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Supporting information for:

Towards controllable growth of self-assembled SiGe single and double quantum dot nanostructures

Yingjie Ma[1], Shufan Huang[1], Cheng Zeng[2], Tianyuan Zhou[1], Zhenyang Zhong[1], Tong Zhou[1], Yongliang Fan[1], Xinju Yang[1], Jinsong Xia[2†], Zuimin Jiang[1‡]

[1] *State Key Laboratory of Surface Physics, Key Laboratory of Micro and Nano Photonic Structures (Ministry of Education) and Department of Physics, Fudan University, Shanghai 200433, China*

[2] *Wuhan National Laboratory for Optoelectronics, School of Optoelectronic Science and Engineering, Huazhong University of Science and Technology, Wuhan 430074, China*

E-mail: † jinsongxia@gmail.com, ‡ zmjiang@fudan.edu.cn

2D SCP distribution calculated using the profile after the wetting layer growth but before the island nucleation (Figure2 (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 (Figure2 (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

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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.

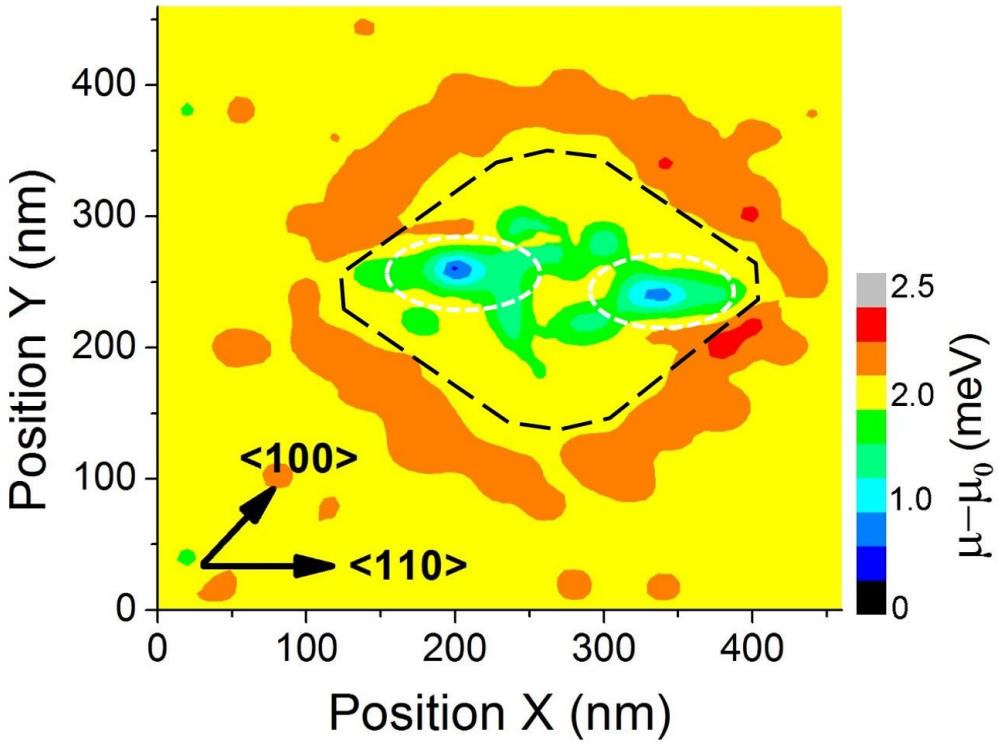

Figure S1 Calculated 2D SCP distribution $\mu - \mu_0$ for a nanohole (r=3) after buffer layer growth and Ge deposition of 2.4 ML (figure 2(a)). The black dash line indicates the boundary of the nanohole after Ge depostion. Two minima are clearly seen in the two regions circled by white dash lines. The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