Shape-control of nickel silicide nanocrystals on stress-modified surface

Cheng-Lun Hsin [1, a], Chun-Wei Huang[2], Chi-Hsuan Cheng[1], Hsu-Shen Teng[1], and Wen-Wei Wu[2,a]

[1]Department of Electrical Engineering, National Central University, Taoyuan, 32001, Taiwan

[2]Department of Materials Science and Engineering, National Chiao Tung University, Hsinchu 300, Taiwan

[a] Corresponding Author E-mail: clhsin@ee.ncu.edu.tw , WWWu@mail.nctu.edu.tw

Supporting Information

Supporting Information Fig.S1. Low-magnification TEM images.

Supporting Information Fig.S2. XRD diffraction peak highlighted between 56.05 ~ 56.45 degree.

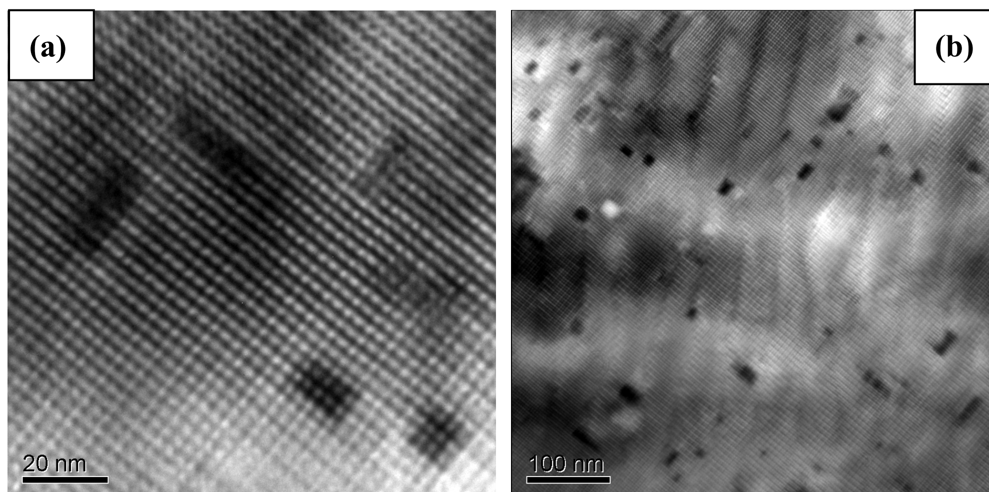

Figure S1 | Low-magnification TEM images. (a) and (b) are low-magnification TEM images to demonstrate that the as-formed silicides were mostly square or rectangular, affected by the underlying dislocation arrays.

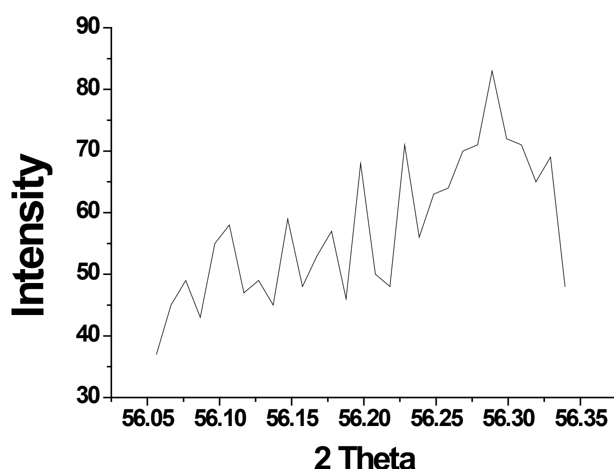

Figure S2 | XRD diffraction peak highlighted between 56.05 ~ 56.45 degree. XRD diffraction peaks for Si are 28.442, 47.302, 56.122, 69.129, 76.376 and 88.029 degree, while those of $NiSi_2$ are 28.596, 47.41, 56.327, 69.346, 76.588, and 88.387, respectively. The amount of silicide is much less than that of Si, so the peak intensity would be quite weak. The auxiliary XRD highlighted between 56.05 ~ 56.45 degree and was shown to demonstrate the $NiSi_2$ phase.