Record Nr. UNINA9910416139903321 Recent Advances in Thin Films [[electronic resource] /] / edited by **Titolo** Sushil Kumar, D. K. Aswal Pubbl/distr/stampa Singapore:,: Springer Singapore:,: Imprint: Springer,, 2020 **ISBN** 981-15-6116-8 Edizione [1st ed. 2020.] 1 online resource (721 pages): illustrations Descrizione fisica Collana Materials Horizons: From Nature to Nanomaterials, , 2524-5384 Disciplina 620.44 Materials—Surfaces Soggetti Thin films Tribology Corrosion and anti-corrosives Coatings Surfaces (Physics) Interfaces (Physical sciences) Optical materials Electronic materials Nanotechnology Surfaces and Interfaces, Thin Films Tribology, Corrosion and Coatings Surface and Interface Science, Thin Films Optical and Electronic Materials Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Thin Film and Significance of its Thickness -- Ultra-Thin Films on Nota di contenuto Complex Metallic Alloy Surfaces: A Perspective -- Growth Defects in PVD Hard Coatings -- Growth Dynamics of Epitaxial Gallium Nitride Films grown on c-Sapphire Substrates -- High-Density Nonmagnetic Cobalt in Cobalt Thin Films -- Synthesis, Stability and Self-Diffusion in Iron Nitride Thin Films: A Review -- Photoelectron Energy Loss

Spectroscopy: A Versatile Tool for Material Science -- MoS2- and MoO3-Based Ultrathin Layered Materials for Optoelectronic

Applications.

Sommario/riassunto

This volume comprises the expert contributions from the invited speakers at the 17th International Conference on Thin Films (ICTF 2017), held at CSIR-NPL, New Delhi, India. Thin film research has become increasingly important over the last few decades owing to the applications in latest technologies and devices. The book focuses on current advances in thin film deposition processes and characterization including thin film measurements. The chapters cover different types of thin films like metal, dielectric, organic and inorganic, and their diverse applications across transistors, resistors, capacitors, memory elements for computers, optical filters and mirrors, sensors, solar cells, LED's, transparent conducting coatings for liquid crystal display, printed circuit board, and automobile headlamp covers. This book can be a useful reference for students, researchers as well as industry professionals by providing an up-to-date knowledge on thin films and coatings.