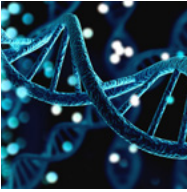




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Research Topics

**Nanotechnology-based
study of the physical
properties of the DNA
molecule**

Frontiers in Nanotechnology



The physical properties of the DNA molecule are the basis for its use in nanotechnology. The potential real-world applications of DNA nanotechnology, the potential of synthetic DNA nanostructures for personalized drugs and therapeutics are a matter of interest within the nanomaterials science studies. The ability of nucleic acid arrays to arrange other molecules indicates its potential applications in molecular scale electronics. This Research Topic focuses on the investigation of the physical properties of the DNA molecule as the basis of nanodevices and nanotechnologies and a wide range of applications of the DNA molecule and DNA-like helices in nanotechnology applications. The creation of a physically-based model of the DNA replication process, alongside a computer model that considers electromagnetic forces is of particular interest. Possible determination of causes and conditions for the early-onset cancer at the DNA level are also of interest.

For more information

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