

1. Record Nr.	UNINA9910827470903321
Autore	Sparkman O. David (Orrin David), <1942->
Titolo	Gas chromatography and mass spectrometry : a practical guide // O. David Sparkman, Zelda E. Penton, Fulton G. Kitson
Pubbl/distr/stampa	Boston, : Elsevier, 2011
ISBN	1-283-17107-4 9786613171078 0-08-092015-2
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (633 p.)
Altri autori (Persone)	PentonZelda KitsonFulton G
Disciplina	543/.85 543.85
Soggetti	Gas chromatography Mass spectrometry
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	The fundamentals of GC/MS -- Introduction and history -- Gas chromatography -- The gc/ms interface -- Mass spectrometry instrumentation -- Mass spectral data interpretation -- Quantitation with GC/MS -- GC conditions, derivatization, and mass spectral interpretation -- Of specific compound types -- Acids -- Alcohols -- Aldehydes -- Amides -- Amines -- Amino acid -- Common contaminants -- Drugs and their metabolites -- Esters -- Ethers -- Fluorinated compounds -- Gases -- Glycols -- Halogenated compounds (other than fluorinated) -- Hydrocarbons -- Isocyanates -- Ketones -- Nitriles -- Nitroaromatics -- Nitrogen-containing heterocyclics -- Nucleosides (TMS derivatives) -- Pesticides -- Phenols -- Phosphorus compounds -- Plasticizers and other polymer additives (including phthalates) -- Prostaglandins (MO-TMS derivatives) -- Solvents and their impurities -- Steroids -- Sugars (monosaccharides) -- Sulfur compounds -- Appendices -- A definitions of terms related to gas chromatography -- B definitions of terms related to mass spectrometry -- C atomic masses and isotope abundances -- X+1 and x+2 values for ions containing atoms of C and H based on -- Isotope

contributions -- E isotope peak patterns for ions containing atoms of Cl and/or Br -- F steps to follow in the determination of an elemental composition -- Based on isotope peak intensity ratios -- G derivatization in GC/MS -- H points of comparison of LC/MS vs GC/MS -- I list of available EI mass spectral databases -- J information required for reporting a GC/MS analysis -- K third-party software for use with GC/MS -- GC installation and maintenance -- Troubleshooting common GC problems -- N maintenance, operating tips, and troubleshooting for mass spectrometers -- O mixtures for determining mass spectral resolution -- P cross-index chart for GC stationary phases -- Q ions for determining unknown structures.

Sommario/riassunto

The second edition of Gas Chromatography and Mass Spectrometry: A Practical Guide follows the highly successful first edition by F.G. Kitson, B.S. Larsen, and C.N. McEwen (1996), which was designed as an indispensable resource for GC/MS practitioners regardless of whether they are a novice or well experienced. The Fundamentals section has been extensively reworked from the original edition to give more depth of an understanding of the techniques and science involved with GC/MS. Even with this expansion, the original brevity and simple didactic style has been retained. Information on
