

## **Carbon nanotube with selective destruction of metallic path by microwave treatment**

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We demonstrate micro-wave treatment on the carbon nanotube network transistor. Weakness of thin film type nanotube transistor is metallic paths that were formed by intrinsic nature of carbon nanotubes. In this report, selective destruction of the metallic path was studied. With few minute exposures by micro-wave, on/off ratio of the transistor was dramatically improved up to  $10^4$  which is the value close to the one of transistor with semiconducting nanotubes. We present details of effect induced by micro-wave treatment with electrical, optical, and structural studies.