1. Record Nr. UNINA9910807625003321 Autore Nesterenko Pavel N **Titolo** High performance chelation ion chromatography / / Pavel N. Nesterenko, Phil Jones, Brett Paull Cambridge,: Royal Society of Chemistry, c2011 Pubbl/distr/stampa 1-84973-231-0 **ISBN** Edizione [1st ed.] Descrizione fisica 1 online resource (317 p.) Collana **ISSN** RSC chromatography monographs, , 1757-7055;; no. 14 Altri autori (Persone) JonesP (Phil) **PaullBrett** Disciplina 543.82 Soggetti High performance liquid chromatography Ion exchange chromatography Complexometric titration Chelates Trace elements - Analysis 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 High Performance Chelation Ion Chromatography -- Contents --Chapter 1 Chelation and its Role in Contemporary Liquid Chromatography -- 1.1 Basic Chromatographic Principles -- 1.2 Chelation as a Mechanism for Obtaining Separation Selectivity -- 1.3 Terminology and Definitions -- 1.4 Historical Developments -- 1.5 The Evolution of Chelating Stationary Phases -- 1.6 The Current State of HPCIC and Context -- References -- Chapter 2 Retention Mechanism and Chelation Theory -- 2.1 Introduction -- 2.2 Surface and Solution

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Sommario/riassunto

Established ion chromatography techniques have changed little since the 1980's but a new technique, high performance chelation ion chromatography (HPCIC), has revolutionized the area. HPCIC enables a much greater range of complex samples to be analyzed and this is the first comprehensive description of its use in the trace determination of metals. Written by world leaders in the field, it is aimed at professionals, postgraduates, chromatographers, analytical chemists, and industrial chemists. The book describes the underlying principles which give rise to the special selectivities that can be...