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Supplementary Materials: Electrodeposited Magnesium Nanoparticles Linking Particle Size to Activation Energy

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Figure S1. Amount of magnesium deposition at the surface of the Ni foam as function of time and corresponding charge passed through the electrochemical cell. The amount of magnesium was determined from ICP-OES analysis.



Figure S2. XRD pattern of Ti/15 h after 200 °C hydrogenation.



Figure S3. Hydrogen desorption profile of the Ni foam.



Figure S4. Hydrogen desorption profiles obtained by MS at various heating rates (5, 10, and $20 \,^{\circ}\text{C}\cdot\text{min}^{-1}$) of the magnesium nanoparticle deposited at the Ni and Ti substrates. Only the first peak corresponding to hydrogen release from the magnesium nanoparticles supported on the Ni substrate was used to calculate E_a.