

Stanford researchers use silicon nanowires to produce 10x the amount of electricity of current lithium-ion (li-on) batteries.

Rechargeable li-on batteries power all sorts of devices-- laptops, iPods, video camers, cell phones, and so on.

This technology could even make li-on batteries a possibility for manufacture of future electric cars. The team behind the discovery even suggests possible uses in homes or offices, storing electricity from rooftop solar panels.

Current li-on batteries depend on the amount of lithium held in the battery's anode (normally made of carbon). The new technology uses silicon (in tiny nanowires) storing the lithium-- unlike other silicon shapes, nanowires do not break down as the lithium is drawn out.

The researchers say the new technology can be quickly pushed into real life applications, as the nanowire manufacture process is a well understood process.

A patent application is already filed, and the team considers forming a company or an agreement with a battery manufacture.

Go Nanowire Battery Can Hold 10 Times the Charge of Existing Battery

## **Reinventing Li-on Batteries With Nanowires**

Written by Marco Attard 16 December 2010