



## Boron Nitride: Properties, Synthesis & Applications (Hardback)

By -

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...



**READ ONLINE**  
[ 4.85 MB ]

### Reviews

*Excellent electronic book and valuable one. Better then never, though i am quite late in start reading this one. I am very easily can get a delight of studying a written book.*

-- **Anastacio Kreiger DDS**

*This ebook is amazing. It typically will not price excessive. I discovered this pdf from my dad and i recommended this publication to learn.*

-- **Rhoda Leffler**