## Supplementary data

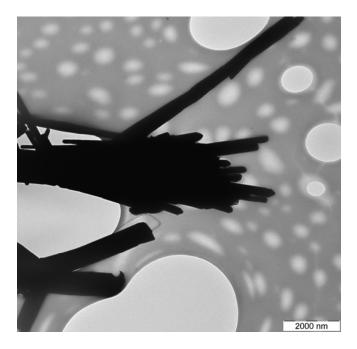


Fig.1.TEM image of Sb<sub>2</sub>Se<sub>3</sub> nanorods.

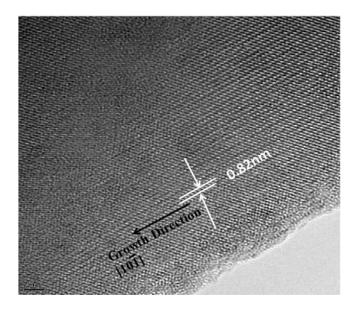


Fig.2.HRTEM image of the  $Sb_2Se_3$  nanorods.

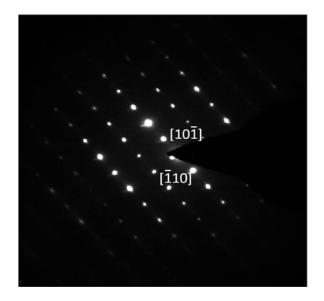


Fig.3. SAED Pattern of the  $Sb_2Se_3$  nanorods. The SAED zone axis is [10-1].