1. Record Nr. UNINA9910483031003321

Titolo	Advances in green synthesis : avenues and sustainability / / Inamuddin, [and three others] editors
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-67884-9
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (VI, 301 p. 259 illus., 83 illus. in color.)
Collana	Advances in Science, Technology & Innovation, IEREK Interdisciplinary Series for Sustainable Development, , 2522-8714
Disciplina	660.0286
Soggetti	Green chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Biomass-derived polyurethanes for sustainable future -- Mechanochemistry: a power tool for green synthesis -- Future trends in green synthesis -- Green synthesis of hierarchically structured metal and metal oxide nanomaterials -- Bioprivileged molecules -- Application of membrane in reaction engineering for green synthesis -- Photoenzymatic green synthesis -- Biomass derived carbons and their energy applications.
Sommario/riassunto	This edited book focusses on green chemistry as the research community endeavours to create eco-friendly materials and technologies. It provides an in-depth overview of the fundamentals, key concepts and experimental techniques for eco-friendly synthesis of organic compounds and metal/metal oxide nanoparticles/nanomaterials. It also emphasizes the mechanisms, designing and industrial technologies for green synthesis and its applications. Each chapter brings the recent developments, state of the art, challenges and perspectives which cover all the aspects in one place, and which concern the green synthesis and evolution. Authored by world-renowned experts in a broad range of green chemistry sectors, this book is an archival reference guide for researchers, engineers, scientists and postgraduates working in the field of sustainable science, green chemistry, environmental science, engineering sciences and industrial technologies.