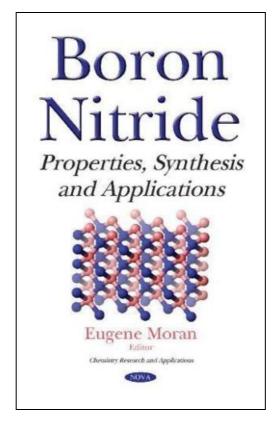
Boron Nitride: Properties, Synthesis & Applications (Hardback)



Filesize: 3.84 MB

Reviews

This written publication is wonderful. It is probably the most incredible publication i actually have read through. Its been written in an extremely basic way in fact it is merely following i finished reading this publication where basically transformed me, alter the way i believe.

(Adan Fritsch)

BORON NITRIDE: PROPERTIES, SYNTHESIS & APPLICATIONS (HARDBACK)



Nova Science Publishers Inc, United States, 2017. Hardback. Condition: New. Language: English. Brand new Book. A hexagonal boron nitride nanosheet (BNNS) is an atomic-thick 2D material that exhibits many interesting properties such as high chemical stability and excellent mechanical and thermal properties. In Chapter One, the authors introduce two methods for the exfoliation of BNNS from hexagonal boron nitride (hBN). Then, methodologies for the surface functionalisation and nanocomposite construction are demonstrated by two BNNS based nanocomposites. The catalytic performance of the BNNS based nanocomposites is also evaluated and discussed in detail. Chapter two evaluates the formation of rolled hexagonal boron nitride nano-sheets (h-BN nanoscrolls) on their unique morphology, magnetic properties and applications. Due to the high chemical and thermal stabilities, as well as atomically smooth surfaces with free of dangling bonds, hBN has been used as barriers, passivation and support layers in 2D electronic devices, to maximise the electrical and optical characterisation of 2D materials. However, there still remains a challenge in obtaining large-area and high-quality hBN film for real 2D electronic devices. Chapter Three focuses on chemical vapor deposition (CVD), a promising method to overcome these limitations. Chapter Four discusses how a boron doped armchair graphene ribbon has been shown by cyclic voltammetry to be a potential catalyst to replace platinum, however the reaction catalysed was not identified. The authors use density functional calculations to show the reaction catalysed is likely dissociation of HO2. Chapter Five reveals a novel and industrially feasible route to incorporate boron nitride nanoparticles (BNNPs) in radiation-shielding aerospace structural materials. Chapter Six deals with the preparation and characterisation of boron nitride nanotube (BNNT)-reinforced biopolyester matrices. The morphology, hydrophilicity, biodegradability, cytotoxicity, thermal, mechanical, tribological and antibacterial properties of the resulting nanocomposites are discussed in detail. Chapter Seven presents theoretical estimations regarding the compressive buckling response of...



Read Boron Nitride: Properties, Synthesis & Applications (Hardback) Online Download PDF Boron Nitride: Properties, Synthesis & Applications (Hardback)

See Also



That's Not the Monster We Ordered (Hardback)

Skyhorse Publishing, United States, 2016. Hardback. Condition: New. Richard Fairgray, Terry Jones (illustrator). Language: English. Brand new Book. The day the Turner family gets their very own monster is a momentous event in the neighborhood....

Read Document

>>



Addressing Special Educational Needs and Disability in the Curriculum: Religious Education (Hardback)

Taylor & Francis Ltd, United Kingdom, 2017. Hardback. Condition: New. 2nd New edition. Language: English. Brand new Book. The SEND Code of Practice (2015) reinforced the requirement that all teachers must meet the needs of...

Read Document

>>



Scientific and Applied Pharmacognosy, Intended for the Use of Students in Pharmacy, as a Hand Book for Pharmacists, and as a Reference Book for Food and Drug Analysts and Pharmacologists (Hardback)

Franklin Classics, United States, 2018. Hardback. Condition: New. Language: English. Brand new Book. This work has been selected by scholars as being culturally important and is part of the knowledge base of civilization as we...

Read Document

»



Scientific and Applied Pharmacognosy: Intended for the Use of Students in Pharmacy, as a Hand Book for Pharmacists, and as a Reference Book for Food and Drug Analysts and Pharmacologists (Hardback)

Arkose Press, United States, 2015. Hardback. Condition: New. Language: English. Brand New Book ***** Print on Demand *****. This work has been selected by scholars as being culturally important, and is part of the knowledge...

Read Document

»



Reading Matthew as the Climactic Fulfillment of the Hebrew Story (Hardback)

Wipf & Stock Publishers, United States, 2015. Hardback. Condition: New. Language: English. Brand new Book. This book is a reading of Matthew's Gospel as though it were written to integrate with, advance, and conclude the...

Read Document

»