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Nota di contenuto	Organic Mass Spectrometry in Art and Archaeology; Contents; List of Contributors; Acknowledgements; Preface; Part I Introduction; 1 Organic Materials in Art and Archaeology; 2 Overview of Mass Spectrometric Based Techniques Applied in the Cultural Heritage Field; PART II DIRECT MASS SPECTROMETRIC ANALYSIS; 3 Direct Mass Spectrometric Techniques: Versatile Tools to Characterise Resinous Materials; 4 Direct Mass Spectrometry to Characterise Wax and Lipid Materials; 5 GALDI-MS Applied to Characterise Natural Varnishes and Binders; 6 MALDI-MS Applied to the Analysis of Protein Paint Binders PART III GAS CHROMATOGRAPHY/MASS SPECTROMETRY7 GC/MS in the Characterization of Lipids; 8 GC/MS in the Characterisation of Resinous Materials; 9 GC/MS in the Characterisation of Protein Paint Binders; 10 SPME/GC-MS in the Characterisation of Terpenic Resins; 11 Py-GC/MS of Organic Paint Binders; 12 Py-GC/MS of Natural and Synthetic Resins; PART IV LIQUID CHROMATOGRAPHY/MASS SPECTROMETRY; 13 Characterization of Organic Natural Dyes by Electrospray Mass Spectrometry Coupled with HPLC and/or Capillary Electrophoresis;

## PART V OTHER MS-BASED TECHNIQUES

14 Compound-specific Stable Isotopes in Organic Residue Analysis in Archaeology  
15 ToF-SIMS Study of Organic Materials in Cultural Heritage: Identification and Chemical Imaging;  
16 Accelerator Mass Spectrometry for  $^{14}\text{C}$  Dating; Index; Colour Plates

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### Sommario/riassunto

Offers an overview of the analysis of art and archaeological materials using techniques based on mass spectrometry. Illustrates basic principles, procedures and applications of mass spectrometric techniques. Fills a gap in the field of application on destructive methods in the analysis of museum objects. Edited by a world-wide respected specialists with extensive experience of the GC/MS analysis of art objects. Such a handbook has been long-awaited by scientists, restorers and other experts in the analysis of art objects.

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