1. Record Nr. UNINA9910793825203321

Green chemistry and biodiversity: principles, techniques, and Titolo

correlations / / edited by Cristobal N. Aguilar, PhD, Suresh C. Ameta,

PhD, A.K. Haghi, PhD

Burlington, ON, Canada;; Palm Bay, Florida, USA:,: Apple Academic Pubbl/distr/stampa

Press, Inc., , [2020]

ISBN 0-429-51463-8

> 0-429-51120-5 0-429-20259-8

Descrizione fisica 1 online resource (309 pages)

Disciplina 660.0286

Green chemistry Soggetti

Biodiversity

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Photodegradation of 2-nitrophenol, an Endocrine Disruptor, Using TiO2

> Nanospheres/SnO2 Quantum Dots / Jayesh Bhatt, Kanchan Kumari Jat, Avinash K. Rai, Rakshit Ameta, and Suresh C. Ameta -- Biodiversity as a Source of Drugs: Cordia, Echinacea, Tabernaemontana, and Aloe / Francisco Torrens and Gloria Castellano -- Biodiversity: Loss and Conservation / Anamika Singh and Rajeev Singh -- Aegle marmelos: Natures Gift for Human Being / Rajeev Singh and Anamika Singh --Seed-Growth Method for the Synthesis of Metal Nanoparticles / Lavnaya Tandon, Divya Mandial, Rajpreet Kaur, and Poonam Khullar -- Soil-Protecting Functions of Medicinal Plants: Meadow and Field Weeds / Rafail A. Afanas'ev, Genrietta E. Merzlaya, and Michail O. Smirnov --

Glycosylation of Polyphenols in Tannin-Rich Extracts from

Euphorbiaantisyphilitica, Jatropha dioica, and Larrea tridentata / Janeth Ventura-Sobrevilla, Gerardo Gutierrez-Sanchez, Carl Bergmann, Parastoo Azadi, Daniel Boone-Villa, Raul Rodriguez, and Cristobal N. Aguilar -- Analysis and Quantification of Larrea tridentata Polyphenols Obtained by Reflux and Ultrasound-Assisted Extraction / Karina Cruz-Aldaco, Daniela Sanchez-Aldana, Salvador Ortega-Hernandez,

Guadalupe Cardenas-Felix, Antonio Aquilera-Carbo, Juan Alberto

Ascasio-Valdes, Raul Rodriguez-Herrera, and Cristobal Noe Aguilar --Properties and Applications of the Phytochemical: Ellagic Acid (4.4.5.5.6.6-hexahydroxydiphenic acid-2.6.2.6-dilactone) / Rene Diaz-Herrera, Pedro Aguilar-Zarate, Juan A. Ascacio-Valdes, Leonardo Sepulveda-Torre, Juan Buenrostro-Figueroa, Monica L. Chavez-Gonzalez, Janeth Ventura, and Cristobal N. Aguilar -- Antioxidative Properties of Punica granatum, Peganum harmala, Dianthus carvophyllus, and Vitis vinifera Extracts Against Free Radicals / Katarina Valachova, Elsaved E. Hafez, Milan Nagy, and Ladislav Soltes --Flavonoids for Designing Metal Nanoparticles and Their Applications / Divya Mandial, Raipreet Kaur, and Poonam Khullar -- pH and Temperature Factor Affecting Curcumin Properties and Its Bioapplicability / Rajpreet Kaur, Divya Mandial, Lavanya Tandon, and Poonam Khullar -- Integrated Water Resource Management and Nanotechnology Applications in Water Purification: A Critical Overview / Sukanchan Palit -- Precision Personalized Medicine from Theory to Practice: Cancer / Francisco Torrens and Gloria Castellano -- Design, Synthesis, and Studies of Novel Piperidine Substituted Triazine Derivatives as Potential Anti-Inflammatory and Antimicrobial Agents / Ravindra S. Shnide -- Metaphors That Made History: Reflections on Philosophy/Science/DNA / Francisco Torrens and Gloria Castellano.

Sommario/riassunto

"Green Chemistry and Biodiversity: Principles, Techniques, and Correlations reports on new approaches to designing chemicals and chemical transformations that are beneficial for human health and the environment, a continuing emerging important field of study. This volume provides a collection of innovative research on the development of alternative sustainable technologies, taking a broad view of the subject and integrating a wide variety of approaches. With a focus on the interdisciplinary applications of green chemistry and biodiversity. this volume will be a rich resource for scientists and researchers in many subfields of chemistry and chemical engineering. Key features: explores the overlap between green chemistry and the biological sciences, demonstrates how green chemistry can contribute to our understanding of biodiversity with the ultimate goal of benefiting from preservation biodiverse habitats, looks at green chemistry at the molecular and macromolecular levels, provides real-world examples of key issues."--