

Synthesis and optical characterizations of chain-like Si@SiSe₂ nanowire heterostructures

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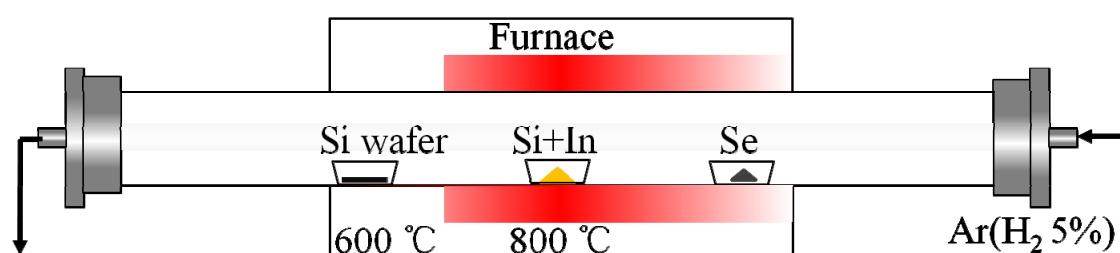


Figure S1. Experiment setup.

Ele.	Wei.%	Ato.%	Ele.	Wei.%	Ato.%
O	8.81	16.64	O	14.62	36.57
Si	68.03	73.18	Si	20.72	29.52
Cu	14.03	6.67	Cu	17.55	11.05
Se	9.12	3.49	Se	40.57	20.56
			In	6.52	2.27

Figure S2. Relative proportions of the detected elements collected from the NW trunk (left table) and the bulbs (right table), respectively.

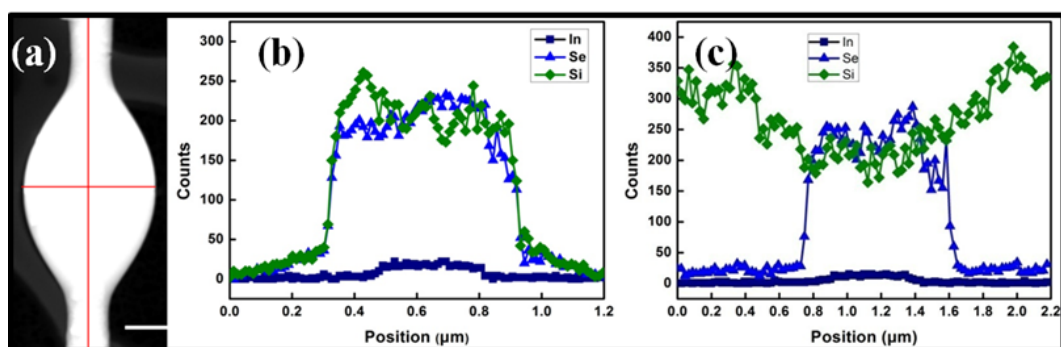


Figure S3. Line scanning of elements Si, Se, and In within a selected olive-shaped bulb. (a) HAADF image. Line scanning along the horizontal (b) and vertical (c) direction indicated with red lines in (a), respectively.

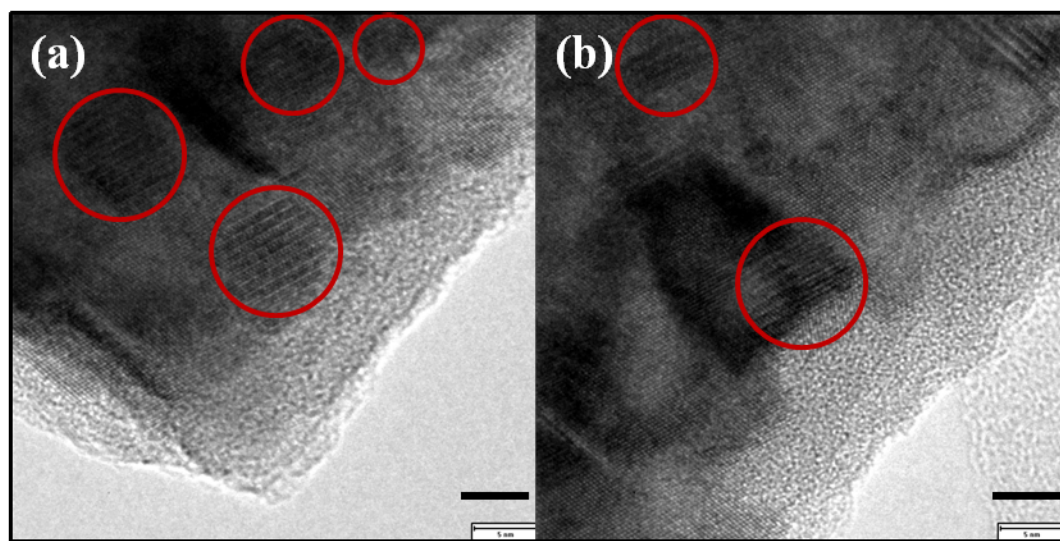


Figure S4. HRTEM images. The red circles indicates the existence of c-SiSe₂ fragments with diameters less than 10nm (scale bar=5nm).

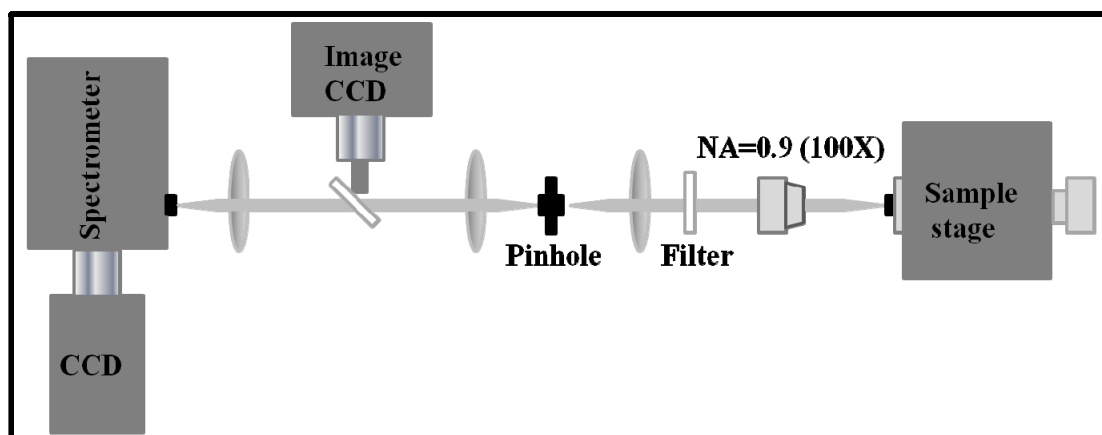


Figure S5. Schematic optical setup used for the optical study of individual chain-like NWs.

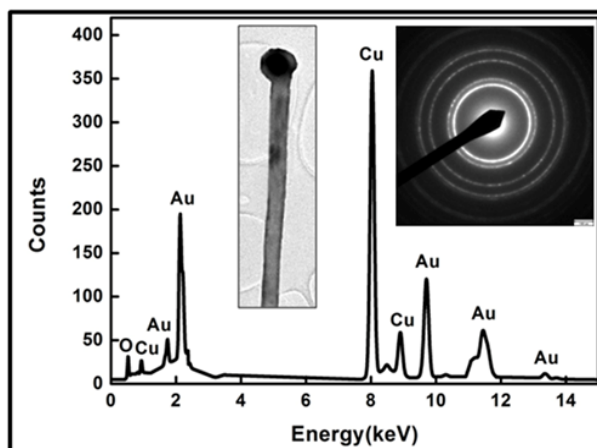


Figure S6. EDX spectrum of the catalyst, indicate that the tip is mainly composed of Au elements.

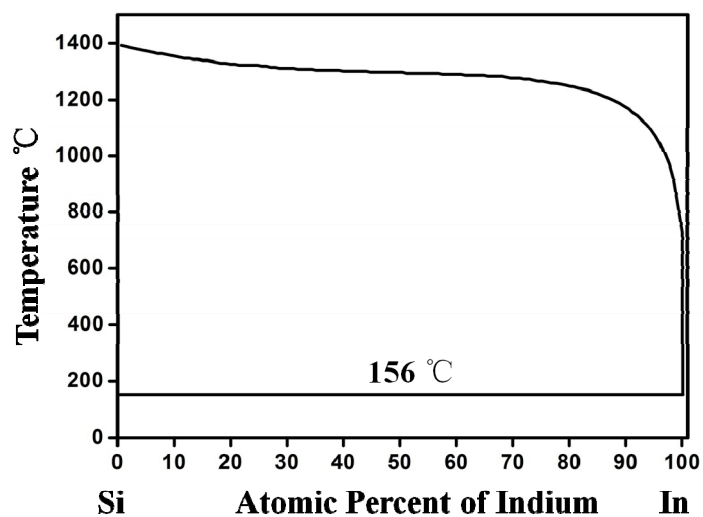


Figure S7. Phase diagram of Si-In alloy system.