



Supporting Information

for

Analysis of catalyst surface wetting: the early stage of epitaxial germanium nanowire growth

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Parameters used to obtain the free energy per unit area for Au/Si and Au/SiO_x substrates

Table S1: Required values for the theoretical models and the resulting interfacial energies by wetting angle, by van der Waals energies and according to R. H. Ewing.

	RT (25 °C)			550 °C		
	Silicon oxide	Gold	Silicon	Silicon oxide	Gold	Silicon
Hamaker constant A_{ij} [10^{-19} J][1–9]	3.08–9.96			3.08–9.96		
		2.90–6.43			2.90–6.43	
		2.81–5.29			2.81–5.29	
Surface energy [J/m ²]	0.01 [10]	1.26 [11]	1.23 [12]	0.01 [10]	1.22 [11]	1.23 [12]
Wetting angle	84°			84°		
		42°			42°	
energetic portion in interfacial energy [13]	0.155	-0.018	0.286	0.155	-0.050	0.285
Particle diameter [nm]		0.35 [14]			0.35 [14]	
Interfacial energy WA [J/m ²]	-0.1			-0.1		
		1.1			1.1	
Interfacial energy VW[J/m ²]	-1.35			-1.27		
		0.09			0.16	
Interfacial energy AE [J/m ²]	0.14			0.10		
		0.27			0.24	

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