Record Nr. UNISA996309149103316 Autore Pena Pereira Francisco Titolo Miniaturization in sample preparation / / Francisco Pena-Pereira, [editor]; managing editor, Anna Rulka; language editor Perry Mitchell Pubbl/distr/stampa Warsaw, [Poland]: Berlin, [Germany]: .: De Gruyter Open, . 2014 ©2014 **ISBN** 3-11-042726-5 3-11-041018-4 Descrizione fisica 1 online resource (464 pages) 543 Disciplina Soggetti Sampling Sample preparation (Chemistry) Extraction (Chemistry) Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front matter -- Contents -- List of Contributors -- 1 From Conventional to Miniaturized Analytical Systems / Pena-Pereira, Francisco -- 2 Solid-Phase Microextraction and Related Techniques / Bagheri, Habib / Piri-Moghadam, Hamed / Naderi, Mehrnoush / Es'haghi, Ali / Roostaie, Ali -- 3 Novel Materials in Solid-Phase Microextraction and Related Sample Preparation Approaches / Hu, Bin / He, Man / Chen, Beibei -- 4 Liquid-phase Microextraction Techniques / Fernández, Elena / Vidal, Lorena -- 5 Choice of Solvent in Liquid-Phase Microextraction / Dadfarnia, Shayessteh / Haji-Shabani, Ali Mohammad -- 6 Method Development with Miniaturized Sample Preparation Techniques / Costas-Rodriguez, Marta / Pena-Pereira, Francisco -- 7 Miniaturized Alternatives to Conventional Sample Preparation Techniques for Solid Samples / Cabaleiro, Noelia / de la Calle, Inmaculada -- 8 Green Aspects of Miniaturized Sample Preparation Techniques / Kloskowski, Adam / Marcinkowski, ukasz / Namienik, Jacek -- Index

Miniaturization is a challenge thrown down to analytical chemistry. The

replacement of conventional analytical systems by miniaturized

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alternatives during the last years is noticeable. Specifically, the miniaturization of traditional sample preparation techniques (e.g., solid-phase extraction or solvent extraction) led to the development of environmentally benign analytical methods. This book aims to provide an overview of the challenges and achievements in the application of the miniaturized sample preparation methods in analytical laboratories. It includes both theoretical and practical aspects of miniaturized sample preparation approaches and hence should be of interest to researchers, students and teachers of analytical and bioanalytical chemistry, environmental sciences and environmental engineering.