allied academies

International Conference on
NANOSCIENCE & TECHNOLOGY
May 21-22, 2018 | New York, USA

New carbon allotropes, their synthesis, properties and applications

Oxana V Kharissova
Autonomous University of Nuevo Leon, Mexico.

The structural, mechanical, physical, and chemical properties of recently discovered and developed nanocarbon allotropes are discussed. These nanostructures include nanotori, nanobuds, graphene and its derivatives: graphene nanoribbons, graphyne, graphdiyne, graphone, and graphane. Graphyne and graphdiyne (2D carbon allotropes on graphene basis having honeycomb structures), graphone and graphane (hydrogenated graphene derivatives) are currently less-known and will be examined in detail. The synthesis of all these materials, their existing and potential applications in nanotechnology and materials chemistry and physics are examined. These carbon allotropes are promising for next generation of flexible electronics, nanoelectronics and spintronics, as well as ITO substituents, sensors, lubricants, gas storage media, in biomedicine and catalysis, among many other applications.

e: bkhariss@hotmail.com

Notes: