Record Nr. UNINA9910727288303321 Thin films: deposition methods and applications / / edited by **Titolo Dongfang Yang** Pubbl/distr/stampa London:,:IntechOpen,,2023 **ISBN** 1-80356-456-3 Descrizione fisica 1 online resource (222 pages) 621.38152 Disciplina Soggetti Thin films Ferroelectric thin films Zinc oxide thin films Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1. Thin Film Deposition Technologies and Application in Photovoltaics -- 2. Sputtering Deposition -- 3. Thin Films Processed by SILAR Method -- 4. Depth Profiling of Multilayer Thin Films Using Ion Beam Techniques -- 5. Encapsulation of Perovskite Solar Cells with Thin Barrier Films -- 6. Spin Pumping in Magnetostrictive Ta/FeGaB/Ta Multilayer Thin Films -- 7. Photoactive Heterostructures Based on -Fe2O3 and CuO Thin Films for the Removal of Pollutants from Aqueous Solutions -- 8. Pulsed Laser Deposition of Transparent Conductive Oxides on UV-NIL Patterned Substrates for Optoelectronic Applications -- 9. Development and Applications of Aluminum Nitride Thin Film Technology -- 10. Thin-Film Batteries: Fundamental and Applications. A thin film is a layer of material ranging from fractions of a nanometer Sommario/riassunto to several micrometers in thickness. Thin films have been employed in many applications to provide surfaces that possess specific optical, electronic, chemical, mechanical and thermal properties. Through ten chapters consisting of original research studies and literature reviews written by experts from the international scientific community, this book covers the deposition and application of thin films.