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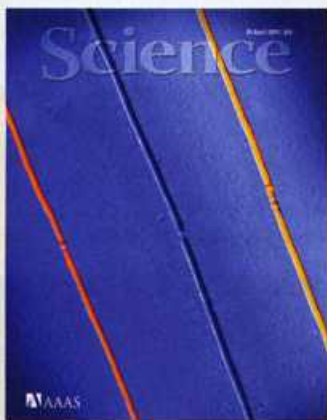
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COVER

False-colored atomic force microscopy image of three carbon nanotubes on a silicon dioxide substrate (composite of scans on three devices). The middle nanotube is disconnected by a ~40-nanometer gap; the outer nanotubes have similar nanogaps bridged by a phase-change material (PCM) bit. Such small bits can be switched by voltage pulses with energy consumption that is one hundred times lower than that of modern PCM data storage. See page 568.

Image: Alex Jerez, Feng Xiong, and Eric Pop, University of Illinois Urbana-Champaign

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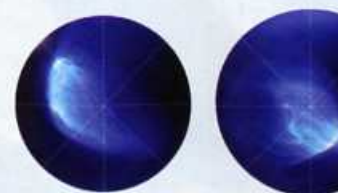
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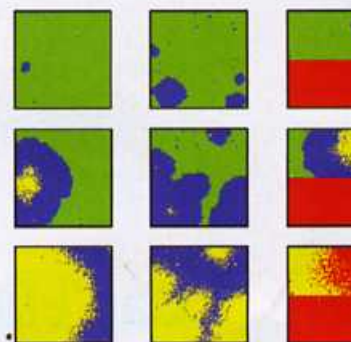
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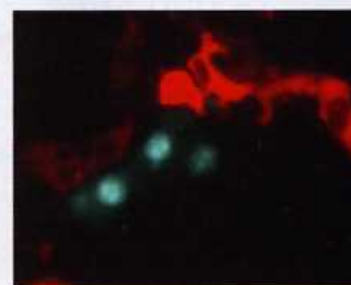
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