1. Record Nr. UNINA9910568286403321

Autore	Gany Alon
Titolo	2021 International Conference on Development and Application of Carbon Nanomaterials in Energetic Materials / / edited by Alon Gany, Xiaolong Fu
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2022
ISBN	981-19-1774-4
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (640 pages)
Collana	Springer Proceedings in Physics, , 1867-4941 ; ; 276
Disciplina	620.115
Soggetti	Materials Carbon Chemistry Nanotechnology Energy storage Catalysis Force and energy Carbon Materials Mechanical and Thermal Energy Storage Materials for Energy and Catalysis Materials Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Carbon nanodots doped graphite carbon nitride towards highly efficient visible light driven-photocatalytic hydrogen evolution -- Effects of carbon nanofibers (CNFs) on combustion and mechanical properties of RDX-based modified single base propellant -- Preparation and performance characterization of CNTs/KNO3 composite materials -- Research on the shock ignition of CL-20 and HMX based explosives -- Molecular dynamics study on the structures and properties of CL-20/graphene composite -- Stabilization of energetic compounds into the nanoscale carbon materials: insights from computational simulations -- Preparation and characterization of CNTs@SiO2 nano-composites -- Study on mechanical properties of carbon nano -

titanium composites by prefabricated fragments -- Preparation, Structure and Performance of TKX-50/AP/GO composite -- Mechanical Response of Aramid Honeycomb Sandwich Panels Under Different Impulses -- Numerical simulation analysis of dynamic response and damage effect of tunnel structureunder internal explosion -- Research on the Energy output characteristics of underwater explosion of aluminized explosive with ETPEs as binder -- Effect of Nano-copper-Ultrafine Carbon Composite on Thermal Decomposition of CL-20 -- Progress on the carbon nanotubes applied to energetic materials -- Research progress of nano-combustion catalyst based on graphene loading technology and its application -- Mechanical, Thermal properties and ablation resistance of unsaturated polyester inhibitor by -type zirconium phosphate and multi-walled carbon nanotubes -- Simulation study on pressure relief of cabin door under explosive load in cabin -- Catalytic Performances of rGO-MFe2O4 (M=Ni, Co and Zn) for Pyrolysis of Ammonium Perchlorate -- Numerical study on impact resistance load of explosion testing pool -- Mechanical Behavior of Cast Plastic-Bonded Explosives -- An optimized preparation study for high efficient fullerene acceptor ICBA -- Influence of explosion point's position on the propagation lawof shock wave in tunnel -- Study on Preparation and Thermal Decomposition Performance of Copper AzideGraphene Nanocomposite -- A new type of stabilizer for nitrocellulose: The study of the synthesis, the character and the stability of 1,2-bis(2-(2,6-dimethoxyphenoxy)ethoxy)ethane -- Study on Preparation, Application and Modification of Flake Aluminium Powder -- Fabrication of HKUST-1 based ink for direct writing of precursors of primary explosives -- Preparation and Properties of NitrocelluloseViton Based Nano Energetic by Direct Writing -- Oxidation Mechanism of Graphene Coating on an Aluminum Slab -- Exploring the Influence of Colloidal Graphite on Granule Casting Modified Double-Base Propellant Granules -- Preparation of short rod shape CuOX/GO nanocomposites and their catalysis on AP -- Effect of Impact Fracture of RDX-Based High-Energy Gun Propellant on the Combustion Properties -- Effect of nano- LLM-105 on the performance of Modified Double Base Propellant -- Study of Three-dimensional Porous Graphene Oxide Aerogel for Catalyzing the Thermal Decomposition of Ammonium Perchlorate -- Review of graphene-based energetic compounds -- A New Insight of Carbon Blacks and Burning Catalysts in Composite Modified Double Base Propellant -- Novel Pyrazol-Functional Covalent Organic Framework for Noble-Metal Nanoparticles Immobilization -- Density Functional Theory Study on Mechanism of Enhanced Catalytic Decomposition of Nitromethane on Hydroxylated Graphdiyne -- Determination of Chlorobenzene in Graphene by Gas Chromatography Mass Spectrometry -- Simulation of impact initiation of Explosives Based on a Meshless Method -- Study on Low Vulnerability of RDX-Al based Cast Explosives -- Study on the Construction and Basic Application of Fluorinated Graphene Modified Magnesium Borohydride -- Synthesis of Co-ordination Energetic Graphene Oxide and Thermal Decomposition for the Combustion of Ammonium Perchlorate -- Research Progress on the Application of Fluorinated Graphene in Energetic Materials -- Molecular dynamics study on aging mechanism of HTPB propellants -- Research Progress on Long Storage Performance of NEPE propellant.

Sommario/riassunto

This book features selected papers presented at the 2021 International Conference on Development and Application of Carbon Nanomaterials in Energetic Materials. It discusses the latest progress in the field of advance carbon nanomaterials in energetic materials; including the structural design, theoretical calculation, synthesis, properties, and

applications of carbon materials. It also presents the new technology and applications of advanced carbon nanomaterials in energetic materials. It can be used as a reference book for researchers in energetic materials and related fields. It is also be useful for undergraduates and postgraduates studying these topics.