

Mass Spectrometry

A Textbook

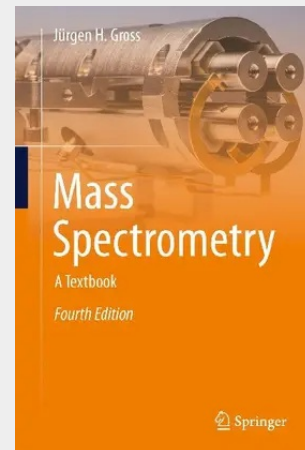
This fourth edition of the highly successful textbook, acclaimed for its comprehensiveness, accuracy, and excellent illustrations and photographs once again comes with markedly updated coverage. It continues to be your companion from undergraduate to graduate studies in chemistry, biochemistry, and other natural sciences, and aims to hold its value when serving as a hands-on reference in the course of professional life.

Starting from the very principles of gas phase ion chemistry and isotopic properties, it guides you through mass spectral interpretation, the design of mass analyzers, tandem mass spectrometry, hyphenated techniques, and the vast range of ionization methods. Step by step, you will understand how mass spectrometry works and what it can do as a powerful tool in your hands.

- This textbook comprises fifteen chapters that can be read independent of each other.
- The chapters of this fourth edition have been restructured into three main sections for an improved organization of the substantial content: **A**, **B**, **C**. Interrelationships are indicated by many cross references between the chapters.
- The breathtaking development of ion mobility spectrometry-mass spectrometry is now reflected in a dedicated new chapter.
- Each chapter begins with an Abstract followed by a set of Learning Objectives and ends with a concise Summary and a collection of references that includes titles with all citations for effective evaluation of further reading.
- The number of figures has again increased. More photographs and schematics make it easier to understand and provide valuable insights into the practical aspects of instrumentation and procedures.
- Examples and notes come with a short subheading that immediately conveys what this section is about. Many examples, especially of methods and applications, are given and some how-to-style paragraphs provide practical guidance.
- Flow charts describe procedures and approaches to mass spectral interpretation and aid in decision making.
- Bulleted enumerations offer a quick overview wherever several features, arguments, assumptions, or properties of a subject call for clear presentation.

The book's dedicated website provides many exercises and supplementary material.

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149,79 €

139,99 € (zzgl. MwSt.)

vorbestellbar, Erscheinungstermin ca. Dezember 2026

Artikelnummer: 9783032292162

Medium: Buch

ISBN: 978-3-032-29216-2

Verlag: Springer Nature Switzerland AG

Erscheinungstermin: 18.07.2026

Sprache(n): Englisch

Auflage: Fourth Auflage 2026

Produktform: Gebunden

Seiten: 1187

Format (B x H): 155 x 235 mm

