

1. Record Nr.	UNINA9910467807803321
Titolo	Preparedness and response for catastrophic disasters // edited by Rick Bissell, Steven Jensen and Shirley Feldman-Jensen
Pubbl/distr/stampa	Boca Raton, FL : , : CRC Press, an imprint of Taylor and Francis, , 2013
ISBN	0-429-25352-4 1-4665-1191-5
Edizione	[First edition.]
Descrizione fisica	1 online resource (407 pages) : illustrations
Disciplina	363.34/7
Soggetti	Emergency management Preparedness - Government policy Disaster relief - Finance Emergency management - United States Preparedness - Government policy - United States Disaster relief - United States - Finance Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	chapter 1 What Is a Catastrophe, and Why Is This Important? -- chapter 2 - Understanding Catastrophes: A Discussion of Causation, Impacts, Policy Approaches, and Organizational Structures -- chapter 3 Ethics in Catastrophe Readiness and Response -- chapter 4 - Political and Legal Issues -- chapter 5 - Economics of Catastrophes and Disasters -- chapter 6 - Logistics and the Management of Critical Supplies Following Catastrophes -- chapter 7 Overview of Critical Infrastructure in Catastrophes -- chapter 8 - Public Health Role in Catastrophes -- chapter 9 - Catastrophes, Mass Displacement, and Population Resettlement -- chapter 10 - Emergent Organizations and Networks in Catastrophic Environments -- chapter 11 Methods of Planning and Response Coordination -- chapter 12 - Catastrophic Disaster Recovery: An Institutional Network Perspective -- chapter 13 - Pandemic Scenario -- chapter 14 - Training and Exercises for Catastrophes -- chapter 15 - Catastrophes in Haiti and Japan -- chapter 16 - Summary and Call to Action.

Based on a popular course for the FEMA Higher Education project, *Preparedness and Response for Catastrophic Disasters* provides important insight into plans to mitigate and respond to the devastation caused by large-scale catastrophic events. Hurricane Katrina provided clear evidence that these occurrences are both qualitatively and quantitatively different from other disasters. Recent tragedies, like the 2004 South Asia tsunami, the 2010 earthquake in Haiti, and the 2011 earthquake, tsunami, and resulting nuclear plant meltdown in Japan further illustrate that we are not prepared for such events. Written by top disaster scholars and practitioners, the book defines what constitutes a catastrophic event, outlining both the factors that can lead to catastrophes and the unique logistical, planning, and response challenges posed by them. Distinct from general disasters, these events are termed "catastrophic" due to the regional impact, impacts to logistics and infrastructure, the devastating effects on large-scale populations, and the ripple effects on regional and global economies. *Preparedness and Response for Catastrophic Disasters* examines why catastrophes must be approached differently. If governments, public administrators, and emergency management professionals are to succeed in protecting our populations, there must be consensus, decisiveness, and leadership in both the coordination and response. In addition, there must be a fundamental recognition that catastrophic events compromise the very infrastructure—public utilities, delivery of goods and service, schools, business functions, and government—that supports communities and upon which modern society is based. As such, the book explores how catastrophes can dramatically affect populations and addresses new, innovative, and fundamentally unique strategies communities can institute to better prepare populations for catastrophic events and their aftermath.

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2. Record Nr.	UNINA9910767559503321
Autore	Ikhmayies Shadia Jamil
Titolo	Advanced Composites // edited by Shadia Jamil Ikhmayies
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031427312 3031427319
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (655 pages)
Collana	Advances in Material Research and Technology, , 2662-477X
Disciplina	620.118
Soggetti	Composite materials Metals Composites Metals and Alloys
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Classification and Application of Advanced Composite Materials -- Chapter 2: Advanced Composites of Nanomaterials and their Applications -- Chapter 3: Advances in Composites for Solid-phase (Micro) extraction -- Chapter 4: Composite Materials for Ballistic Applications -- Chapter 5: Additive manufacturing for complex geometries in polymer composites -- Chapter 6: Eco/Friendly polymer-based composites for nuclear shielding applications -- Chapter 7: Mechanical and Tribological Behaviour of Hybrid Polymer and Hybrid Sandwich Composites -- Chapter 8: Nanocomposites Based on Conducting Polymers and Nanomaterials Derived from Natural Polymers -- Chapter 9: Mechanical and sliding wear performance of ZA27-Gr alloy composites for bearing applications: Analysis using Preference Selection Index Method -- Chapter 10: Mechanical and Tribological aspects of Aluminium alloy composites for Gear application - A Review -- Chapter 11: Microcavity Mediated Light Emissions from Plasmonic and Dielectric Composites -- Chapter 12: Fabrication and Application of Graphene Composite Materials -- Chapter 13: Sustainable grinding performances of Nano SiC reinforced Al matrix composites under Minimum Quantity Lubrication (MQL) -- Chapter 14: Waste-based zeolites and their advanced composites for wastewater and

environmental remediation applications -- Chapter 15: Advanced composites for drug adsorption -- Chapter 16: Advances in manufacturing and processing of discontinuous particle reinforced titanium matrix composites (TMCs) -- Chapter 17: Metal based Electrical Contact Materials -- Chapter 18: Organosulfur polymer composites by free radical polymerization of sulfur with vegetable oils -- Index.

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## Sommario/riassunto

This book presents a comprehensive collection of reviews and experimental research findings in the realm of composite materials. It explores manufacturing technologies and applications, as well as recent breakthroughs in nanomaterial-based composites, polymer-based composites, titanium matrix composites (TMCs), conducting polymers, natural polymers, graphene polymers, graphene composites, and organosulfur polymeric composites, alongside reinforced aluminum matrix composites. The mechanical and tribological aspects take center stage, with a focus on aluminum alloy composites as a superior alternative to traditional gear materials. The book also addresses cutting-edge composite materials developed for drug removal via adsorption techniques, radiation shielding, and their use as shielding absorbers for ionizing radiation. Furthermore, the significance of electrical contact materials and their performance is explored. The book unveils fabrication methods, sample preparation techniques, properties, and various applications of these remarkable composites. Topics range from additive manufacturing to solid-phase extraction and solid-phase microextraction utilizing diverse composites as adsorbents. Additionally, the inverse vulcanization process, a novel technique involving the copolymerization of elemental sulfur with different monomers based on their resource origins, is discussed. Technologies such as powder metallurgy (PM), mechanical alloying (MA), self-propagating high-temperature synthesis (SHS), and rapid solidification processing (RSP) are described. The book further delves into the preparation techniques of zeolite using both conventional and advanced methods, along with the synthesis of various zeolite-based composites, particularly their application in environmental remediation. The book culminates with a summary of analysis and modeling techniques used in composite materials, including those employed in ballistic applications.

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