



Supplementary materials

# Tailoring InSb Nanowires for High Thermoelectric Performance Using AAO Template-Assisted Die Casting Process

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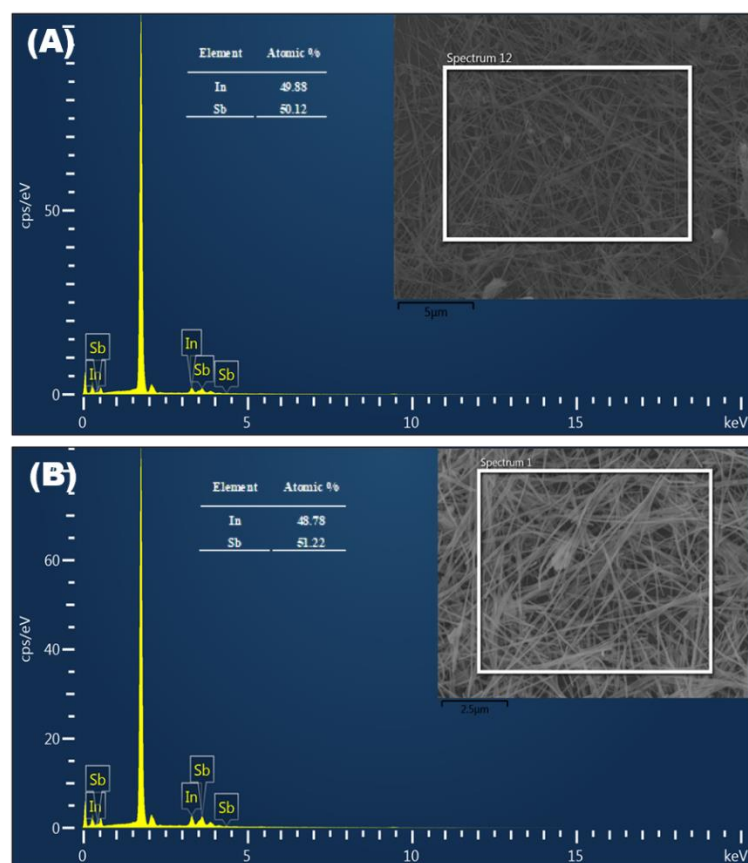
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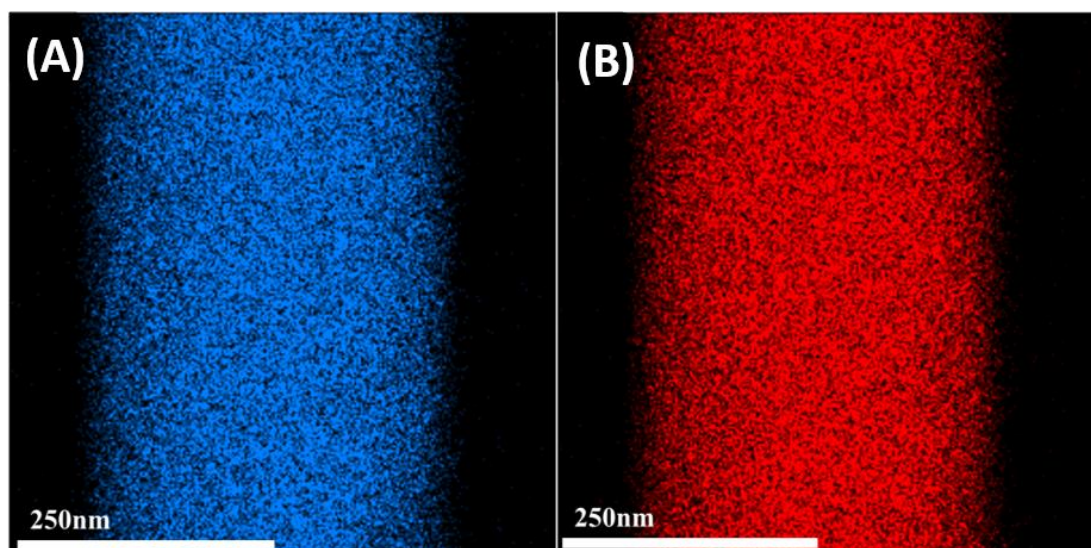
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**Table S1.** Anodization parameters used for the synthesis of AAO template.

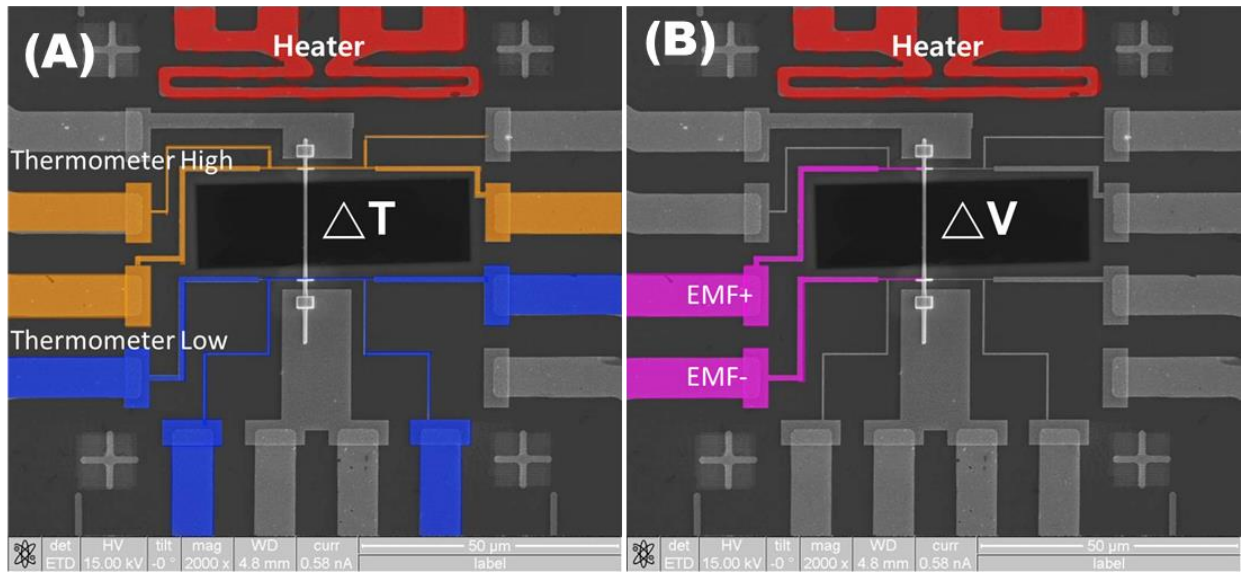
Electrolyte	Potential (V)	Electrolyte temperature (° C)	Anodization time (h)		Pore widening (min)
			First anodization	Second anodization	
3 wt.% H <sub>2</sub> C <sub>2</sub> O <sub>4</sub>	40	5	1	48	30
1 vol.% H <sub>3</sub> PO <sub>4</sub>	150	5	1	72	20



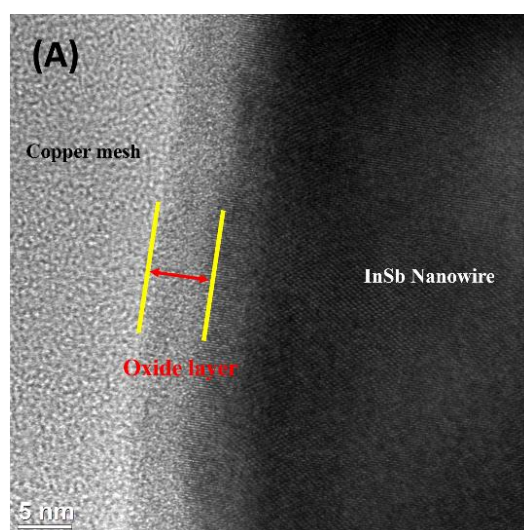
**Figure S1.** (A, B) EDX observed elemental composition of synthesized NWs obtained for (A) InSb O-NWs and (B) InSb P-NWs.



**Figure S2.** Elemental mapping of the InSb nanowires, showing In (A), and Sb (B).



**Figure S3.** InSb P-NW setup for Seebeck effect measurement (A) temperature and (B) Voltage difference.



**Figure S4.** TEM image of single InSb P-NW with thin oxide layer.