

Review of: "The importance of the nanoscale is in changing the properties and characteristics of materials in these dimensions"

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Potential competing interests: No potential competing interests to declare.

Note: Nanostructure is defined as any structure with one or more dimensions and is measured in the range of nanometer scale.

Nanostructures are materials or structures that have at least one dimension between 1 and 100 nanometers. The importance of the nanoscale is in changing the properties and characteristics of materials in these dimensions. Properties such as electrical conductivity, electromagnetic properties, etc. Starting to change the properties of the material by shrinking it depends above all on the type of material and the desired property. For example, by shrinking the dimensions of a material, generally, some of the electromagnetic properties of nanomolecular materials, such as the conductivity of nano particles in materials, are improved. This increase in strength does not happen only in the range of a few nanometers, and the strength of materials of several tens or even hundreds of nanometers may be much more than the mass material of a large scale. On the other hand, the change of some properties such as conductivity in electromagnetic properties in nanowires can occur in dimensions of only a few nanometers. Self-assembly (nanoparticles) into nanostructures is a spontaneous process by which nanomolecules/nanophases are transformed into organized functions. Two important types of nanostructures are conductive nanoparticles (microstructured particles, mostly semiconducting materials) and a> (tiny tubes, usually made of pure carbon). Self-assembled nanoparticles made of semiconductors change nanostructures depending on their scale size.

CNT carbon nanotubes can be large amounts transfer electric current, much more than graphene nanowires and nanoribbons generally self-aggregate in nanostructures, increasing nanoelectromagnetic interaction (nanoparticles) in conductive nanomaterials and semiconductors. Nanotubes are CNTs

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