NANO SUPER DIAMOND

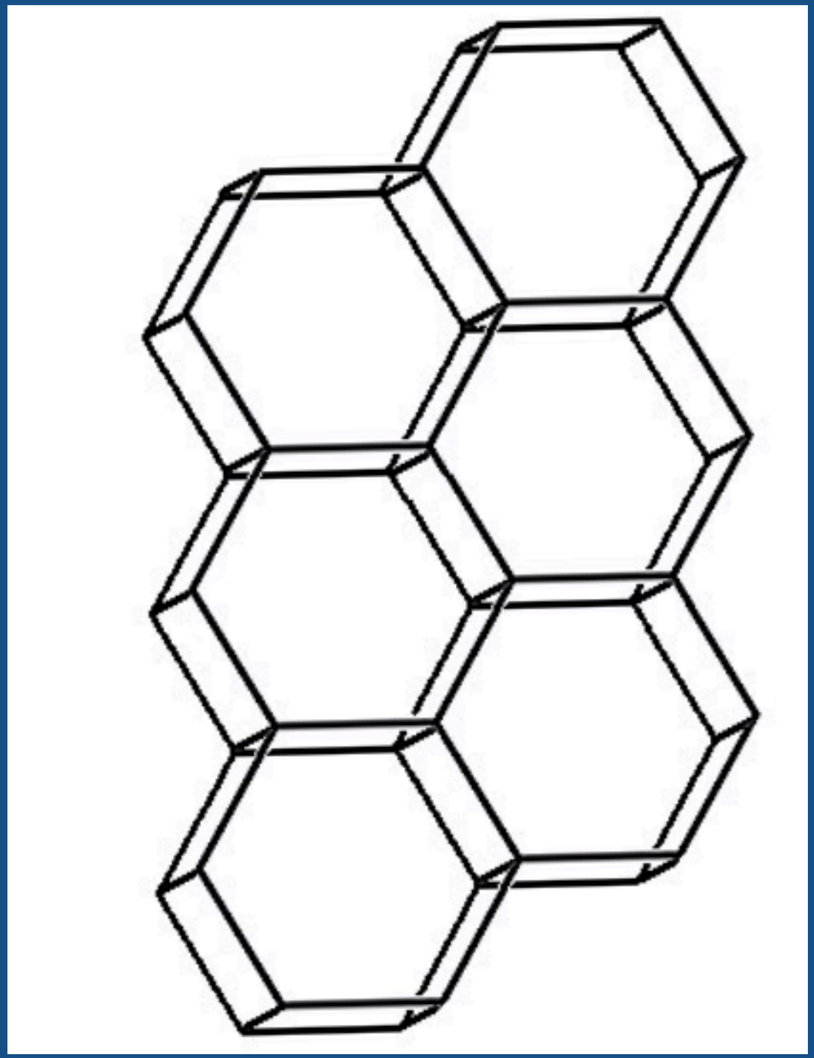
GAME CHANGING TECHNOLOGY

DESCRIPTION

Nano Super Diamond is a new carbon nanomaterial. It is a two-layer, ultra-strong diamond with the general chemical formula (C2)n.

The substance is formed by two parallel monolayers of carbon atoms with a hexagonal lattice, where each of the four valence electrons forms an sp3 hybrid bond with a neighboring atom, with three bonds formed in the plane of the layer, and one forming a bond between the layers.

The new chemical compound has a flat structure with diamond bonds and forms a hexagonal two-layer lattice with a thickness of 110-80 nanometers. It does not have sp2 hybrid bonds and π bonds between layers, which are found in graphite and graphene.



READY TO MASS PRODUCTION

- New-generation plastics and composites
- Nano concrete, nano paints, nano waterproofing, nano reinforcement
- Storage technologies for radioactive and highly toxic waste, new materials for the construction of nuclear facilities
- Stealth coatings, nano explosives
- Functional composite materials and nano-coatings for protection against radiation for the space industry
- Nano rubbers, nano alloys
- New-generation eco motor oils, lubricants

GAME CHANGING TECHNOLOGY

Super powerful nano capacitors:

- For electric vehicles, green energy storage, home appliances
- Best replacement for lithium-ion batteries
- Significant increase in capacity
- Reduction in size and weight
- Environmentally neutral production of capacitors and raw materials
- Easy and safe disposal

NANO SUPER DIAMONDS	GRAPHENE	NANOTUBES
Extreme strength, density, unique electrical, optical, mechanical, thermal, and other properties. Stronger and denser than diamond. The structure in the form of reinforcement makes it more elastic	Characterized by low active resistance Competitor of copper and silicon	Good conductor of electricity
Application technologies are developed for: • Electronics, energy storage devices • Military, aircraft, and space industries • Atomic Industry • Production of construction materials • Automotive and shipbuilding industry Not toxic. Environmentally friendly production.	Areas of application are still only theoretical. Exists only in laboratory conditions. When it is used to create new materials, its properties change. Toxic. Environmentally harmful production.	Research is underway on its use in the production of batteries and solar panels. Do not radically change the properties of composites and rubber. Concrete with nanotubes is not waterproof. Toxic. Environmentally harmful production.
Price 1 $/g	Price 50-100 $/g	Price 1-2 $/g

WHAT IS DONE

- Scientific research has been carried out
- Equipment for the production of nanomaterials with a capacity of 24 tons per year has been developed. Production cost optimized
- Research work has been carried out to create new products and technologies
- Sales to military industry companies have begun

Catalysts

The material can be used in catalysts to speed up chemical reactions. The large surface area and chemical stability make it attractive for catalytic purposes, for example in electrocatalysts, catalysts capable of converting hydrocarbons, or catalysts for hydrogen energy.

Batteries

It can be used as an electrode material in various types of batteries, including lithium-ion batteries. It has high electrical conductivity and a large surface area, which contributes to the efficient storage and release of electrical energy.

Nano super diamond can be used in lithium-ion batteries to improve energy storage efficiency and increase battery capacity. In addition, can be used in hydrogen fuel cells, where its high conductivity can improve electrolysis and hydrogen storage.

Electronics

Nano super diamond can be used in a variety of electronic devices and components, including transistors, sensors, chips, and other devices. Nano super diamond has incredible electronic properties, such as high electrical conductivity, high electron mobility, and high thermal conductivity. This makes it an ideal material for the development of new generations of electronic devices, including sensors, screens, and solar cells. Nano super diamond opens up new opportunities for nanoelectronics. Due to its unique properties, it can be used to create nanowires, nanotransistors, and other nanoscale components.

Medicine

Nano super diamond may have applications in medicine, such as biomedical diagnostics and treatment. Due to its unique properties, it can be used to develop new types of sensors for detecting chemicals or biomarkers. It can be used to create nanomaterials for drug delivery as well as to create implants and biocompatible materials.

Ecology

Nano super diamond can also find applications in environmental technologies such as water and air purification. It can be used in filters to remove pollutants and harmful gases from the environment.

Water filtration systems

Nano super diamond can be used to create effective water filtration systems. Its porous structure and high surface area allow it to trap pollutants, bacteria, and other harmful substances, providing clean drinking water.

Cryogenics

Nano super diamond has very low thermal conductivity at low temperatures, making it a potentially interesting material for use in cryogenic systems. It can be used to insulate and reduce heat loss in cryogenic containers and systems.

Flexible Electronics and Wearable Devices

Nano super diamond has a unique flexibility and transparency that allows it to be used in flexible electronics and wearable device manufacturing. It can be used to create flexible touch screens, electronic socks, bandages, and other flexible devices.

Aerospace technology

Nano super diamond can find applications in aerospace engineering, particularly in the creation of lightweight and strong components for aircraft, rockets, and spacecraft. Its properties of strength and light weight make it an attractive material for use in structures that require maximum efficiency and low weight.

High-temperature applications

Nano super diamond has a high resistance to high temperatures, making it a potentially useful material for high-temperature applications. It can be used in the production of furnaces, thermal insulation materials, and other systems that work at high temperatures.

Ultra-sensitive detectors

Nano super diamond is highly sensitive to various types of radiation, such as X-rays or particles. This makes it a potential material for creating ultra-sensitive detectors that would find applications in medicine, nuclear research, and other fields.

Energy-saving systems

Nano super diamond can be used to develop energy-saving systems. High thermal conductivity allows for improved efficiency of heat exchangers, thermoelectric devices, and other energy conservation systems.

Chemical industry

Nano super diamond can be used in the chemical industry. It can be used in catalysts, electrode materials, membranes, and other chemical processes to improve efficiency and save resources.

ABOUT US

Quantum Satis Engeneering LLC is #1 in the world with the most advanced technologies in nanotechnology and the production of stable isotopes.

The company's team unites 20 innovators and highly qualified scientific specialists.

Our team has many years of experience in scientific research and applying its results to create new products.

We quickly create scientific teams to solve specific problems thanks to many years of trusting relationships with each other.

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