

Manipulating DNA to conduct electricity could lead to faster, more powerful computers

The ability to use DNA as a construction material, capable of holding scaffolds of molecules and atoms was one huge step in [developing modern nanostructures](#). Most recent of these developments are gold-plated nanowires constructed by scientists from the Helmholtz-Zentrum Dresden-Rossendorf (HZDR) and from Paderborn University... These nanowires, due to their gold-plating, were able to conduct electricity.

Even more fascinating is how these were made using modified DNA strands... These allowed for the structures to independently take on their desired forms, complex structures developed by molecules through a self-assembling processes.

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There is one problem, though. "Genetic matter doesn't conduct a current particularly well," [\[Artur Erbe](#) of the Institute of Ion Beam Physics and Materials Research] points out, which explains why the nanowires were gold-plated. But even with this, there was still difficulty with conducting current at room temperatures.

Still, the research is promising. This nanowire that's made partially out of genetic material could be the future of electronics. Smaller wires allow for more compact designs, which together with [smaller transistors](#), can be used to make more powerful computers.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Computers Made of Genetic Material Will Revolutionize Our World](#)