

Plant virus used to create memory device

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A team of U.S. scientists says it has used a plant virus to construct a memory device.

The device developed by Yang Yang and colleagues at the University of California-Los Angeles is based on the tobacco mosaic virus, which is best known for infecting the leaves of tobacco plants.

The team coated the virus with a layer of platinum nanoparticles, embedded that in a polymer and sandwiched the resulting nanostructure between two electrodes. When a voltage was applied, the device displayed an "on" state that remained stable until the voltage fell below a certain value, resulting in an "off" state.

The scientists say although the switching speed is slow compared with established devices and the switching action is not fully understood, it should be possible to improve the performance through further research.

The unusual study is detailed in the inaugural issue of the journal Nature Nanotechnology.

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