

1. Record Nr.	UNINA9910818960203321
Titolo	Green extraction of natural products : theory and practice / / edited by Farid Chemat and Jochen Strube
Pubbl/distr/stampa	Weinheim, [Germany] : , : Wiley-VCH Verlag, , 2015 ©2015
ISBN	3-527-67681-3 3-527-67679-1 3-527-67682-1
Descrizione fisica	1 online resource (384 p.)
Collana	Green Chemistry
Disciplina	581.192
Soggetti	Plant extracts Extraction (Chemistry) Chemical engineering
Lingua di pubblicazione	Tedesco
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	""Green Extraction of Natural Products ""Contents ""; ""Preface ""; ""List of Contributors ""; ""Chapter 1 Green Extraction: From Concepts to Research, Education, and Economical Opportunities ""; ""1.1 Introduction ""; ""1.2 Orange Fruit is not Limited to Produce Only Juice? ""; ""1.3 Chemistry of Natural Products ""; ""1.3.1 Primary Metabolites ""; ""1.3.1.1 Glucides ""; ""1.3.1.2 Lipids ""; ""1.3.1.3 Amino Acids and Proteins ""; ""1.3.2 Secondary Metabolites ""; ""1.3.2.1 Terpenoids ""; ""1.3.2.2 Alkaloids ""; ""1.3.2.3 Polyphenols ""; ""1.4 From Metabolites to Ingredients ""; ""1.5 Green Extraction from Research to Teaching ""; ""1.5.1 Principle: Innovation by Selection of Varieties and Use of Renewable Plant Resources ""; ""1.5.2 Principle: Use of Alternative Solvents and Agro Solvent

""1.5.3 Principle: Production of Coproducts Instead of Waste to Include Biorefinery	
""""1.5.4 Principle: Prioritizing a Non-denatured and Biodegradable Extract without Contaminant	
""", ""1.6 Conclusions and Perspective	"";
""References	""
""Chapter 2 Process Engineering and Product Design for Green Extraction	""""2.1
Market and Market Development	"""; ""2.2
Regulatory Framework	"""; ""2.3 Systematic
Apparatus and Process Design	"""; ""2.3.2 Graphical
""2.3.1 Design of Experiments	"""; ""2.3.3 Physicochemical Modeling
Calculation Methods	""
""2.3.3 Physicochemical Modeling	""

Sommario/riassunto

Farid Chemat is a full Professor of Chemistry at Avignon University (France), Director of GREEN Extraction Team (alternative extraction techniques and solvents), co-director of ORTESA LabCom research unit Naturex-UAPV, and scientific coordinator of ""France Eco-Extraction"" dealing with dissemination of research and education on green extraction technologies. Born in 1968, he received his PhD degree in process engineering from the Institut National Polytechnique de Toulouse-France in 1994. After periods of postdoctoral research work with Prolabo-Merck (1995-1997), he spent two years (1997-1999
