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| Descrizione fisica     | 1 online resource (530 pages) : illustrations (some color), photographs   |
| Collana                | De Gruyter Textbook   |
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| Disciplina              | 541/.38   |
| Soggetti                | Radiation chemistry<br>Microwaves<br>Chemistry, Physical and theoretical  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Nota di bibliografia    | Includes bibliographical references at the end of each chapters.  |
| Nota di contenuto       | Frontmatter -- Preface / Cravotto, Giancarlo -- Contents -- List of contributors -- 1. Microwave chemistry: history, development and legacy / Cravotto, Giancarlo / Cintas, Pedro -- 2. An Introduction to dielectric heating / Veronesi, Paolo -- 3. Microwave generators, transmission, and interaction with different materials / Leonelli, Cristina -- 4. Interpretation of the rate enhancing effect of microwaves / Keglevich, György / Mucsi, Zoltán -- 5. Industrial microwave reactors: components and set up / Radoiu, Marilena -- 6. The impact of microwaves in organic synthesis / Hoz, Antonio de la / Prieto, Pilar -- 7. Chemical reactions on the interfaces of solids under microwaves / Wada, Yuji / Mochizuki, Dai / Ano, Taishi / Maitani, Masato M. / Tsubaki, Shuntaro / Haneishi, Naoto -- 8. Some aspects of catalysis with microwaves / Horikoshi, Satoshi / Serpone, Nick -- 9. Microwaves in flow chemistry / Delbecq, Frédéric / Luque, Rafael / Len, Christophe -- 10. Microwaves in green and sustainable chemistry / Díaz-Ortiz, Ángel / Carrillo, José R. -- 11. Synthesis of medium-sized heterocycles under microwave irradiation / Sharma, Abhishek / Eycken, Erik Van der -- 12. Microwaves applied to hydrothermal synthesis of nanoparticles / Wojnarowicz, Jacek / Chudoba, Tadeusz / Majcher, Andrzej / ojkowski, Witold -- 13. Microwave-assisted solvothermal synthesis of inorganic compounds (molecular and non molecular) / González-Prieto, Rodrigo / Herrero, Santiago / Jiménez-Aparicio, Reyes / Morán, Emilio / Prado-Gonjal, Jesús / Priego, José Luis / Schmidt, Rainer -- 14. Microwave-assisted synthesis of nanoparticles / Horikoshi, Satoshi / Serpone, Nick -- 15. Microwaves in polymer chemistry / Bogdal, Dariusz -- 16. Microwave extraction of natural products in the teaching laboratory: fundamentals of essential oils green extraction / Perino, Sandrine / Petitcolas, Emmanuel / Chemat, Farid -- 17. Microwave extraction of bioactive compounds from industrial by-products / Passos, Cláudia P. / Coimbra, Manuel A. -- 18. The Use of microwaves in drug discovery / Collina, Simona / Volpe, Serena Della -- 19. Microwave heating in medicinal chemistry / Engen, Karin / Sävmarker, Jonas / Odell, Luke R. / Larhed, Mats -- 20. Microwave-assisted biomass conversion / Tabasso, Silvia -- 21. Microwave technology for environmental remediation / Wu, Zhilin / Cravotto, Giancarlo -- 22. Microwaves in the omics field / Delgado-Povedano, María M. / Castro, María D. Luque de -- 23. Microwaves in sample preparation for |

elemental determination / Bizzi, Cezar Augusto / Flores, Erico Marlon de Moraes / Mesko, Marcia Foster -- 24. Microwave-assisted sample preparation for organic analysis / Barin, Juliano Smanioto / Duarte, Fábio Andrei / Mello, Paola de Azevedo / Flores, Éder Lisandro de Moraes -- 25. Microwave chemistry in the organic instructional laboratory / Morrison, Richard -- A snapshot of more common commercial microwave reactors

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