

NANOTECHNOLOGY AND ITS APPLICATION

IN ELECTRONICS AND COMPUTERS

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Nanotechnology is the process of development and production of material microparticles. Nanometer is the main measurement unit in this area. Basis of nanotechnology is a highlight material microparticles with 100 nanometers size. At least today nanotechnology just have started grow. It is widely used in microelectronics, chemical industry and robotics.

Computers and the industries around them are set to be advanced a further giant step with the application of nanotechnology.

Nanotechnology gives scope to develop new ideas and methods of running super-fast processors, storing data, and many other computational advances.

Intel and other computer-chip companies already sell tens of billions of dollars worth of chips every year packed with electronic circuitry patterned down to the nanoscale. Computer hard drives, LED-based traffic signals, CD players, and low-friction coatings account for billions more in sales.

There are 4 fields of nanotechnology application: nanocomputers, spintronics, magneto electronics and nanoelectronics.

Nanotechnology could prove to be a “transformative” technology comparable in its impact to the steam engine in the 18th century, electricity in the 20th century, and the internet in contemporary society. Scientists have already developed nano-applications that are radically transforming a host of products and services, including battery-storage capacity, computer-chip minimization, drug delivery, facial creams, food processing, solar energy and water purification. But the development of nanotechnology in our country has not reached a high level yet.