Scanning Tunneling Microscopy study of ssDNA-CNT on Au(111) surface

XINGHUA LU, Harvard University, ERIC BRANDIN, JENE GOLOVCHENKO, DANIEL BRANDON, NANOPORE GROUP, HARVARD UNIVERSITY TEAM — The single-strand deoxyribonucleic acid (ssDNA) - carbon nanotube (CNT) complex on Au(111) surfaces has been studied via scanning tunneling microscopy (STM). The interaction between ssDNA and CNT not only disperses the nanotubes, but also makes the ssDNA more accessible for the STM study. Sputtering on the ssDNA-CNT complex helps to reveal the internal structure. Scanning tunneling spectroscopy (STS) has been carried out to study the electronic structure of the ssDNA-CNT complex.

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