

New Li-Ion Batteries Charge 70 Percent in 2 Minutes, Last for 20 Years



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A team of researchers in Singapore [have developed a next generation lithium-ion battery](#) that can recharge a battery to 70-percent in just two minutes. That means it would charge an entire electric car in just 15 minutes. And here's the kicker: it lasts over 20 years.

Normally, it's [safe to be skeptical](#) about new battery technology, but there's something rather hopeful about this breakthrough. The new battery isn't altogether new. It's actually just an improvement upon existing lithium-ion technology.

The key comes in the form of nanostructures. Instead of the traditional graphite used to create the lithium-ion battery's anode, this new technology uses a cheap titanium dioxide gel, the same kind of material used in sunscreen to absorb UV rays. The scientists found away to turn the compound into nanostructures that speed up the charging process. And speed it up they do. This simple innovation makes lithium-ion batteries charge 20-times faster and last 20-times longer.

"With our nanotechnology, electric cars would be able to increase their range dramatically with just five minutes of charging, which is on par with the time needed to pump petrol for current cars," Associate Professor Chen Xiaodong of Nanyang Technological University said in a release. Just imagine [what it could do for your smartphone](#).



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The researchers say they'll have the new technology on the market in just two years. While we've certainly seen fast-charging battery promises [in the past](#), the simple fact that this new battery uses so much existing technology is reason to believe that they're right about that timeline, too. [\[NTU\]](#)