Special Issue

Advanced Research of Graphene Oxide-Based Materials for Catalysis

Message from the Guest Editors

It is well known that materials play a crucial role in the development of science and technology, because the realization of a new technology often requires the support of novel materials. Therefore, exploring materials with excellent properties has always been an important subject of scientific research. A remarkable material, graphene, has attracted widespread attention since it was first exfoliated from graphite by Andre Geim and Konstantin Novoselov in 2004. It has been prepared via the thermal decomposition of SiC wafer under ultrahigh vacuum (UHV) conditions, via chemical vapor deposition (CVD) growth on metal substrates (Ni and Cu), or via substrate-free CVD. This is a mass production method that is potentially able to produce graphene for electronics applications. In addition, graphene can also be prepared at a larger scale via liquid-phase exfoliation to form a graphene oxide (GO) intermediate, followed by reduction to restore the graphene structure (rGO). This is also considered the most economical way to produce graphene.

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Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

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