图书基本信息

书名:《Overview's of recent research on energetic materials高能材料最新研究综览》

13位ISBN编号:9789812561718

10位ISBN编号:9812561714

出版时间:2005-8

作者: Shaw, Robert W.; Brill, Thomas B.; Thompson, Donald L.

页数:509

版权说明:本站所提供下载的PDF图书仅提供预览和简介以及在线试读,请支持正版图书。

更多资源请访问:www.tushu000.com

内容概要

Few books cover experimental and theoretical methods to characterize decomposition, combustion and detonation of energetic materials. This volume, by internationally known and major contributors to the field, is unique because it summarizes the most important recent work, what we know with confidence, and what main areas remain to be investigated. Most chapters comprise summaries of work spanning decades and contain expert commentary available nowhere else. Although energetic materials are its focus, this book provides a guide to modern methods for investigations of condensed and gas-phase reactions. Although these energetic reactions are complex and difficult to study, the work discussed here provides readers with a substantial understanding of the behavior of materials now in use, and a predictive capability for the development of new materials based on target properties.

书籍目录

IntroductionPreface1 . Connecting Molecular Properties to DecompositionCombustion , and Explosion Trends Thomas B . Brill2 . Thermal Decomposition Processes of Energetic Materials in the Condensed Phase at LOW and Moderate Temperatures Richard Behrens3 . Study of Energetic Material Combustion Chemistry by Probing Mass Spectrometry and Modeling of Flames Oleg P . Korobeinichev4 . Optical Spectroscopic Measurements of Energetic Material Flame Structure Tim Parr and Donna Hanson-Parr5 . nansient Gas-Phase Intermediates in the Decomposition of Energetic Materials Paul J . Dagdigian6 . Role of Excl-ted Electronic States in the Decomposition of Energetic Materials E . R . Bernstein7 . Gas . Phase Kinetics for Propellant Combustion Modelin9 : Requirements and Experiments William R . Anderson and Arthur Fontijn8 . Gas-Phase Decomposition of Energetic MoleculesDonald L . Thompson9 . Modeling the Reactions of Energetic Materials in the Condensed Phase Laurence E . Fried , M . Riad Manaa and James P . Lewis10 . Multi . Phonon Up . Pumping in Energetic Materials Dana D . Dlott11. Applications of Theoretical Chemistry in Assessing Energetic Materials for Performance or Sensitivity Betsy M . Rice12 . Combustion and Ignition of Nitramine Propellants : Aspects of Modelin9 , Simulation , and Analysis Eun S . Kim and Vigor Yang13 . Burnin9 . Rate Models and Their Successors , A Personal Perspective Martin S . Miller14 . Ideas to Expand Thinking About New Energetic Materials Jeffery Bottarondex

版权说明

本站所提供下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问:www.tushu000.com