

Supporting Information

Metal-Insulator-Semiconductor Field-Effect Transistors (MISFETs) Using p-type SnS and Nanometer-thick Al₂S₃ Layer

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SI-1a: Morphology studies of SnS structures on Al coated and bare glass substrates and SnS thickness over Al layers:

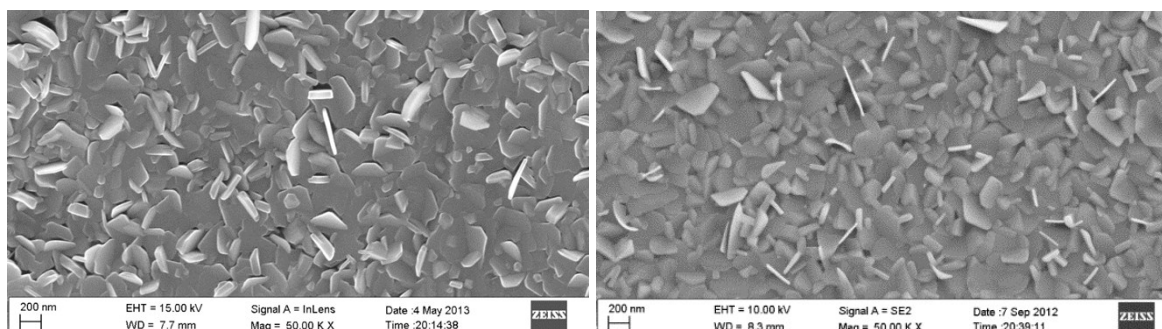


Fig. SI-1a: FESEM images of SnS structures on Al coated and bare glass substrates.

SI-1b: Surface properties SnS structures on different surfaces by profilometer studies

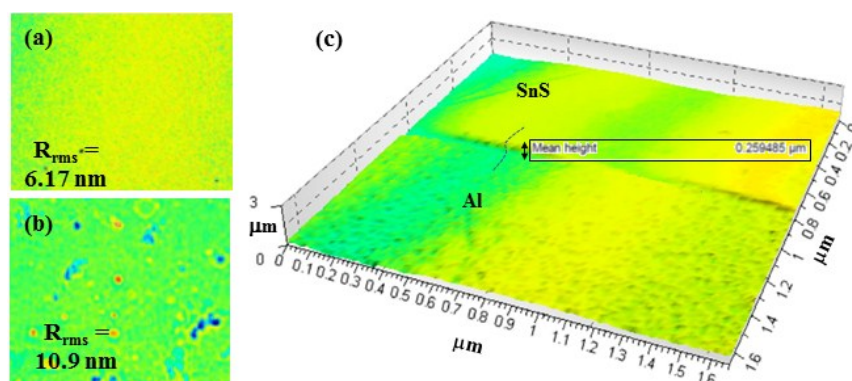


Fig. SI-1b: (a & b) Surface roughness of SnS nanostructures over Al coated and bare glass substrates and (c) thickness of SnS over Al coated glass substrate

SI-2: Chemical composition of SnS structures on Al coated and bare glass substrates:

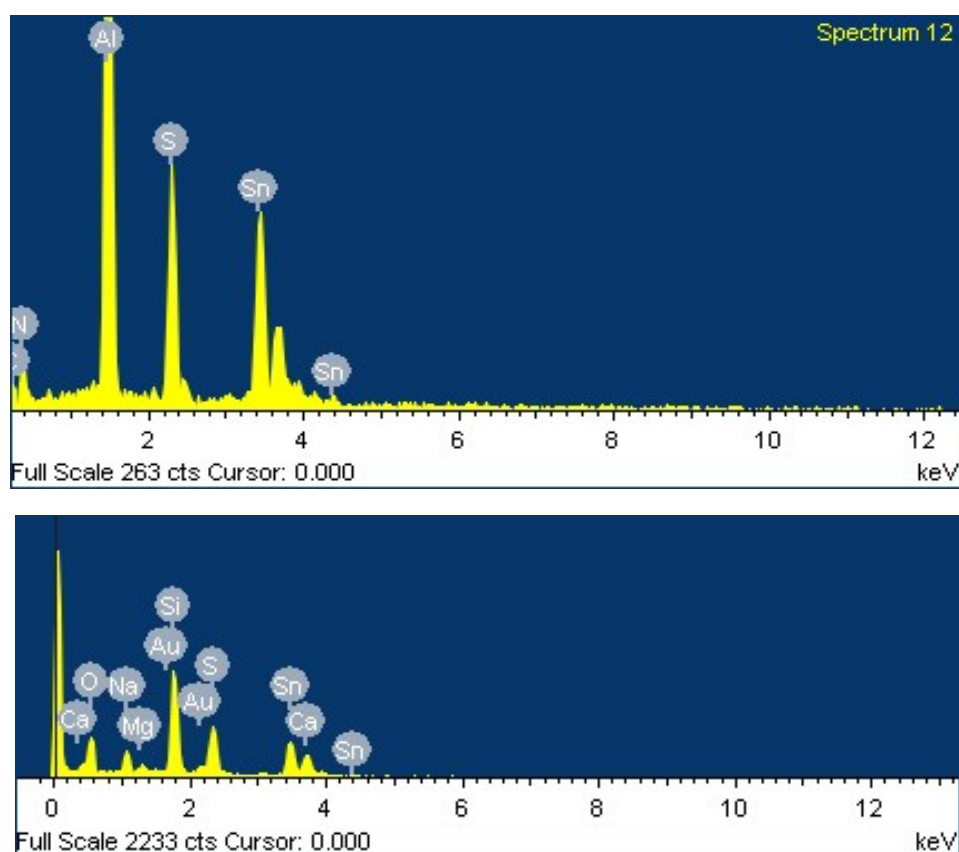


Fig. SI-2: EDS spectra of SnS structures on Al coated and bare glass substrates:

SI-3: Structural studies of SnS structures on bare glass substrate (y-axis is in log scale) and Al coated glass substrates:

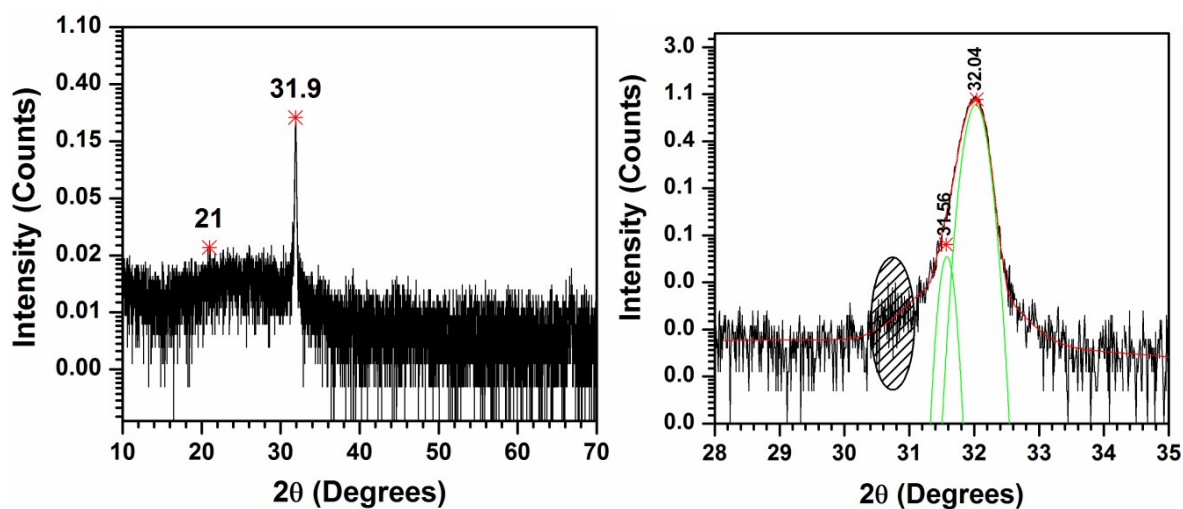


Fig. SI-3: XRD spectrum of SnS structures grown on bare glass and elaborated XRD spectrum of SnS structures grown on Al coated glass substrates

SI-4: Crystalline characteristics of SnS structures grown on bare and Al coated glass substrates.

Table 1: Data from XRD spectrum of SnS structures on glass substrate

Nr.	Pos. [°2Th.]	Intensity [cts]	FWHM [°2Th.]	d-Spacing [Å]		Rel. Int. [%]
				Observed	Standard	
1	31.90	200.83	0.1968	2.805	2.797	100.00

Table 2: Data from multi-peak Gaussian curve fit of elaborated XRD spectrum of SnS structures on Al coated glass substrates

Peak	Area	Center (2θ°)	Width (FWHM, 2θ°)	Height (counts)
1	10.72	31.577	0.18835	45.395
2	348.96	32.023	0.28179	988.07