

Silk protein boosts e-book efficiency: scientists

March 6 2011



Live silkworms are seen here feeding on mulberry leaves at an exhibition in Bangalore in 2001. Taiwanese scientists say they have discovered that a protein created by silkworms in the production of silk can be used to manufacture a component that will make e-books more efficient.

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Silk fibroin can be used in transistors, which are used in e-paper, and increase their efficiency, according to a research paper presented by the scientists from National Tsing Hua University in the northern city of Hsinchu, on Sunday.

"The transmission of electronic signals on the transistors using [silk](#)

fibroin is about 20 times faster," Peter Hwang, a professor from the university's Materials Science and Engineering Department and the head of the research team, told AFP on Sunday.

"That means the page-turning speed of e-books will become faster," he said, adding that such components could also be used in next-generation flexible displays.

Hwang said the substance was likely to be available on the market within the next three years.

The team's research paper was recently published in the Germany-based periodical [Advanced Materials](#).

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Citation: Silk protein boosts e-book efficiency: scientists (2011, March 6) retrieved 20 April 2024 from <https://phys.org/news/2011-03-silk-protein-boosts-e-book-efficiency.html>

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