## Molecular Electronics: A promising line-up

For authors and

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Arrays of thousands of perfectly linear and parallel carbon nanotubes have been turned into transistors by John Rogers of the University of Illinois in Urbana-Champaign and his co-workers.

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The researchers grew their nanotubes on quartz decorated with iron-oxide stripes that catalyse the tubes' growth. The tubes line up along the crystal axis of the substrate. Each tube could be divided into many transistors by careful placement of metal electrodes on the array's surface. Devices built in this way showed good performance — particularly in having high 'mobility', a measure of how readily current can move through them. The nanotube arrays could also be transferred from the quartz onto plastic substrates, which could be useful in flexible displays.