ISO 23124:2024-04 (E)

Surface chemical analysis - Measurement of lateral and axial resolutions of a Raman microscope

Contents

Page

Foreword ..... **iv**

Introduction ..... **v**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 General information **1**
4.1 Outline of the method 1
4.2 Lateral resolution 2
4.3 Axial resolution 2

5 Sample requirements **3**
5.1 Selection of the sample and sample requirement to measure the lateral resolution 3
5.2 Selection of the sample and sample requirement to measure the axial resolution 3

6 Experimental parameters to be specified **3**
6.1 Overview 3
6.2 Numerical aperture of objective lens 3
6.3 Size of confocal pinhole or the optics which works with similar function 4
6.4 Setting the parameters before the operation of the instrument 4

7 Data acquisition **5**
7.1 Data collection and analysis for lateral resolution 5
7.2 Data collection and analysis for axial resolution 5
7.3 Recording of the data 5

Annex A (informative) **Case study using dispersed carbon nanotubes and suspended graphene as samples** **7**

Bibliography **11**