

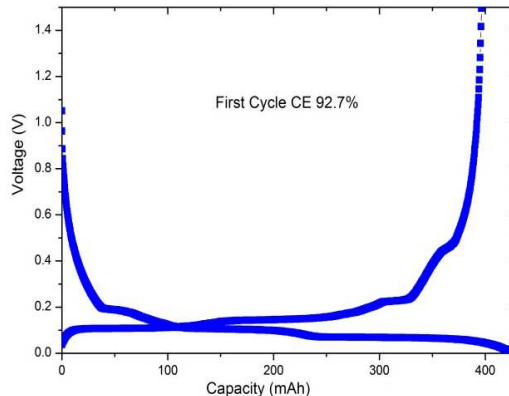
400 mAh/g Graphene Anode Material

High Capacity and High Rate Performance Anode Materials for Li-ion Batteries

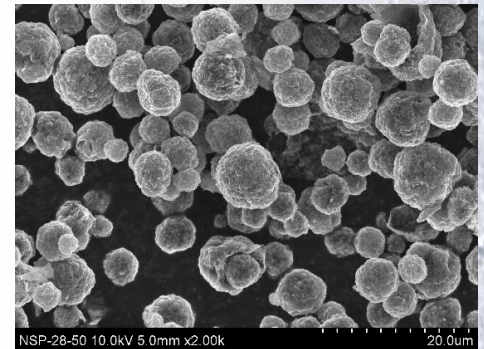
Nanotek Instruments, Inc., established in 1997, specializes in using cutting edge nanotechnology for consumer applications.

The core business revolves around energy storage devices such as supercapacitors, fuel cells, and next generation batteries.

Nanotek Instruments holds the very first patent on the production of the “wonder material” graphene. Together with our subsidiary, Angstrom Materials, we use this expertise to incorporate graphene into energy applications where we can fully utilize its amazing properties.



First Cycle Curves



SEM Image

Nanotek’s graphene-based anode materials provide a patent-protected, innovative platform technology for the design and fabrication of cost-effective, high-capacity, and high rate capable graphene-based anode materials for lithium-ion batteries.

Characteristics

**400 mAh/g
First Cycle Efficiency
>92%**

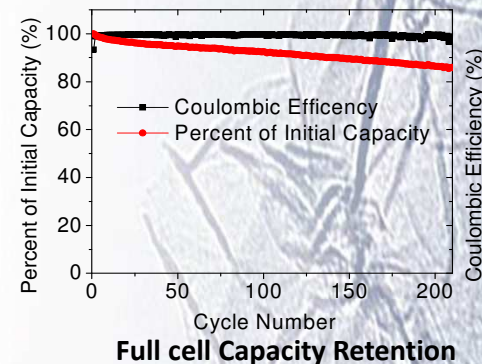
vs.

**300-360 mAh/g for
commercial graphite
anodes**

- High Capacities:
- Good rate and cycle performance due to the 2-D nano geometry and superior electrical conductivity of graphene
- Suitable for common cathode materials
- Low pouch cell expansion rate <10%
- Gassing issue free
- Cost-effective

Applications

- High power density Li-ion batteries for EV, HEV, PHEV, power tools, and electric bicycles
- High energy density Li-ion batteries for smart phones, laptops, VR devices, drones, and other microelectronic devices



Full cell Capacity Retention

