Supporting information for:
Towards controllable growth of self-assembled SiGe single and double quantum dot nanostructures

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2D SCP distribution calculated using the profile after the wetting layer growth but before the island nucleation (Figure 2 (a), Ge deposition of 2.4 ML)

Figure S1 shows the calculated 2D SCP distribution by using the profile after the wetting layer growth but before the island nucleation (Figure 2 (a), Ge deposition of 2.4 ML). It is clearly seen that two SCP minima (as indicated by two ellipses in white dash lines) exist and align
along Si $<110>$ inside the nanohole after Ge WL growth. The two SCP minima are clearly asymmetrical, which is similar to the results shown in figure 6. Such comparison indicates that the assumption of the initial Ge wetting layer conforms mostly to the Si surface profile after buffer growth is reasonable.

**Figure S1** Calculated 2D SCP distribution $\mu - \mu_0$ for a nanohole ($r=3$) after buffer layer growth and Ge deposition of 2.4 ML (figure 2(a)). The black dash line indicates the boundary of the nanohole after Ge deposition. Two minima are clearly seen in the two regions circled by white dash lines. The fitting parameter $(z_e - z_0)$ was 1.3 nm.