

EXTRACTION, PROPERTIES AND TECHNOLOGY OF IONITES BASED ON AN INORGANIC MATRIX

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ANNOTATION

Nanotechnology is the technology of complexes for the operation and extraction of materials that ensure the extraction of bodies in nanowires for the desired purposes. Thus, "nanomaterial" is a solid body with new properties, depending on the size from 1 to 100 nm. As such, nanotechnology limits new effects that appear on bodies, while nanotechnology limits nanometers are confused with the technologies for obtaining substances.

Key words: such elements of Science, clamped provides information

DNA, which is located at a distance of 0.3 nm from each other in Uzi and has the property of collecting information through the sequential order of arrival of base pairs in itself, is considered one of the most perfect nanojisms. A DNA molecule that is clamped provides information with a data density equal to 1 Tb of CM-2 (1 tb of 10¹² bits).

Photosynthesis, which converts solar energy into biologically useful chemical energy, carrying out a separately obtained electrical charge, is also again an example of biological nanotechnology. The use of Nano catalysts in the process of converting solar energy into electrical energy using photo galvanic materials indicates that solar energy can be changed in Nan.

People have used such elements of Science with craftsmanship for over 100 years. For example, in the case of colored glass, if gold salts are added to the bottle, the color of the bottle will be red, if silver salts are added; it has long been known that the color of the bottle is yellow.

In colored glass, metal atoms form nanoparticles (previously called colloidal particles), so that the optical properties of the solution depend on their size. Nano pigments in the metallic state are the center of medicine Biotechnology, which is used in the designation of DNA and other nanoparticles. As an example of other traditional nanotechnology; light-sensitive silver halide emulsions can be obtained. They are nanoparticle-state carbon granules Bol'b used in photography, for the purpose of attaching car tires and typographic paints.

Nanotechnology as a science and technology began to take shape in the 2nd half of the XX century. A major change occurred in this area after Gerda Binning and Henry Poorer created a copying tunnel microscope. The Keynesian copying probe (tip or needle) allowed the regrouping of atoms on the surface. This made it possible to characterize structures in nanowires and to build and display nanoparticles. Nano fan and nanotechnology depend on more than one specialty and cover a wide range.

Colors in quantum dots occur when new optical properties appear in the opening of particles in circles, as well as in different and internal transitions in quantization.

The optical properties of semiconductor nanoparticles were examined in detail. Such particles are called quantum dots, such effect is important as three-dimensional closed points. In semiconductors, two important effects occur when electrons are captured in very small areas. First, the energy slit increases sharply in the process of observation in volumetric crystals. Like particles in this field, secondly, the energy layer of electrons in Lumos (and empty holes in the Homo) is quantized. Both effects are important in determining the optical properties of quantum dots.

In a very small area, the grip of electrons and the presence of holes make it possible to sew materials indoors.

The specific side of this is that the critical size of the same material decreases and the size of the closed zone increases. Transitions occur in the valence state of electrons and in the conduction state. The optical wavelength in the transition between zones depends on the size of the points, and the radiation of the particles is measured using the determination of their size. An example of quantum dots can be taken CdSe materials. The field of visible rays can be closed by changing the size of the Cd-Se nanoparticles. This gives them an ideal opportunity to capture images in light diodes and luminescent technologies.

The use of quantum dots as chromophores is defined as points of different sizes in analyzes (biotags) at different biological objects. The specific aspect of bio plications is that due to optical radiation, several QD (quantum dots) chromophores can be detected by varying optical radiation at the same time due to broadband excitation. These cases were used in breast tissue cancer and in the movement that nerve tolls made towards small molecular organelles. Infra - red in the operation of photopriomniks, sensors, lasers.

In a dielectric medium, the color of the dispersed metallic nanoparticles differs from the metal-dielectric in that the surface-localized Plasmon differs from the total electron vibration. The clarity of the refractive spectra of gold and silver on the surface leads to a change in the optical area of the spectrum, so that metallic nanoparticles can be used as pigments. Metal nanoparticles of gold are used in the preparation of biologic and chemical sensors, in bilateral cancer "spare bombs", fluorescent display materials and optical switches. The development of such recommendations is based on the emergence of photosensitive chromophore groups. Cadmium selenide (CdSe) nanocrystals photodiodes?, fluorescent displays are used for fixing and viewing cancer tissue in a natural way.

Condensed QD monographs can be used in light-emitting devices using nanolithography. In order to make a template in nanolithography, photolithography and electronic light lithography, a silicon surface photo-mirror floor is prepared.

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