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| 1. Record Nr.           | UNINA9910971663003321   |
| 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                    | 9786613171078<br>9781283171076<br>1283171074<br>9780080920153<br>0080920152   |
| Edizione                | [2nd ed.]   |
| Descrizione fisica      | 1 online resource (633 p.)  |
| Altri autori (Persone)  | PentonZelda<br>KitsonFulton G   |
| Disciplina              | 543/.85<br>543.85   |
| Soggetti                | Gas chromatography<br>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.

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## 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

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