

## Electronic Supplementary information (ESI)

### Electrochemical hydrogen storage properties of a non-equilibrium $\text{Ti}_2\text{Ni}$ alloy

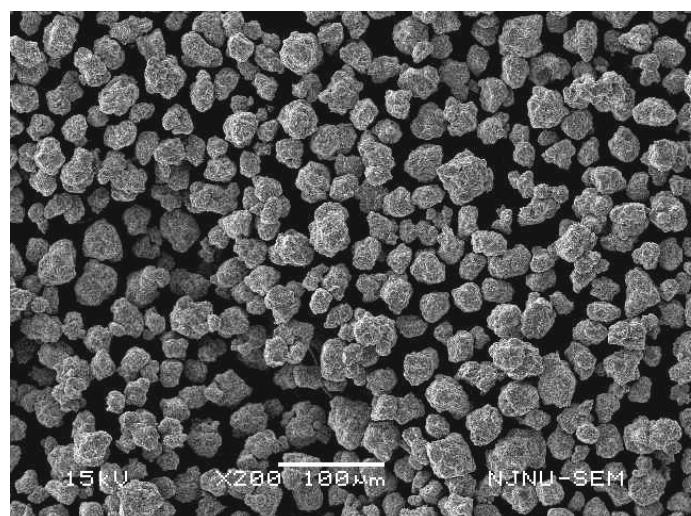
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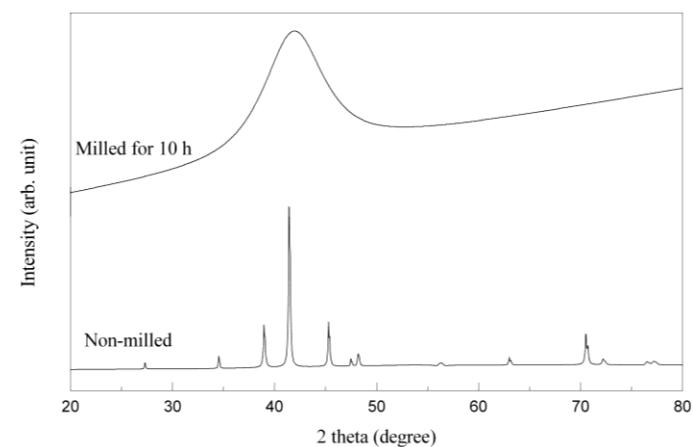
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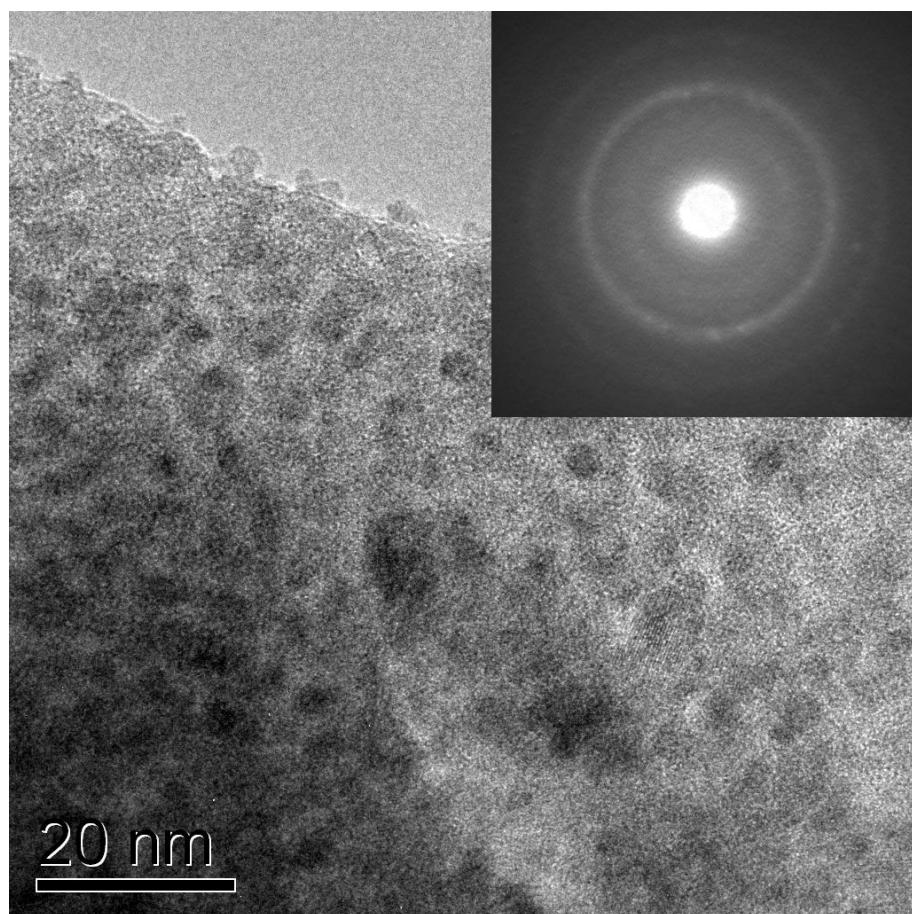
(a)



(b)



**Fig. S1. (a) SEM image of amorphous  $\text{Ti}_2\text{Ni}$  alloy and (b) XRD patterns of crystalline and amorphous  $\text{Ti}_2\text{Ni}$  alloys**



**Fig. S2.** The SEAD and HRTEM images of the non-equilibrium  $\text{Ti}_2\text{Ni}$  alloy