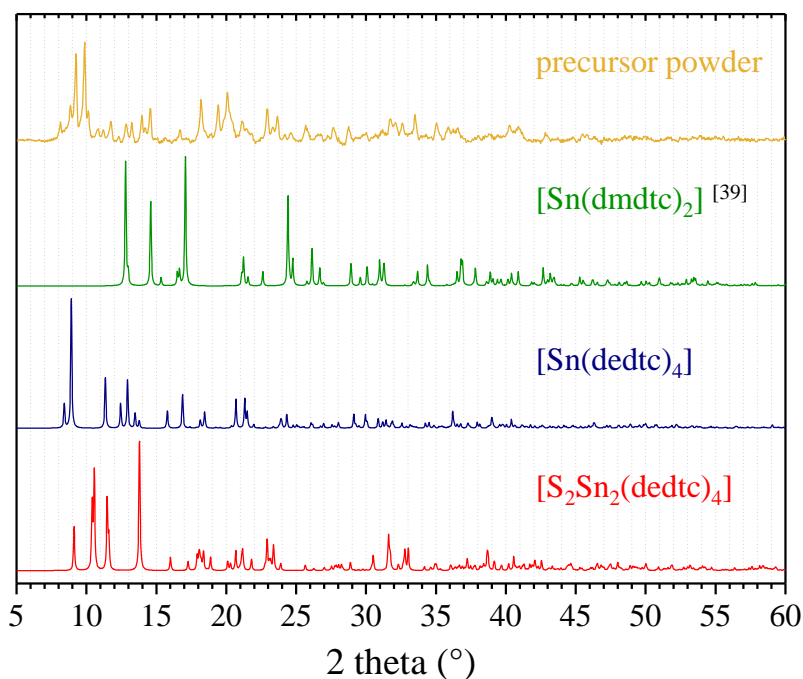


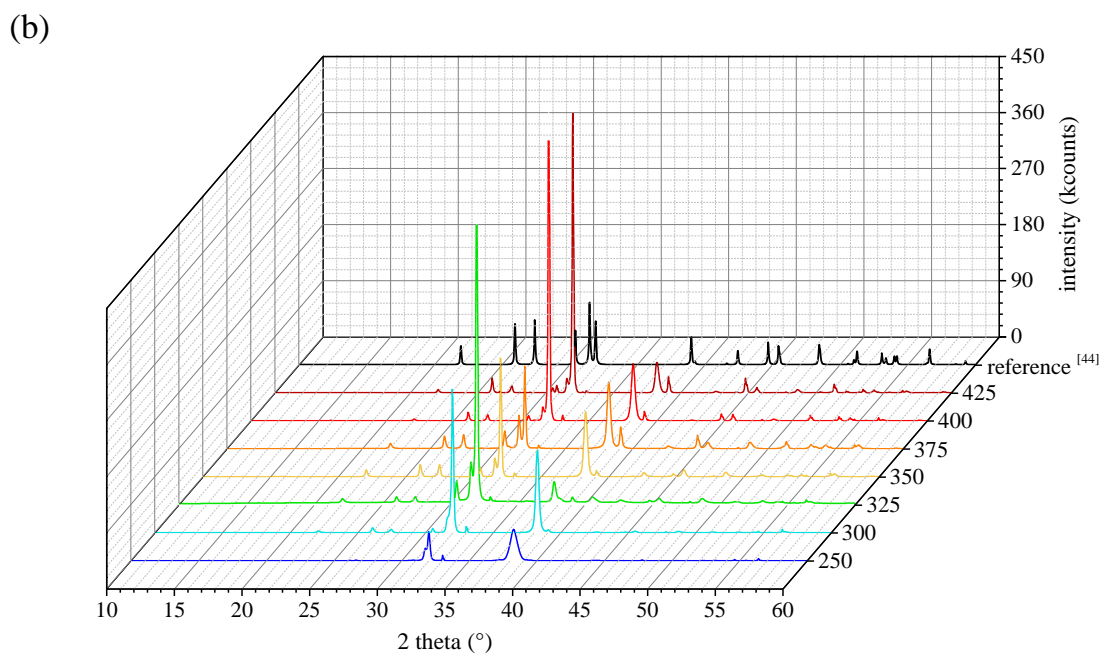
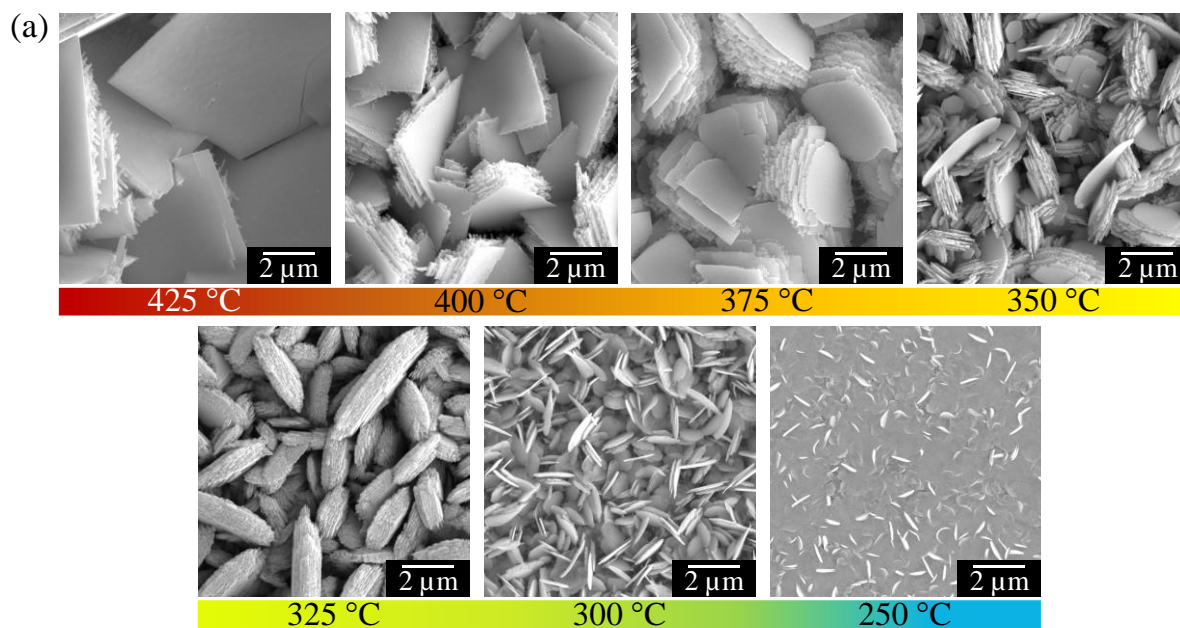
## Supporting Information

### Fabrication of SnS Nanowalls via Pulsed Plasma-Enhanced Chemical Vapor Deposition Using a Metal-Organic Single-Source Precursor

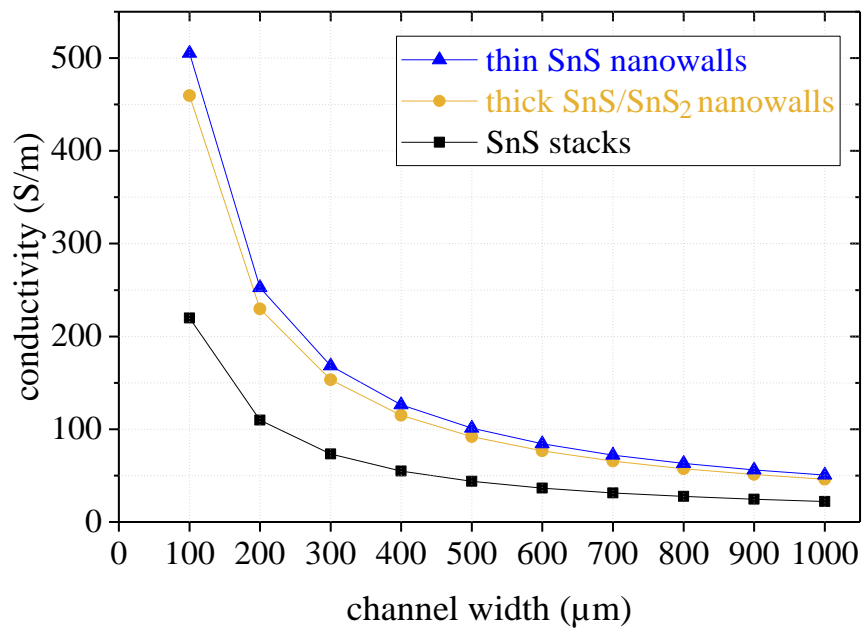
Charlotte Ruhmlieb\*, Young Joo Lee, Christian Strelow, Tobias Kipp, and Alf Mews



**Figure S-1.** Powder X-ray diffraction pattern of the used precursor powder (first from top) in comparison to the calculated powder X-ray diffraction pattern of [Sn(dmdtc)<sub>2</sub>] (ref. [39]) and the measured powder X-ray diffraction patterns of [Sn(dedtc)<sub>4</sub>] and [S<sub>2</sub>Sn<sub>2</sub>(dedtc)<sub>4</sub>].



**Figure S-2.** (a) Scanning electron microscope images of tin-sulfide samples fabricated via plasma-enhanced chemical vapor deposition at substrate temperatures ranging from 250 °C to 425 °C. (b) Powder X-ray diffraction patterns corresponding to the samples deposited at the particular substrate temperature. The dominant (040) reflex is at 31.9 °.



**Figure S-3.** (a) Specific conductivity of the investigated tin-sulfide samples as a function of channel width (active contact area of mercury droplet and structure).