1. Record Nr. UNINA9910495215603321

Titolo	Advanced Applications of 2D Nanostructures : Emerging Research and Opportunities / / edited by Subhash Singh, Kartikey Verma, Chander Prakash
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2021
ISBN	981-16-3322-3
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (274 pages)
Collana	Materials Horizons: From Nature to Nanomaterials, , 2524-5392
Disciplina	620.112
Soggetti	Nanotechnology Nanochemistry Materials Chemistry Nanoscale Design, Synthesis and Processing Materials Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction, History and Origin of Two Dimensional (2D) Materials -- Different types and intense classification of 2D Materials -- Different Techniques for Designing and Fabrication of 2D Materials -- 2D Graphene oxide based composites and their application in catalysis and sensing -- Nanostructured 2D Materials as Nano Coatings and Thin Films -- MXene: A non-oxide next generation energy storage materials for batteries and supercapacitors -- Nano coatings and thin films of 2D nanomaterials as transparent conductivity electrodes -- 2D-Metal Oxide Nanosheets (MO-NSs) in Electronic Applications -- Modeling and Simulation of Nano-structured 2D Materials -- Nobel corrosion properties of 2D Nanostructure for advanced applications. .
Sommario/riassunto	This book focuses on both recent advances and the applications of two-dimensional (2D) nanomaterials in different fields. This book encapsulates all the aspects related to 2D nanomaterials and their applications. It provides scientific and technological insights on novel routes of design and fabrication of few layered nanostructures and their hetero structures based on a variety of 2-D layered materials. It

also covers a wide range of industrial applications of 2D nanomaterials. It emphasizes on the detailing of the various characterization techniques used. The book will be a valuable reference for beginners, researchers, and professionals interested in nano-materials and allied fields.