ISO 22581:2021 (E)

Surface chemical analysis — Near real-time information from the X-ray photoelectron spectroscopy survey scan — Rules for identification of, and correction for, surface contamination by carbon-containing compounds

Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Symbols and abbreviated terms

5 Sample contamination

5.1 General
5.2 Causes of contamination
5.3 Recognition of contamination
5.3.1 Construction of rules based on sample description
5.3.2 Rules for use of the sample history
5.3.3 Rules for use of peak positions
5.3.4 Rule to establish carbon type
5.3.5 Rules identifying C1s as arising from absorbed material in the form of a thin film
5.3.6 Achievement of the goal

6 Estimation of film thickness and correction for its impact

6.1 Film thickness
6.2 Correction of substrate composition

Annex A (informative) Flow diagrams for operation of rules

A.1 Sequence 1: Establish the likelihood of contamination
A.2 Sequence 2: Confirm contamination present as surface layer
A.3 Sequence 3: Establish adsorbed character of contamination
A.4 Sequence 4: Determine aliphatic content of carbon
A.5 Sequence 5: Eliminate carbonate or carbide
A.6 Sequence 6: Evaluate counters

Page count: 16