

HIGH YIELD NANOSCALE FABRICATION OF THE SPM TIP WITH CARBON NANOTUBES USING THE DIELECTROPHORESIS

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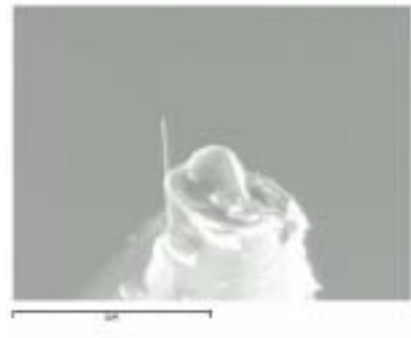
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The cheap, simple and high yield nanoscale fabrication of CNT(Carbon Nanotubes)-attached SPM(Scanning Probe Microscopy) tip has been studied in this research. The electric field(AC or AC+DC) between the SPM tip and the electrode makes the dielectrophoresis which is a main principle in deposition of the carbon nanotubes on SPM tip. We found the optimal electrical condition for the high yield deposition through the experiments. Using the CNT attached SPM tip, we have obtained an enhanced resolution compared to that from the bare silicon tip through the scanning of the surface of the bio materials.



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