

1. Record Nr.	UNINA9910457968803321
Autore	Kitson Fulton G
Titolo	Gas chromatography and mass spectrometry [[electronic resource]] : a practical guide // Fulton G. Kitson, Barbara S. Larsen, Charles N. McEwen
Pubbl/distr/stampa	San Diego, : Academic Press, c1996
ISBN	1-281-01886-4 9786611018863 0-08-053232-2
Descrizione fisica	1 online resource (xii, 381 pages) : illustrations
Altri autori (Persone)	LarsenBarbara Seliger McEwenCharles N. <1942->
Disciplina	543/.0873
Soggetti	Gas chromatography Mass spectrometry Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I: The Fundamentals of GC/MS; Chapter 1. What Is GC/MS?; Chapter 2. Interpretation of Mass Spectra; Chapter 3. Quantitative GC/MS; Part II: GC Conditions, Derivatization, and Mass Spectral Interpretation of Specific Compound Types; Chapter 4. Acids; Chapter 5. Alcohols; Chapter 6. Aldehydes; Chapter 7. Amides; Chapter 8. Amines; Chapter 9. Amino Acids; Chapter 10. Common Contaminants; Chapter 11. Drugs and Their Metabolites; Chapter 12. Esters; Chapter 13. Ethers Chapter 14. Fluorinated CompoundsChapter 15. Gases; Chapter 16. Glycols; Chapter 17. Halogenated Compounds (Other Than Fluorinated); Chapter 18. Hydrocarbons; Chapter 19. Isocyanates; Chapter 20. Ketones; Chapter 21. Nitriles; Chapter 22. Nitroaromatics; Chapter 23. Nitrogen-Containing Heterocyclics; Chapter 24. Nucleosides (TMS Derivatives); Chapter 25. Pesticides; Chapter 26. Phenols; Chapter 27. Phosphorus Compounds; Chapter 28. Plasticizers and Other Polymer Additives (Including Phthalates); Chapter 29. Prostaglandins (MO-TMS Derivatives); Chapter 30. Solvents and Their Impurities

Chapter 31. Steroids; Chapter 32. Sugars (Monosaccharides); Chapter 33. Sulfur Compounds; Part III: Ions for Determining Unknown Structures; Part IV: Appendices; Appendix 1. Definitions of Terms Related to Gas Chromatography; Appendix 2. Tips for Gas Chromatography; Appendix 3. Derivatives Found Useful in GC/MS; Appendix 4. Cross-Index Chart for GC Phases; Appendix 5. McReynolds' Constants; Appendix 6. Simple GC Troubleshooting; Appendix 7. Definitions of Terms Related to Mass Spectrometry; Appendix 8. Tips and Troubleshooting for Mass Spectrometers; Appendix 9. Atomic Masses and Isotope Abundances; Appendix 10. Structurally Significant McLafferty Rearrangement Ions; Appendix 11. Isotope Patterns for Chlorine and Bromine; Appendix 12. Mixtures for Determining Mass Spectral Resolution; Index

Sommario/riassunto

This guide provides, under one cover, a wealth of practical information designed to facilitate the effectiveness of the GC/MS user. Separation conditions for numerous compound types are provided along with derivatized and underivatized compounds. A section on how to interpret mass spectral data, an extensive correlation of ion masses and neutral losses with possible structures, and examples of mass spectra are provided to further aid structure determination. Also included are basic information on instrumentation, ionization methods, quantitation, and tips on the operation of mass spectrometers.
