

Plastic chips promise flexible, cheaper devices

Hybrid has good energy properties

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A TEAM OF RESEARCHERS at the University of Arkansas said that hybrid chips combining plastic and silicon could lead to flexible devices that promise to be cheaper too.

Physics boffin Huaxiang Fu said he used solid state theory to look at a combo of organic material and inorganic semiconductors.

He and his team claim to have established that such a hybrid will keep the good electronic properties of silicon, while the use of plastic even gives advantages over pure semiconductor materials.

The results of his study are published in the *Journal of Chemical Physics*.

The team looked at the properties of a single atomic layer of semiconductor material sandwiched between two layers of organic polymers.

They found that the hybrid conducted electricity almost as well as pure semiconductor material, while it also has a big energy absorption window, so uses energy more efficiently.

Fu forecasts that will allow for easier to process and cheaper semiconductors, with a potentially huge market for such devices. μ