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<b>Titolo</b>	Advances in Thin Films, Nanostructured Materials, and Coatings : Selected Papers from the 2018 International Conference on "Nanomaterials: Applications & Properties" / / edited by Alexander D. Pogrebniak, Valentine Novosad
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<b>Soggetti</b>	Surfaces (Technology) Thin films Microtechnology Microelectromechanical systems Surfaces (Physics) Nanochemistry Materials - Analysis Materials Surfaces, Interfaces and Thin Film Microsystems and MEMS Surface and Interface and Thin Film Characterization and Analytical Technique Materials Engineering
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<b>Nota di contenuto</b>	Thin Film Deposition by Plasma Beam of a Vacuum Arc with Refractory Anodes -- Multilayer Design of CrN/MoN Superhard Protective Coatings and Their Characterisation -- Structure and Properties of Combined Multilayer Coatings Based on Alternative Triple Nitride and Binary Metallic Layers -- DSC Investigations of the Effect of Annealing Temperature on the Phase Transformation Behaviour -- Microstructure and Mechanical Properties of Multilayered -AIN/-BCN -- Mass Transfer Model of Sputtering from Rod-Like Targets for Synthesis of

Multielement Nanocoatings -- Self-Organized Growth by Sputtering and Other PVD Techniques -- On the Possibility of Training Demonstration of the Giant Magnetoresistance Effect in Higher School -- Multifractal analysis of the surfaces of protective (TiAlSiY)N, Me<sub>1-x</sub>N/CrN and Me<sub>1-x</sub>N/ZrN coatings.

**Sommario/riassunto**

This book highlights the latest advances in chemical and physical methods for thin-film deposition and surface engineering, including ion- and plasma-assisted processes, focusing on explaining the synthesis/processing-structure-properties relationship for a variety of thin-film systems. It covers topics such as advances in thin-film synthesis; new thin-film materials: diamond-like films, granular alloys, high-entropy alloys, oxynitrides, and intermetallic compounds; ultra-hard, wear- and oxidation-resistant and multifunctional coatings; superconducting, magnetic, semiconducting, and dielectric films; electrochemical and electroless depositions; thin-film characterization and instrumentation; and industrial applications.