

ISO/TR 16268:2009-10 (E)

Surface chemical analysis - Proposed procedure for certifying the retained areic dose in a working reference material produced by ion implantation

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and abbreviated terms	5
5	Concept and procedure	6
5.1	General information	6
5.2	Preparation of the working and transfer reference materials	8
5.3	Measurement of retained areic dose in the transfer reference material	8
5.4	Compatibility of the working reference material and the surface-analytical method	8
6	Requirements	9
6.1	Reference materials	9
6.2	Instrumentation requirements	9
6.2.1	Ion implanter	9
6.2.2	Wavelength-dispersive X-ray fluorescence spectrometer	9
6.2.3	Electron microprobe	10
6.3	Ion-implantation requirements	10
6.4	Uniformity requirement	10
7	Certification	10
7.1	Working reference material against the transfer reference material	10
7.2	Transfer reference material against the secondary reference material	10
7.3	Retained areic dose of the working reference material	11
	Annex A (informative) Ion implantation	12
	Annex B (informative) Ion-implantation dosimetry	13
	Annex C (informative) X-ray fluorescence spectrometry	14
	Annex D (informative) Non-certified secondary reference materials and substitutes	15
	Annex E (informative) Uncertainties in measurements of areic dose	16
	Bibliography	19