Electronic Supplementary Information (ESI)

Electrodeposited Ni dendrites with high activity and durability for hydrogen evolution reaction in alkaline water electrolysis

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Supporting Information Figure Caption

Figure S1. LSV curve of Ni reduction on glassy carbon electrode in a 0.5 M $NiCl_2$ electrolyte with a scan rate of 20 mVs^{-1} at 298K.

Figure S2. FESEM images of Ni dendrite. (a) before and (b) after stability test.

Figure S3. FESEM image of grown Ni dendrite at -0.8 V for 20 s.

Figure S4. (a) FESEM image of grown Ni dendrite at -0.8 V for 180 s. (b) XRD patterns of glassy carbon and grown Ni dendrite at -0.8 V for 180 s.

Figure S5. The effect of particulate additives (left two columns) reducing the orientational-translational mobility ratio (right two columns) on the growth morphology.[37]

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Figure S6. Adsorption sites for H on Ni (111), (100) and (110) (Modified from ref. 41).

Figure S1

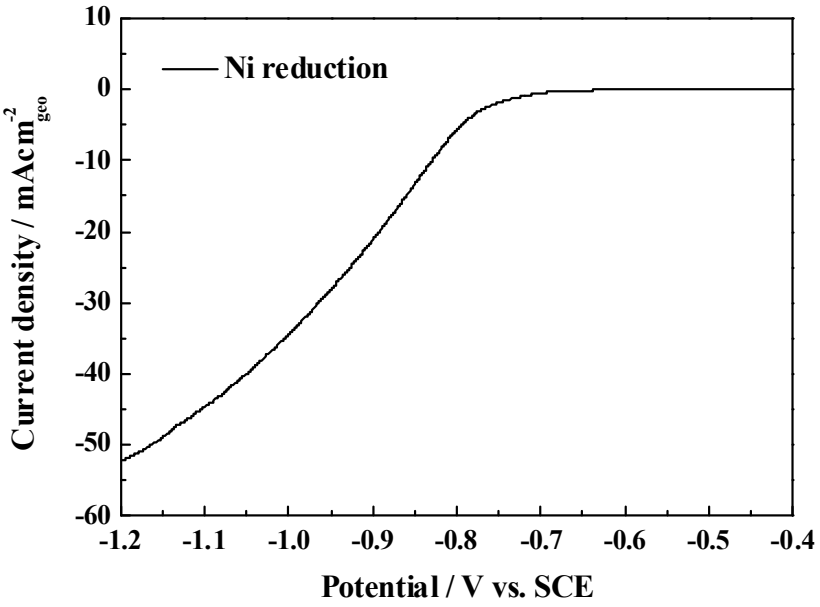

Figure S2

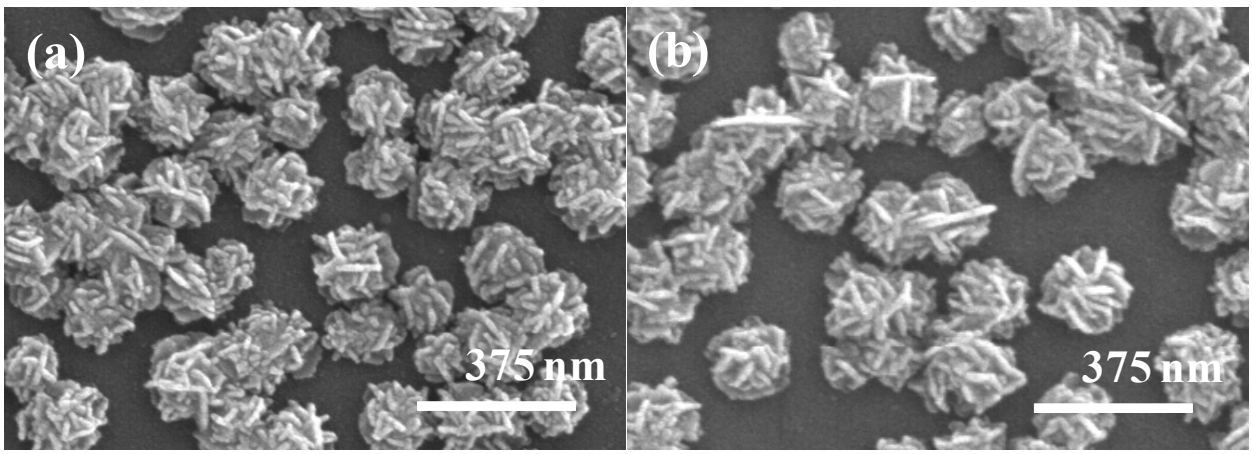

Figure S3

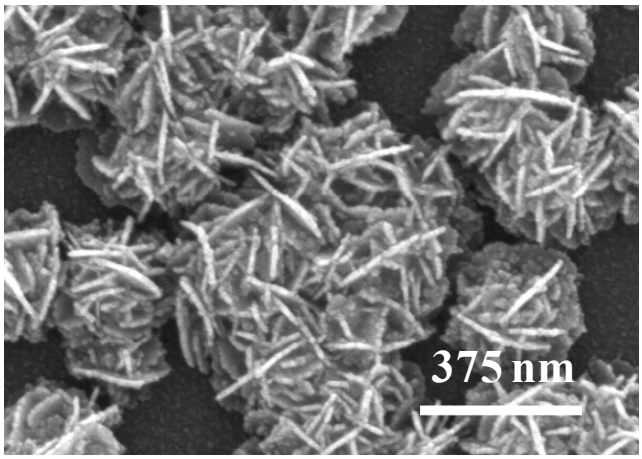

Figure S4

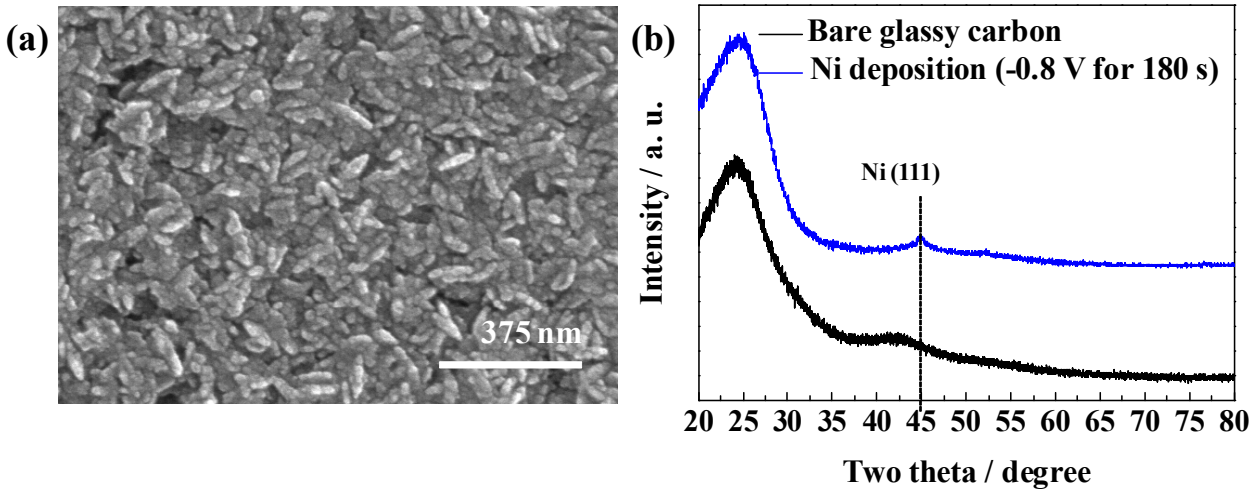

Figure S5

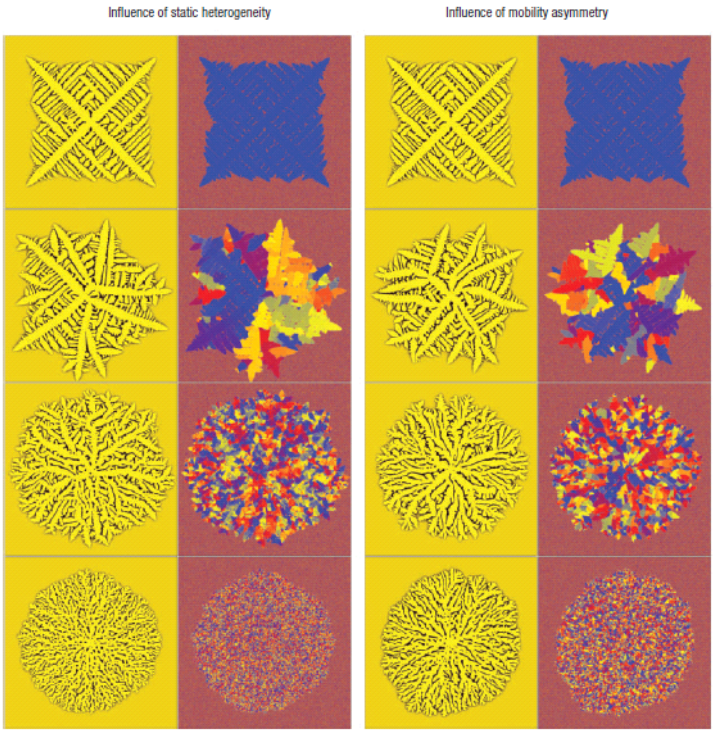

Figure S6.