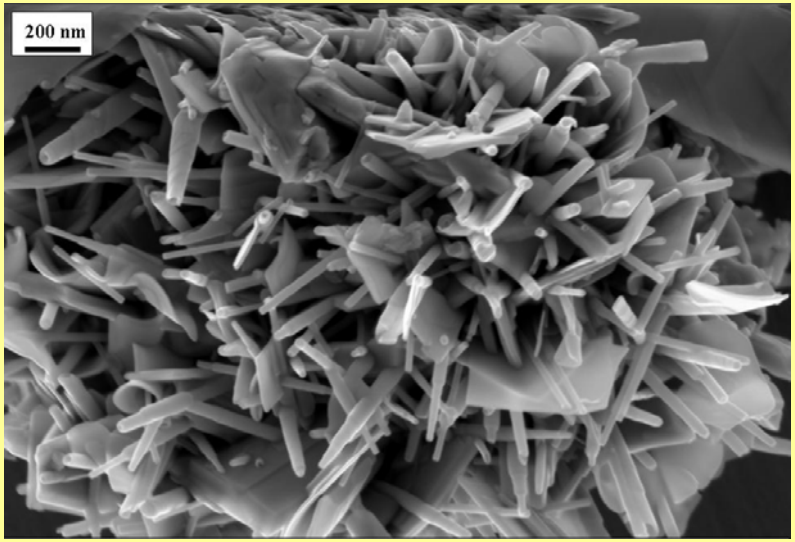
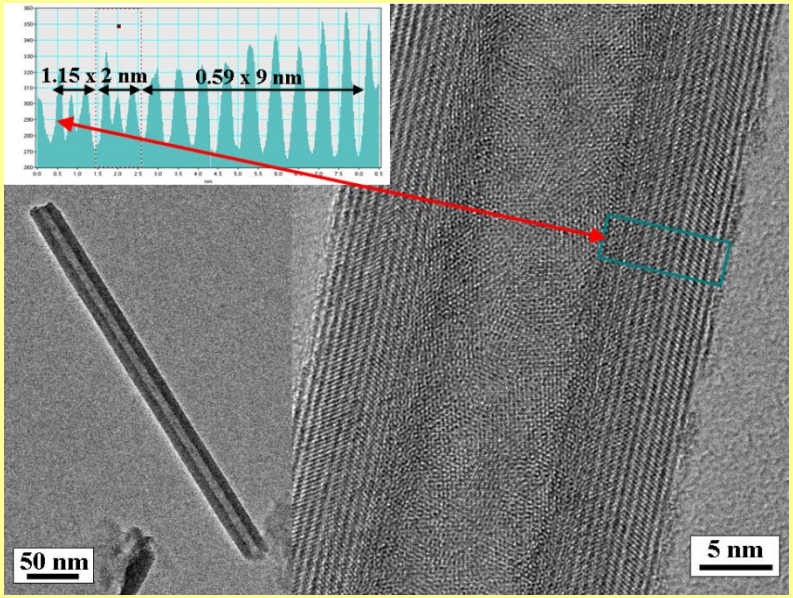
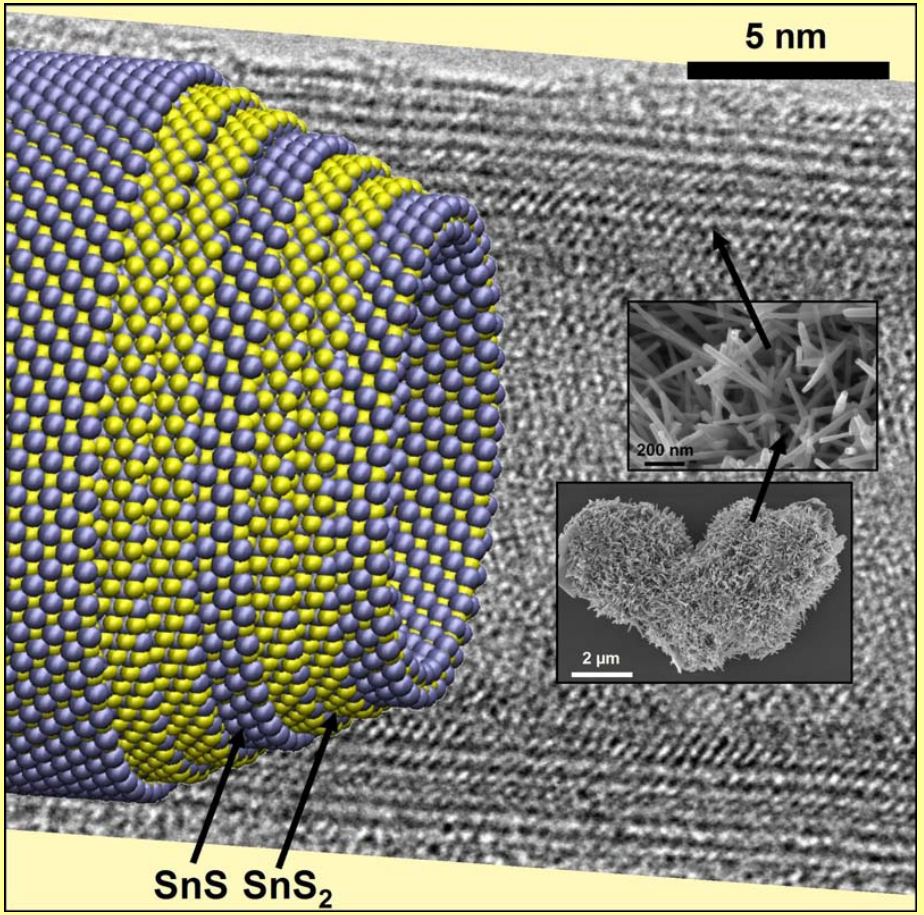
SnS_2/SnS (O-T-T) ordered superstructure nanotubes



SEM view of the nanotubes/nanoscrolls



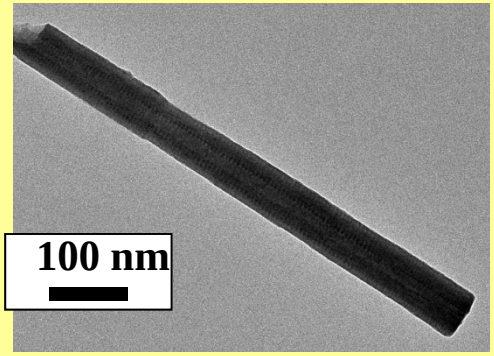
SnS_2 nanotubes

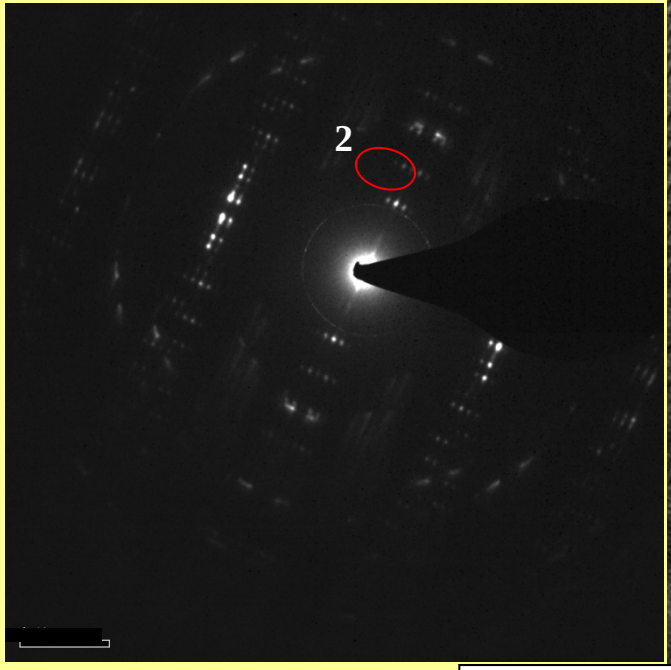


SnS_2/SnS superstructure nanotubes

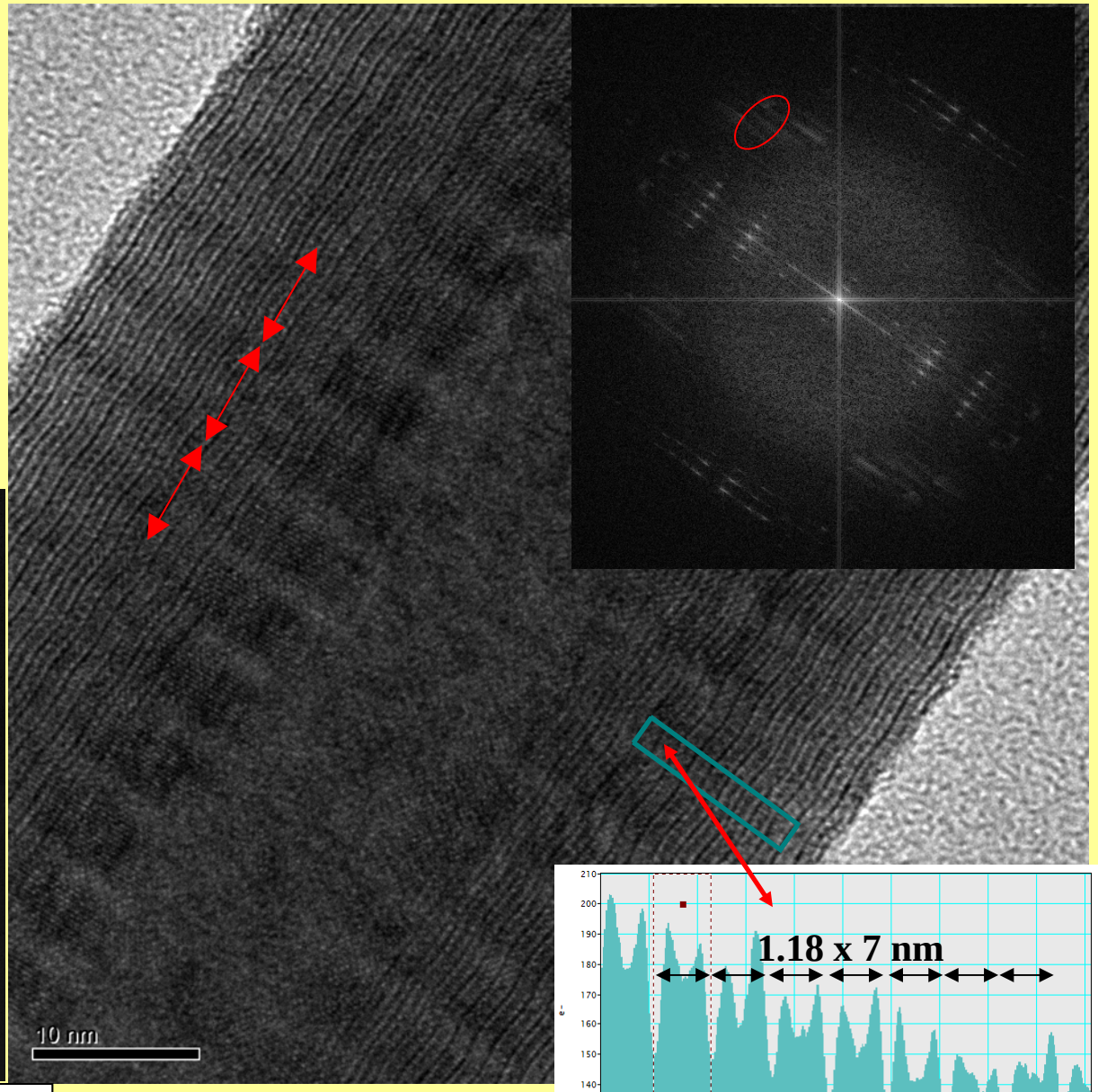
G. Radovsky, R. Popovitz-Biro, M.Staiger, K. Gartsman, C. Thomsen, T. Lorenz, G. Seifert and R. Tenne,
Angew. Chem. Intl. Ed. 50, 12316 (2011)

Strained O-T nanotube

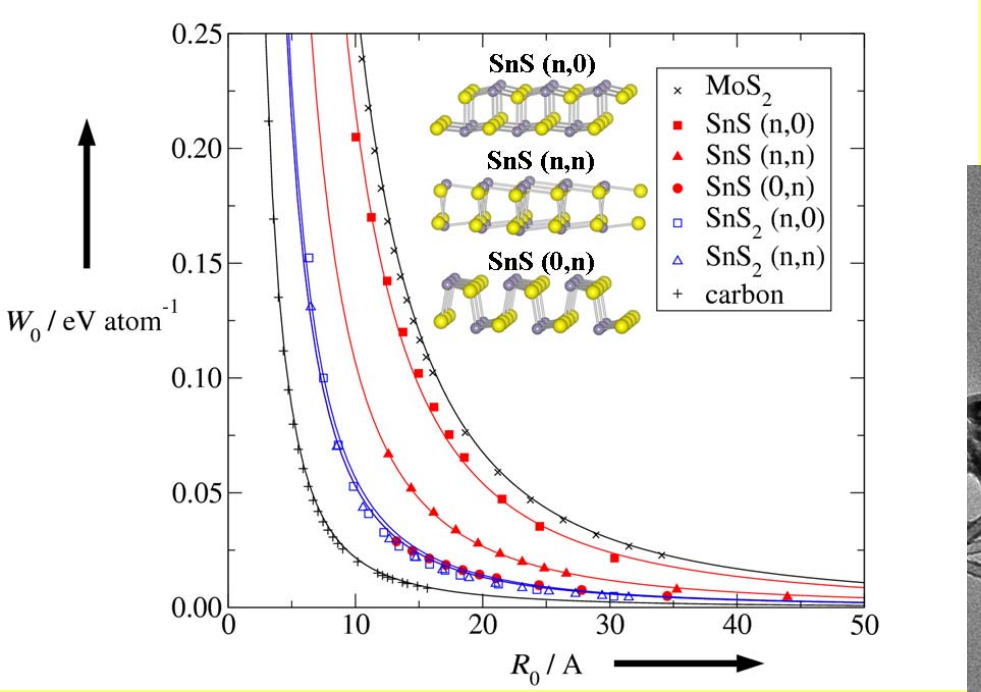




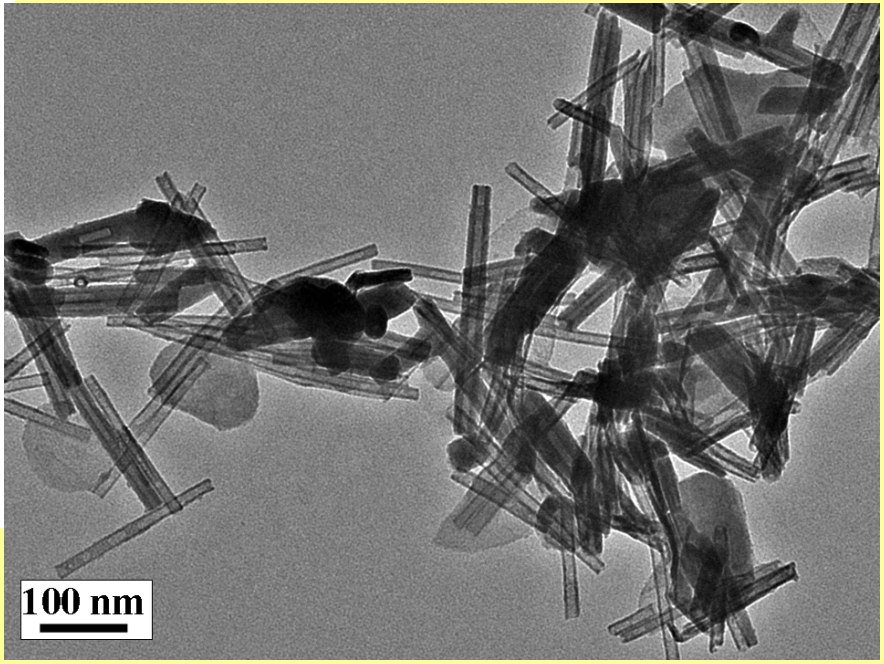
10 nm



SnS_2 nanotubes and SnS_2/SnS ordered superstructure nanotubes



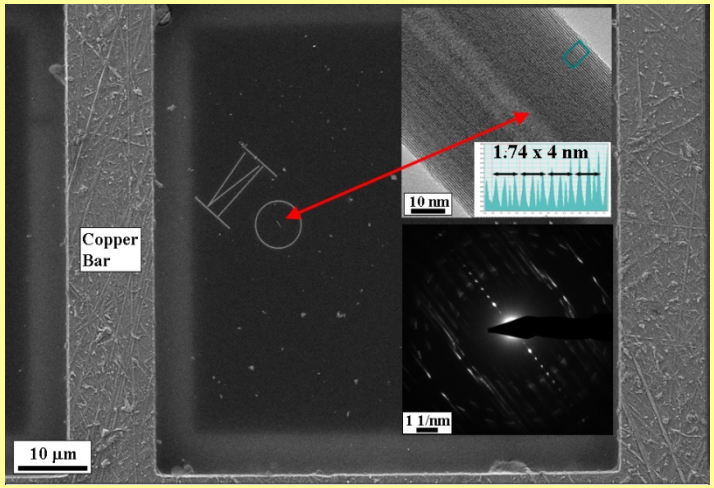
DFTB calculations: Why SnS_2/SnS(0,n) superlattice nanotubes grow preferentially (G. Seifert et al.)



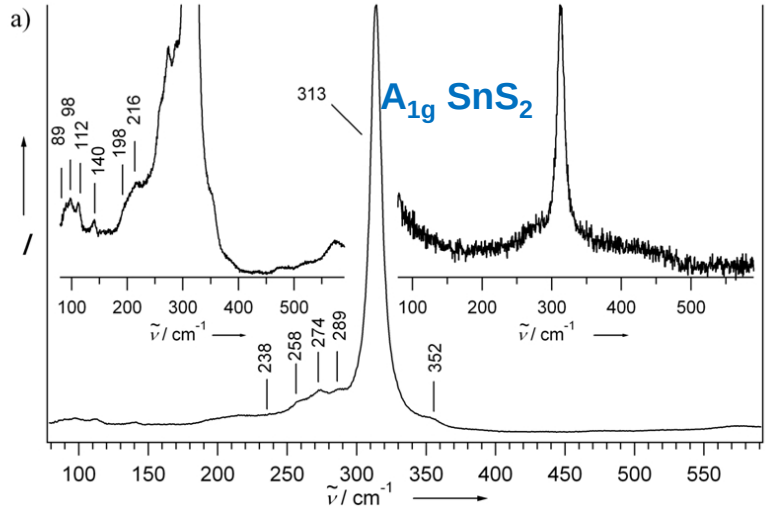
INT-SnS_2 growth in a FBR-like reactor

G. Radovsky et al. *Angew. Chem. Intl. Ed*. 50, 12316 (2011)

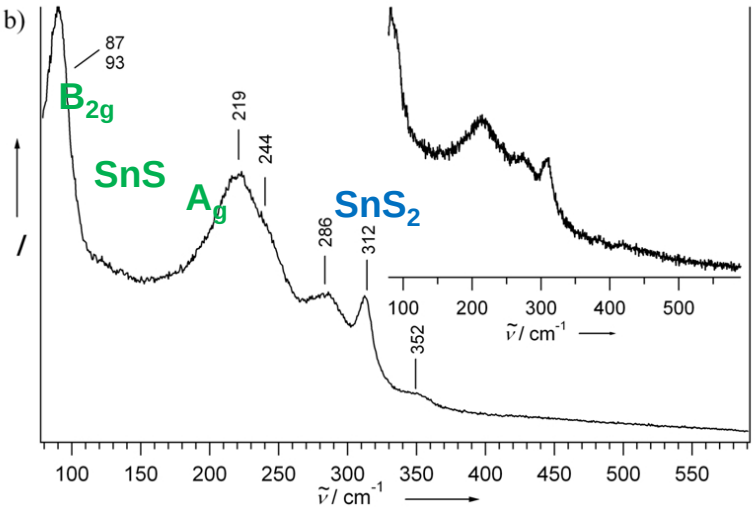
Raman spectra of SnS_2 and SnS_2/SnS ordered superstructure nanotubes



SnS_2 nanotubes

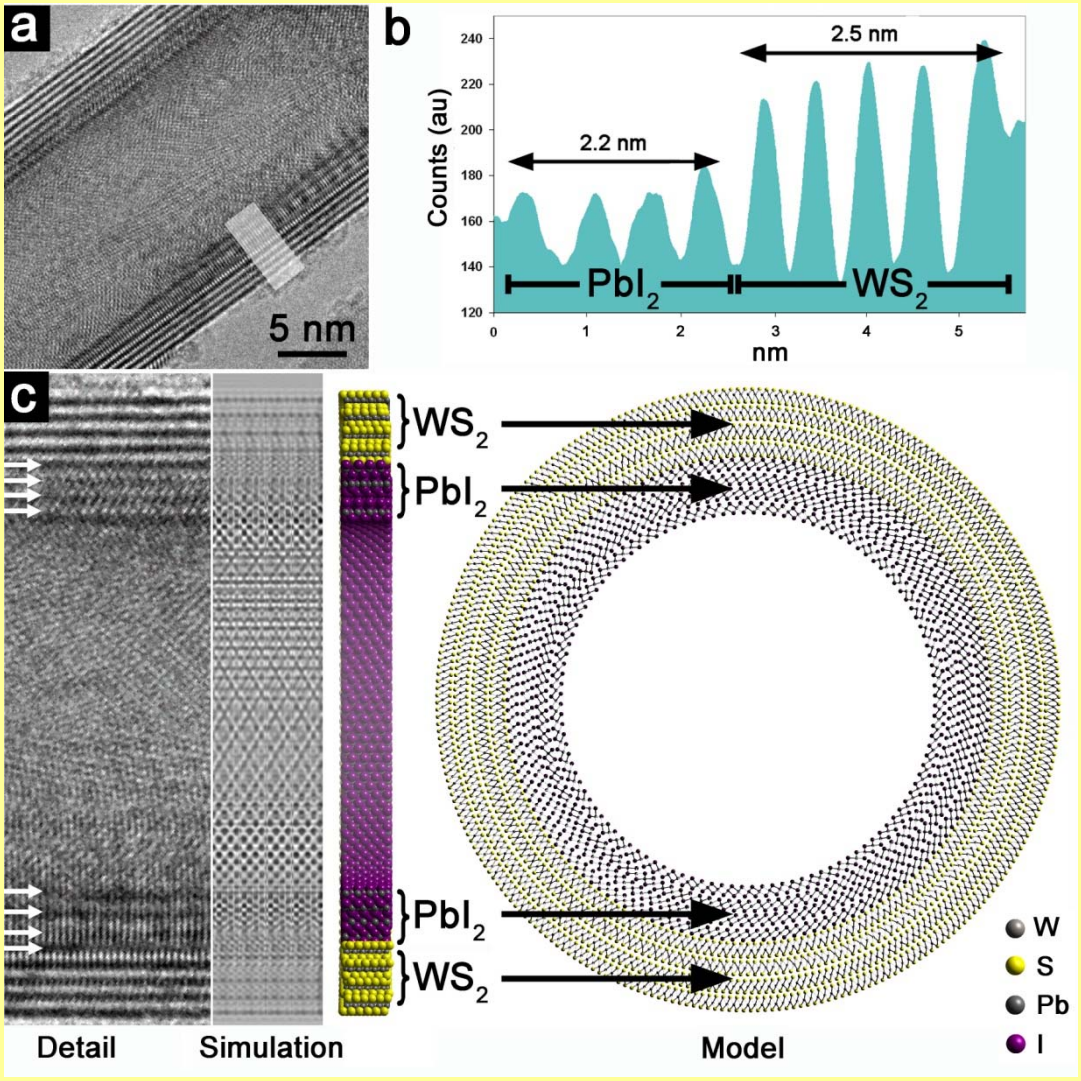


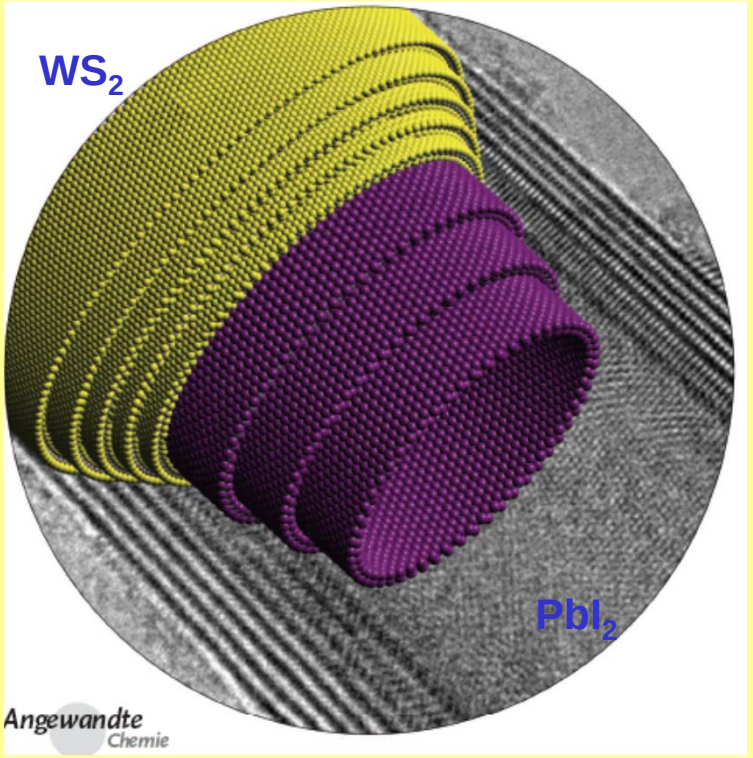
SnS_2/SnS nanotubes



G. Radovsky, R. Popovitz-Biro, M.Staiger, K. Gartsman, C. Thomsen, T. Lorenz, G. Seifert and R. Tenne, *Angew. Chem. Intl. Ed.* 50, 12316 (2011)

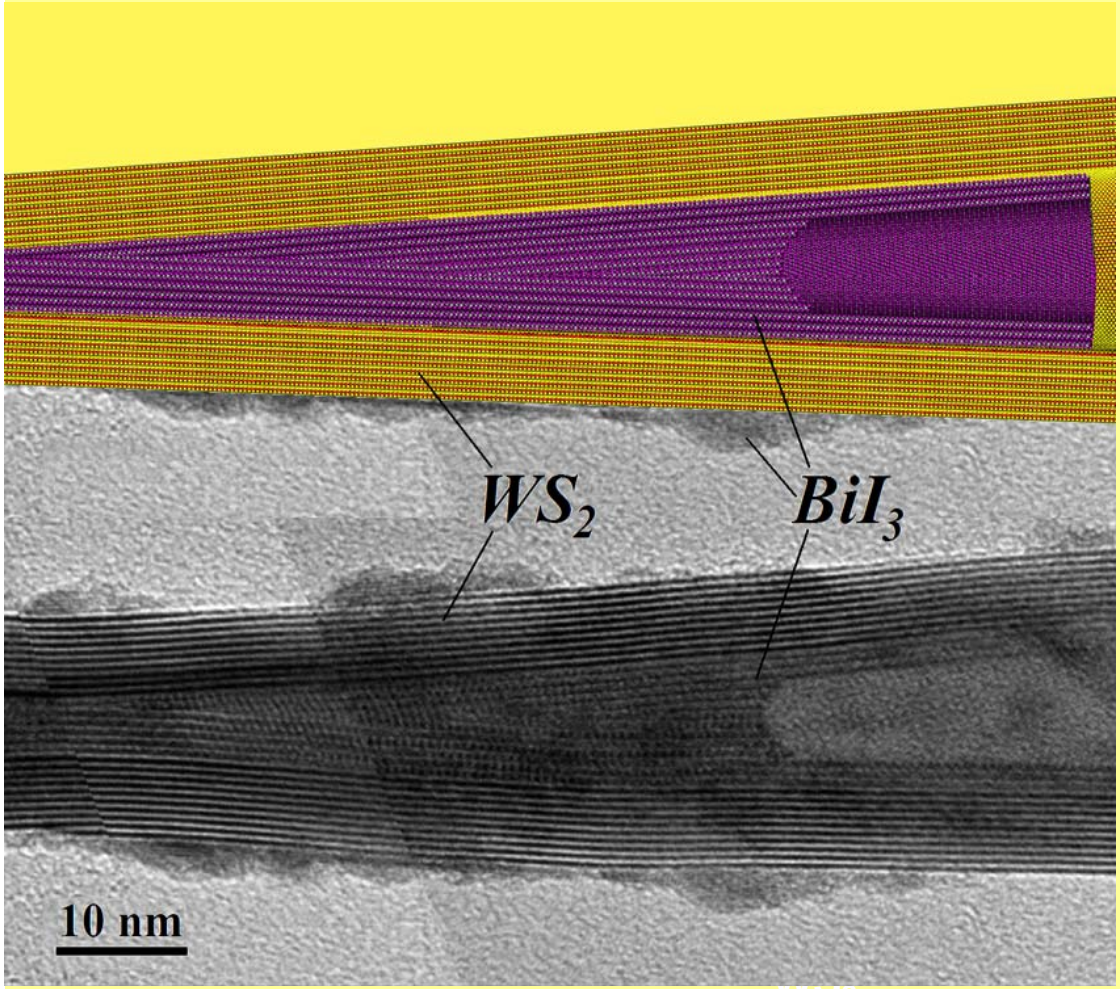
Core-shell nanotubes



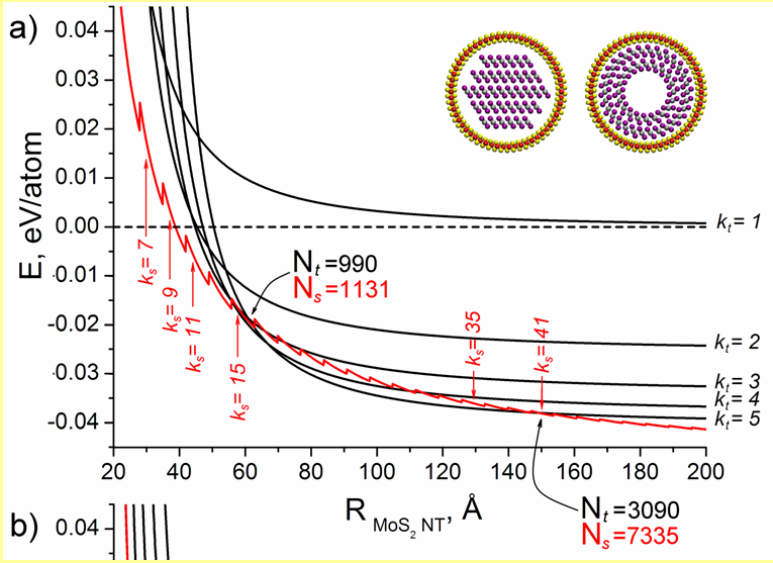


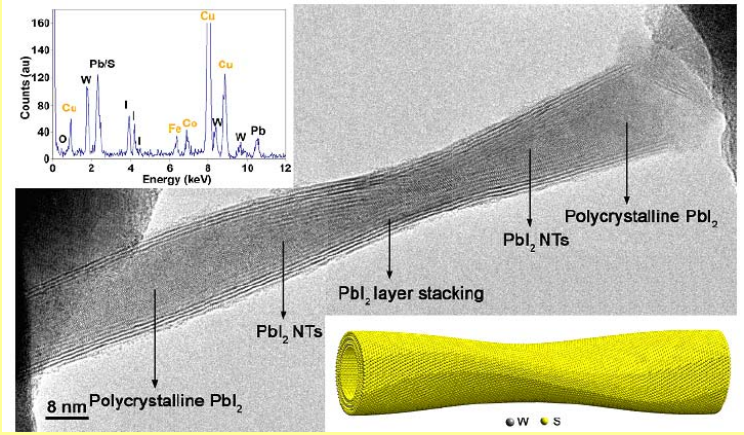
R. Kreizman, S. . Hong, J. Sloan, R. Popovitz-Biro, A. Albu-Yaron, G. Tobias, B. Ballesteros, B.G. Davis, M.L.H. Green, and R. Tenne, *Angew. Chem. Intl. Ed*. 48, 1230 (2009)

Stability range for the PbI_2@MoS_2 core-shell nanotubes



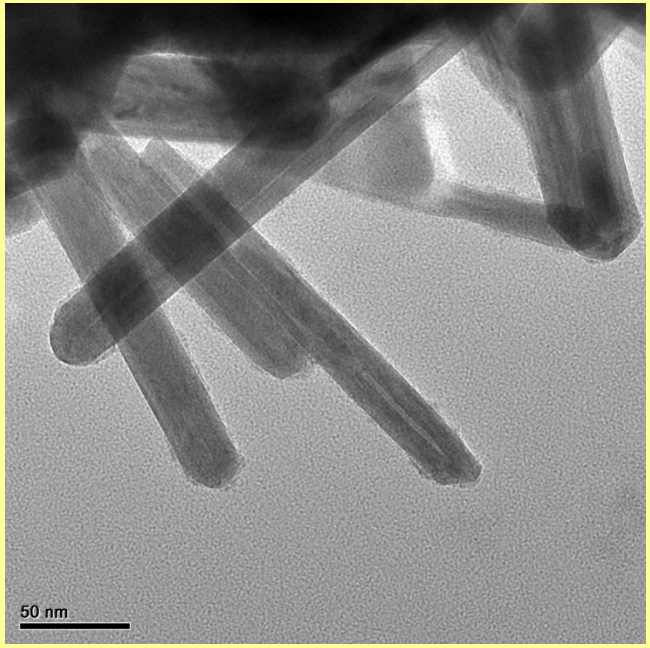
---- PbI_2 platelets
---- PbI_2 nanotubes

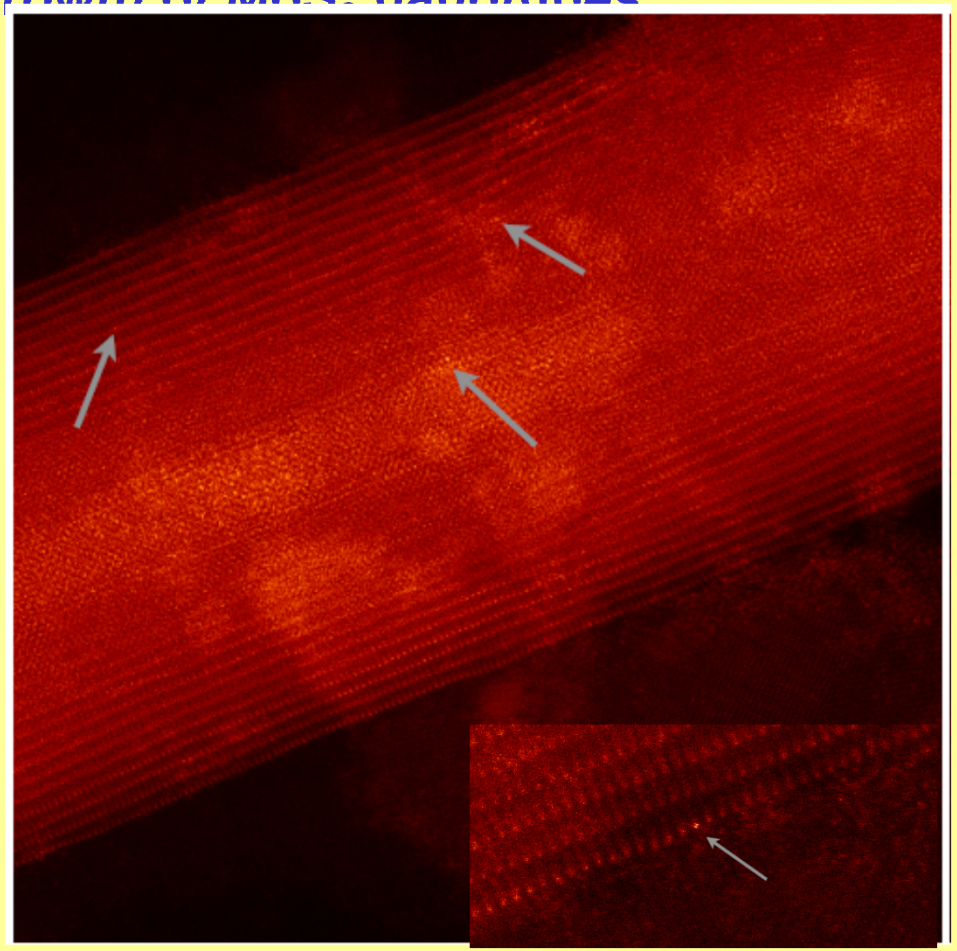




R. Kreizman, A.N. Enyashin, F.L. Deepak, A. Albu-Yaron, R. Popovitz-Biro, G. Seifert and R. Tenne,
Adv. Func. Mater. 20, 2459 (2010)

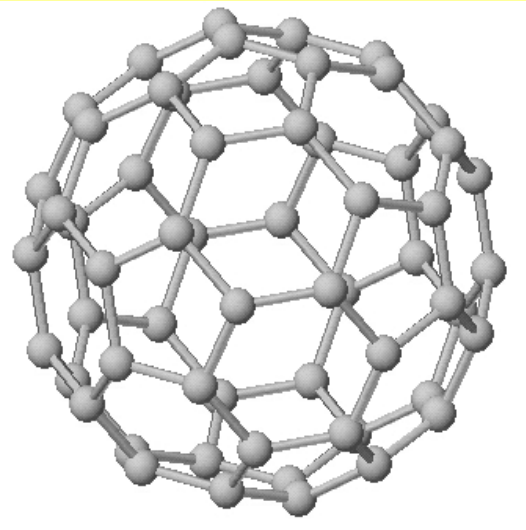
Metal-catalyzed growth of MoS_2 nanotubes



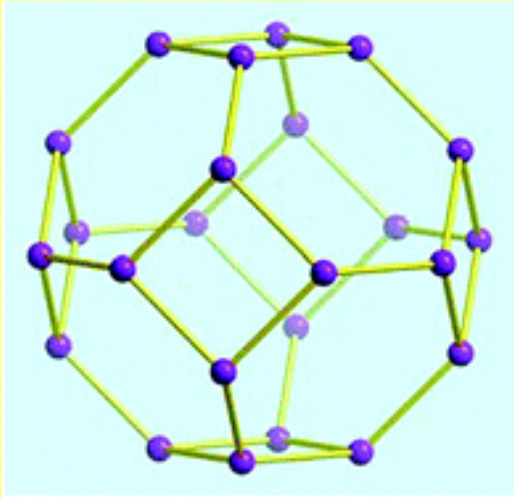


O. Brontvein (WIS), D. Stoppa, L. Houben (Julich), J. Gordon (BGU), to be published

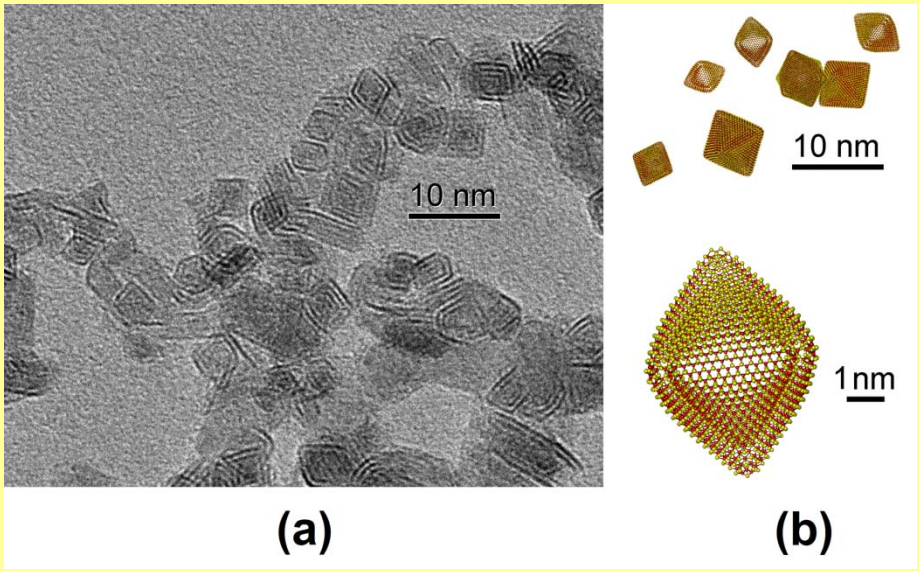
Euler Rule for Archimedeans



C_{60}: 12 pentagons and 20 hexgaons:
truncated icosaheder



6 rhombi and 8 hexagons:
truncated octahedron
("true inorganic fullerenes")



Laser ablated MoS_2