

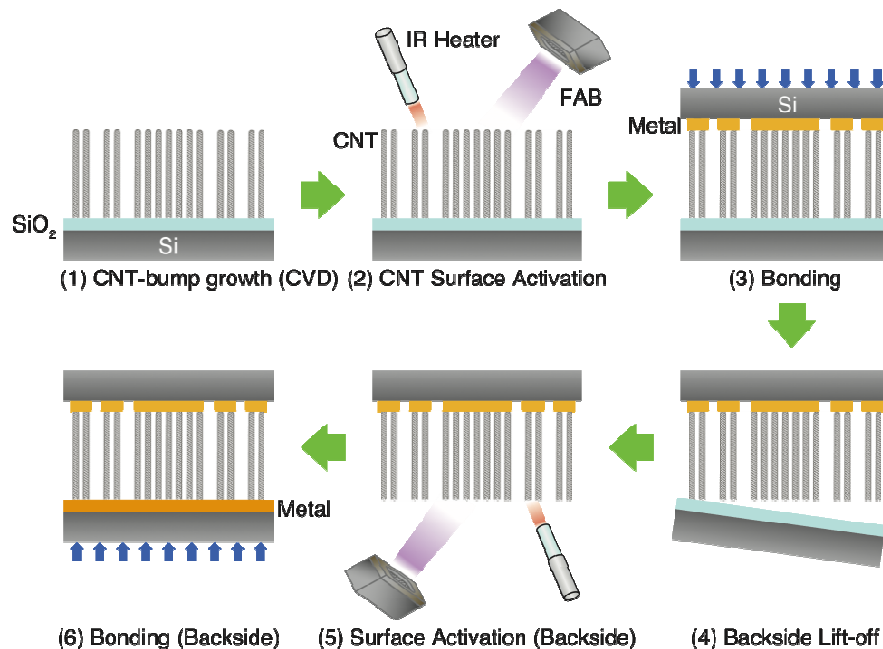
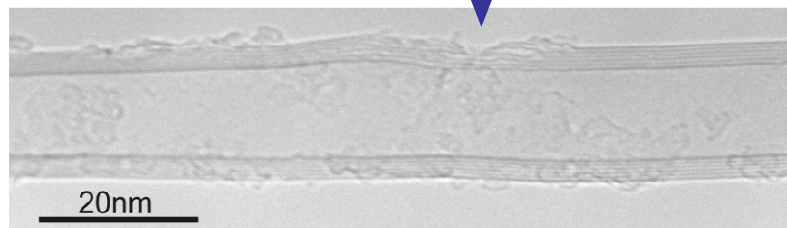
Vertically aligned CNTs were bonded to metal (Au) substrate by Surface Activated Bonding in order to be applied to LSI wiring. After bonding, the growth substrate was removed from CNT, and another substrate was bonded successfully. Thus, CNTs that require high temperature processes for fabrication become able to be applied to various device process.

## Surface Activated Bonding (SAB)

Tadatomo Suga

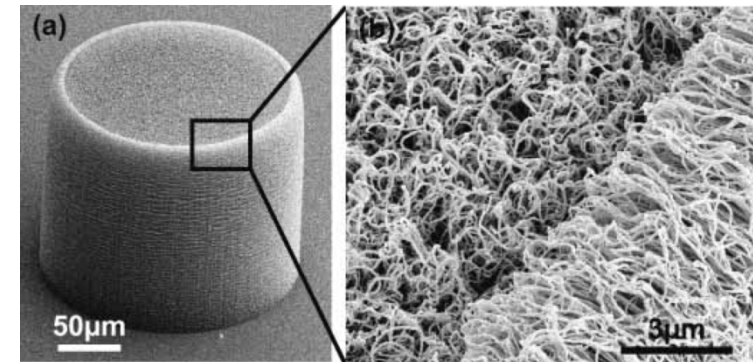
Masahiisa Fujino

Expose inner shell by ArFAB



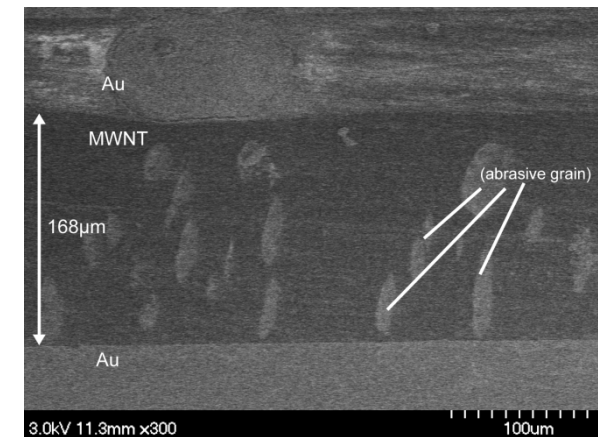
## CNT growth, Raman-shift spectroscopy

Shigeo Maruyama (Dept. Mech.Eng.)



$$\rho_{\text{cnt}} = 9.1 \, \Omega \cdot \text{m}$$

$$(\rho_{\text{cu}} = 1.7 \, \Omega \cdot \text{m})$$



M. Fujino, *et al.*, Proceedings of Electronics System Integration Technology Conference (ESTC) 2010, Berlin, pp.250-253 (2010)