Carbon fiber mat

Method of Preparing Doped and/or Composite Carbon Fibers

The invention relates to development and production of graphene, hybrid carbon structures, functionalized carbon structures, carbon fiber composites reinforced with micron, submicron, and nanometer size structures, carbon nanorods, and carbon hollow cubes. These attractive carbon-based structures are developed by subjecting polymer base systems to centrifugal spinning and dehydrating them in sulfuric acid vapor and/or short heat treatment.
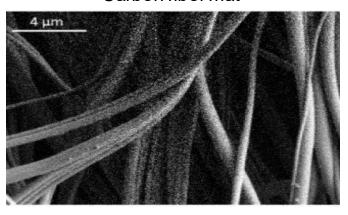
Problem

Graphene is usually developed through the Hummers process or other methods that have not proven scalability and have been considered not cost-effective.

Solution

This invention improves scalability issues of producing graphene structures and provides a cost-effective alternative method to produce a variety of carbon nanostructures

Value Proposition

This invention presents an effective method to develop composite carbon fibers, doped with several carbon-based structures, which improves scalability of producing graphene, and variety of carbon nanostructures in a relatively cost-effective way.

Competitive Advantages

- Cost Effective

- High scalability potential

- Ease of process

- High thermal and electrical conductivity

Status of Development

- Seeking commercial partners

IP Status

- Patent # US10422054

- Licensing available

For further information regarding this Technology please contact:
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