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Sommario/riassunto

The preparation and characterization of various nano-scaled materials and their applications in diverse security and safety- related fields. Readers are provided with a broad overview on the topic as it combines articles addressing the preparation and characterization of different nano-scaled materials (metals, oxides, glasses, polymers, carbon-based, etc.). The contributions derive from the lectures and contributions of the NATO Advanced Study Institute meeting “Nanoscience Advances in CBRN Agents Detection, Information and Energy Security” held in Sozopol, Bulgaria, 29 May - 6 June, 2014. In addition, it presents an interdisciplinary approach, utilizing Nanoscience and Nanotechnology research from different disciplines including; physics, chemistry, engineering, materials science and biology. A major advantage of this book, which represents the knowledge of experts from 20 countries, is the combination of longer papers introducing the basic knowledge on a certain topic, and brief contributions highlighting specific applications in different security areas.
