

Preface

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This special issue of American Journal of Condensed Matter Physics focuses on the development of applications, theory and processing of thin films. It is very important to know the fundamental relationships of the growth of thin films in order to better understand the processes which govern the properties of different materials and compounds.

Thin film materials for various application such as renewable energy, microelectromechanics systems (MEMS), aeronautics, metallurgy, electronics, medicine and biotechnology are the main purposes of this special issue. Both theoretical (numerical simulations and analytical formulations) and experimental works has been done for better understand the chemical and physical processes that involves the production and characteristics of thin films. In this special edition novelties as the production of thin films through the use of electrical microdischarges generated at moderate to high pressures are presented. Some new and ever interesting topics concerning photovoltaic cell production or interface solid state reactions are also aborded. This special issue on thin films is therefore an important source for students, academics and in general researchers interested to learn more on the fundamental processes and applications related to thin films.

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