetime	
	5.5	Lateral resolution and beam current	
		5.5.1 General	
		5.5.2 Method 1	
		5.5.3 Method 2	
		5.5.4 Method 3	
	5.6	Spectrometer intensity performance and energy resolution	3
		5.6.1 General 115 115 115 115 115 115 115 115 115 11	
		5.6.2 Method 1	
	5.7	5.6.3 Method 2	
	5.7 5.8	Spectrometer energy scale Spectrometer intensity linearity	4
	5.0 5.9	Spectrometer response function	
	5.10	Spectrometer parameters	
	5.10	5.10.1 Spectrometer aberration 71.2016	
		5.10.2 Analytical area 4.62.63.13.6 Adda 4.08.83.0 63.0427.67.601.6	
	5.11	Image drift	
	5.12	Vacuum environment	
Ribli	iogranh		5

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 201, *Surface chemical analysis*, Subcommittee SC 7, *Electron spectroscopies*.

This second edition cancels and replaces the first edition (ISO 15471:2004), of which it constitutes a minor revision with the following modifications:

- addition of a Bibliography;
- minor editorial changes to the text.

Introduction

Auger electron spectrometers (AESs) and scanning Auger electron microscopes (SAMs) are produced by many manufacturers throughout the world. While the basic principles of the AES analytical method in each instrument are the same, the specific designs of the instruments and the way that performance specifications are provided differ widely. As a result, it is often difficult to compare the performance of instruments from one manufacturer with those from another. This International Standard provides a basic list of items devised to enable all Auger electron spectrometers to be described in a common manner. This International Standard is not intended to replace the manufacturer's specification, which may extend to 30 or more pages. It is intended that, where certain items are contained in that specification, there are agreed and defined meanings to those items.

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