

Review of: "One of the goals of nanotechnology is to advance in the field of electronics and computer science, to make memories and chips with more capabilities and less cost"

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Using particles from the microscale to the nanoscale provides benefits for various scientific fields, but because a large percentage of their atoms are on the surface, nanomaterials can be highly reactive and pose risks for humans. Nanoparticles are of great interest due to their wide application, both in industry and in the natural sciences.

While natural materials have constant physical properties regardless of size, the size of a nanoparticle determines its physical and chemical properties. Therefore, the properties of a material change as its size approaches the nanoscale and the percentage of atoms on the surface of the material becomes significant. The important feature of all nanostructures is that in which the number of surface atoms is more than the number of volume atoms. This ratio increases with decreasing nanoparticle size. Therefore, the size of the nanoparticle is considered its most important feature. The range of activity of nanoparticles depends on the nature and shape of the nanostructure. However, if the energy of the nanoparticle field is comparable to the energy of electromagnetic radiation and if in a certain range a wavelength with the occurrence of chemical reactions in materials. Under irradiation, significant changes will be made in the activity of nanoparticles up to 100 nm in size, the nanometer is expected to be used for storage. Given the relatively large (physically speaking) storage devices we have now and the fact that we need gigabyte sizes in various areas, there is a high potential for activity in this context. Each quantum dot consists of a discrete ball of several hundred atoms that can have one of two magnetic states. This allows them to contain a single bit of information (zero or one), as is customary in machine computing. In conventional hard disks, the data bits must be spaced far enough apart that they do not overlap. Quantum dots act as completely independent units that are not structurally connected, so they can become somewhat closer to each other. One of the new information storage tools is the use of nickel quantum dots in nanometer sizes, which are expected to be used to store terabytes of data. According to nanomolecular memory, there is a high potential for activity in this field.

One of the goals of nanotechnology is to advance in the field of electronics and computer science, to make

memories and chips with more capabilities and less cost. As explained above, achieving goals in this area will eliminate many defects in machines, especially memories and assemblers, which will be a huge revolution in the electronics industry in the field of nanotechnology. This allows them to contain a single bit of information (zero or one), as is customary in machine computing. In conventional hard disks, the data bits must be spaced far enough apart that they do not overlap. Quantum dots act as completely independent units that are not structurally connected, so they can become somewhat closer to each other. Quantum dots act as completely independent units. They are not structurally connected, so they can be somewhat closer to each other.

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References

1. ^ Afshin Rashid. (2023). *Review of: "Nano electrical memories and testing Nickel nanoparticles NI_nanoparticle Strong conductors of electric current"*. Qeios. doi:10.32388/sbe8l8.
2. ^ Criystian Orlando. (2023). *Review of: "nanowires by focused ion beam (FIB) nanolithography method"*. Qeios. doi:10.32388/vxmrt2.
3. ^ Martin Harisson. (2023). *Review of: "vanillin nanowires by focused ion beam (FIB) nanolithography method (below 1 · · nm - 1 · nm range)"*. Qeios. doi:10.32388/zhw4v2.
4. ^ Marisa Begovich. (2023). *Review of: "multi-layer Si graphene field effect nano transistor, a 3D channel"*. Qeios. doi:10.32388/ssge50.
5. ^ Janta Rico. (2023). *Review of: "Nanowires (SiNWs) have high mobility and surface-to-volume ratio, which makes them easy to control using a weak electric field."*. Qeios. doi:10.32388/0oft3n.
6. ^ Afshin Rashid. (2023). *Review of: "Reproduction (electrical nano memories) by the method combined nanolithography (1Y V), Fast switching speed (1 microsecond)"*. Qeios. doi:10.32388/jg1x8x.
7. ^ Afshin Rashid. (2023). *Review of: "Experiment (nanoelectronic memory) using small organic molecules Chlorophyll pseudo instead of charge storage capacitors"*. Qeios. doi:10.32388/k0x2ro.
8. ^ Carlos Sanchez. (2023). *Review of: "Nanowires (SiNWs) have high mobility and surface-to-volume ratio"*. Qeios. doi:10.32388/u7jf5u.
9. ^ Janet Santos. (2023). *Review of: "Silicon nanowires SiNWs"*. Qeios. doi:10.32388/n3sxxk.
10. ^ Afshin Rashid. (2023). *Review of: "Propagation of Oligophenylene vanillin nanowires by focused ion beam (FIB) nanolithography method (below 1 · · nm - 1 · nm range)"*. Qeios. doi:10.32388/whhfa8.
11. ^ Anita Gupta. (2023). *Review of: "Amplification of Nano Wires Nano Wire by Electron Nano Lithography"*. Qeios. doi:10.32388/l3md1n.
12. ^ Afshin Rashid. (2023). *Review of: "The concept of (Nano assembler) in smart electronic nano structures"*. Qeios. doi:10.32388/atyte1.
13. ^ Martin Galardo. (2023). *Review of: "Uniform nanowires (Nano Wire)"*. Qeios. doi:10.32388/rhn9jj.

