



Graphene quantum dots and method of making

UND Technology 13-24

Patent Number US 9,637,443

Date of Issuance: 2 May 2017

Summary

The University of North Dakota has patented a method for forming graphene quantum dots. The method includes adding an organic starting material to a vessel and heating the organic starting material to a temperature near the organic starting material's boiling temperature. The starting material can be an amino acid and water and alcohols can be used as solvents. The graphene quantum dots can be sensed by exciting the graphene quantum dots and measuring the wavelength and energy of the emitted waves.

Advantages

- Requires less harsh operating conditions
- Quicker reaction times
- Simpler process
- Alternative to “bottom-up” and “top-down” production methods

Inventors

Dr. Julia Xiaojun Zhao

Dr. Xu Wu

