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Autore	Klapotke Thomas M.
Titolo	Chemistry of high-energy materials / / Thomas M. Klapotke
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ISBN	3-11-043047-9 3-11-043933-6
Edizione	[Third edition.]
Descrizione fisica	1 online resource (336 p.)
Collana	De Gruyter Textbook
Disciplina	662/.2
Soggetti	Explosives Explosives, Military Green technology Electronic books.
Lingua di pubblicazione	Tedesco
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Frontmatter -- Preface to this 3rd English edition -- Preface to this 2nd English edition -- Preface to the first English edition -- Preface to the first German edition -- Contents -- 1. Introduction -- 2. Classification of Energetic Materials -- 3. Detonation, Detonation Velocity and Detonation Pressure -- 4. Thermodynamics -- 5. Initiation -- 6. Experimental Characterization of Explosives -- 7. Special Aspects of Explosives -- 8. Correlation between the Electrostatic Potential and the Impact Sensitivity -- 9. Design of Novel Energetic Materials -- 10. Synthesis of Energetic Materials -- 11. Safe Handling of Energetic Materials in the Laboratory -- 12. Energetic Materials of the Future -- 13. Related Topics -- 14. Study Questions -- 15. Literature -- 16. Appendix -- Author -- Index
Sommario/riassunto	Chemistry of High-Energy Materials continues in this new and revised 3rd edition to provide fundamental scientific insights into primary and secondary explosives, propellants, rocket fuel and pyrotechnics. The contents of the previous edition were meticulously updated and recent research developments added to this graduate-level textbook. Applications in military and civil fields are discussed. Especially environmental issues caused by lead-based primary explosives,

perchlorates in pyrotechnic formulations and modern signal flare compositions are discussed and current research presented. Further additions include the understanding of the mechanism and continuing development of laser ignition methods, techniques for the characterization of detonators and their output as well as principles and effects of underwater explosions. New in the 3rd Edition: • Revised and updated content, new study problems and questions. • Extended examination of the application of ionic liquids in the field and hydrodynamics. • Intended for advanced students in chemistry, materials science and engineering, as well as to all those working in defense technology. "This book makes a nice addition to the shelf of everyone involved with energetic materials. As such it is recommended as a very useful reference for both students and experienced readers." Ernst-Christian Koch on the 2nd Edition in: Propellants Explosive Pyrotechnics 16/2011 Upcoming titles by Thomas M. Klapötke: Energetic Materials Encyclopedia (January 2018) Thomas M. Klapötke CSci CChem FRSC was from 1995 until 1997 Ramsay Professor of Chemistry at the University of Glasgow in Scotland. Since 1997 he has held the Chair of Inorganic Chemistry at LMU Munich.

2. Record Nr. UNINA9910411920803321

Titolo	Water, Flood Management and Water Security Under a Changing Climate : Proceedings from the 7th International Conference on Water and Flood Management / / edited by Anisul Haque, Ahmed Ishtiaque Amin Chowdhury
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ISBN	3-030-47786-X
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (VII, 370 p. 179 illus., 159 illus. in color.)
Disciplina	628.1 363.61
Soggetti	Pollution Environment Engineering geology Geology Environmental Sciences Geoengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	This book presents selected papers from the 7th International Conference on Water and Flood Management,with a special focus on Water Security under Climate Change, held in Dhaka, Bangladesh in March 2019. The biennial conference is organized by Institute of Water and Flood Management of Bangladesh University of Engineering and Technology. The recent decades have experienced more frequent natural calamities and it is believed that climate change is an important driving factor for such hazards. Each part of the hydrological cycle is affected by global climate change. Moreover, increasing population and economic activities are posing a bigger threat to water sources. To ensure sustainable livelihoods, safeguard ecosystem services, and enhance socio-economic development, water security needs to be investigated widely in a global and regional context.