Nanotube breakthrough

Carbon nanotubes have been grown by researchers at the University of Cambridge at temperatures that would enable them to be integrated into today's cmos processes. Deemed as a ‘driving force’ behind current nanotech developments, carbon nanotubes have mechanical and electronic properties that make them very attractive for next generation electronics. Until now though, the growth of nanotubes demanded high temperatures that made them incompatible with cmos device fabrication.

Mirco Cantoro, Stephan Hofmann, Andrea Ferrari and John Robertson led the research at Cambridge’s Department of Engineering, collaborating with colleagues at the University’s Cambridge Hitachi Laboratory and Department of Materials Science. Using chemical vapour deposition, currently used by the semiconductor industry for thin film deposition, they have managed to grow single walled carbon nanotubes at temperatures as low as 350oC.

Author
Vanessa Knivett

Email this article