Record Nr. UNINA9910298623203321 Thin Film Structures in Energy Applications / / edited by Suresh Babu **Titolo** Krishna Moorthy Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2015 **ISBN** 3-319-14774-9 Edizione [1st ed. 2015.] 1 online resource (300 p.) Descrizione fisica 620.44 Disciplina Soggetti Surfaces (Technology) Thin films Energy storage **Energy systems** Surfaces and Interfaces, Thin Films **Energy Storage Energy Systems** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Thin film – deposition, growth aspects and characterization -- Coatings for Energy Applications -- Ternary and quaternary semiconducting compounds thin film solar cells -- Organic Semiconductors: A New Future of Nano Devices and Applications -- Titania Nano-architectures for energy -- State-of-the-art thin film electrolytes for solid oxide fuel cells -- Thin film thermoelectric materials for sensor applications: An overview -- Electroluminescent Thin Film Phosphors -- Thin Films for Energy Efficient Mechanical Tools. Sommario/riassunto This book provides a comprehensive overview of thin film structures in energy applications. Each chapter contains both fundamentals principles for each thin film structure as well as the relevant energy application technologies. The authors cover thin films for a variety of energy sectors including inorganic and organic solar cells, DSSCs, solid

oxide fuel cells, thermoelectrics, phosphors and cutting tools.