1. Record Nr. UNINA9910821793603321

Titolo	Microwave-assisted organic synthesis : a green chemical approach / / edited by Suresh C. Ameta, PhD, Pinki B. Punjabi, PhD, Rakshit Ameta, PhD, and Chetna Ameta, PhD
Pubbl/distr/stampa	Oakville, ON : , : Apple Academic Press, Inc. Boca Raton, FL : , : CRC Press, , 2015 ©2015
ISBN	1-77463-355-8 0-429-16249-9 1-77188-039-2
Descrizione fisica	1 online resource (400 p.)
Disciplina	547/.2
Soggetti	Organic compounds - Synthesis Microwave heating Green chemistry
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	1. Introduction / Suresh C. Ameta -- 2. Instrumentation / Chetna Ameta, Purnima Dashora, and Ritu Vyas -- 3. Oxidation / Chetna Ameta, Poonam Kumawat, and Abhilasha Tripathi -- 4. Reduction / Sangeeta Kalal, Kiran Meghwal, Meenakshi Joshi, and Pinki B. Punjabi -- 5. Substitution / Meenakshi Shingh Solanki, Shikha Panchal, and Ritu Vyas -- 6. Alkylation and arylation / Sanyogita Sharma, Neelam Kunwar, and Suresh C. Ameta -- 7. Addition / Abhilasha Jain, Priya Parsoya, and Dipti Soni -- 8. Cycloaddition / Abhilasha Jain, K.L. Ameta, Pinki B. Punjabi, and Suresh C. Ameta -- 9. Elimination / Chetna Ameta, Kumudini Bhanat, Arpit Kumar Pathak, and Pinki B. Punjabi -- 10. Condensation / Sanyogita Sharma, Abhilasha Jain, and Rakshit Ameta -- 11. Rearrangement / Paras Tak, Nirmala Jangid, and Pinki B. Punjabi -- 12. Coupling / Surbhi Benjamin, Neelam Kunwar, Kumudini Bhanat, and Suresh C. Ameta -- 13. Synthesis of heterocycles / Chetna Ameta, Rajat Ameta, and Seema Kothari -- 14. Nanomaterials / Surbhi Benjamin, Shweta Sharma, and Rakshit Ameta -- 15. Polymerization /

	Dipti Soni, Monika Trivedi, and Rakshit Ameta -- 16. Other reactions / Surbhi Benjamin, Paras Tak, and Rakshit Ameta -- 17. Industrial applications / Dipti Soni, Jitendra Vardia, and Rakshit Ameta -- 18. Future prospects / Rakshit Ameta.
Sommario/riassunto	The large-scale production of chemicals to meet various societal needs has created environmental pollution, including pollution from byproducts and improper disposal of waste. With the world facing adverse consequences due to this pollution, green chemistry is increasingly being viewed as a means to address this concern. Since most organic syntheses require toxic solvents, more reaction time, and drastic conditions of temperature, conventional methods of organic synthesis are less preferred. Microwave-assisted organic synthesis is considered to be a promising green chemical approach because it