Carbon nanotube and graphene fibers: Synthesis, properties and functional applications

Due to the unique structures and supreme mechanical, electrical and thermal properties, carbon nanotube and graphene are ideal building blocks for super fibers which own great potential applications in many fields. However, the lack of effective assembles technique makes it is of great challenges in obtaining strong nanocarbon fibers with multifunctional properties and applications. Here we will talk about our concerned work on the synthesis, assembly and mechanical properties of carbon nanotube and graphene fibers, and their applications in fields such as EMI, energy will be included as well.

Biography

Yongyi Zhang received his BS degree in Chemistry from Beijing Normal University in 2002 in China and PhD in Physical Chemistry from Peking University in China in 2008. He worked as a Post Doc. in University of Michigan, Ann Arbor and University of South Dakota in USA from 2008 to 2011. Dr. Zhang has been appointed as an associate Professor since 2011 and became a Professor at the Advanced Material Department at Suzhou Institute of Nano-Tech and Nano-Bionics, Chinese Academy of Sciences since 2017. He is also the director of the Nanomaterials Department at Suzhou Institute of Nano-Tech and Nano-Bionics, Nanchang, Chinese Academy of Sciences since 2017. His interests include the synthesis, assembly, properties and applications of carbon nanotube and graphene fibers. He has published over 40 papers and applied over 40 patents.

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