1. Record Nr. UNINA9910972277803321 Autore Moldoveanu Serban **Titolo** Essentials in modern HPLC separations / / Serban C. Moldoveanu, Victor David Amsterdam, : Elsevier, 2012, c2013 Pubbl/distr/stampa **ISBN** 1-283-60165-6 9786613914101 0-12-385014-2 Edizione [1st ed.] Descrizione fisica 1 online resource (549 p.) Altri autori (Persone) DavidVictor <1955-> Disciplina 660/.2842 Soggetti Separation (Technology) High performance liquid chromatography Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front Cover; Essentials In Modern HPLC Separations; Copyright; Dedication; Contents; Preface; Chapter1 - Basic Information about HPLC; 1.1.INTRODUCTION TO HPLC; 1.2.MAIN TYPES OF HPLC; 1.3. PRACTICE OF HPLC; 1.4.OVERVIEW OF HPLC INSTRUMENTATION; References; Chapter2 - Parameters that Characterize HPLC Analysis; 2.1.PARAMETERS RELATED TO HPLC SEPARATION; 2.2.EXPERIMENTAL PEAK CHARACTERISTICS IN HPLC; References; Chapter3 - Equilibrium Types in HPLC; 3.1.PARTITION EQUILIBRIUM; 3.2.ADSORPTION EQUILIBRIUM: 3.3.EQUILIBRIA INVOLVING IONS: 3.4.EQUILIBRIUM IN SIZE-EXCLUSION PROCESSES 3.5.THE INFLUENCE OF PH ON RETENTION EQUILIBRIA3.6.THE INFLUENCE OF TEMPERATURE ON RETENTION EQUILIBRIA; References; Chapter4 - Intermolecular Interactions: 4.1.FORCES BETWEEN IONS AND MOLECULES; 4.2.FORCES BETWEEN MOLECULES AND A SURFACE; References; Chapter5 - Retention Mechanisms in Different HPLC Types; 5.1.RETENTION IN REVERSED-PHASE CHROMATOGRAPHY; 5.2. RETENTION AND SEPARATION PROCESS IN ION-PAIR CHROMATOGRAPY; 5.3.RETENTION AND SEPARATION ON POLAR STATIONARY PHASES; 5.4.

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## Sommario/riassunto

Essentials in Modern HPLC Separations discusses the role of separation in high performance liquid chromatography (HPLC). This up-to-date reference systematically covers new developments in types and characteristics of stationary phases, mobile phases, and other factors of this technique that influence separation of compounds being analyzed. The volume also considers the selection process for stationary and mobile phases in relation to the molecules being separated and examined, as well as their matrices. The book includes a section on the contemporary applications of HPLC, p