

Supplementary Materials
Catalytic Effect of $(\text{Ti}_{0.85}\text{Zr}_{0.15})_{1.05}\text{Mn}_{1.2}\text{Cr}_{0.6}\text{V}_{0.1}\text{Cu}_{0.1}$ on hydrogen
storage properties of ultrafine Mg particles

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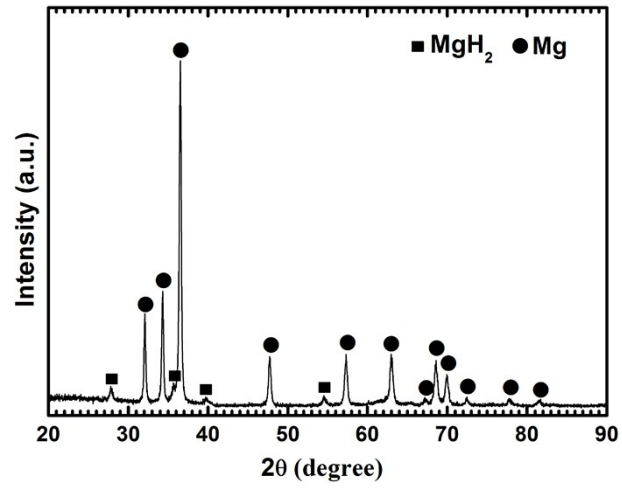


Fig. S1. XRD patterns of the as-milled Mg UFPs.

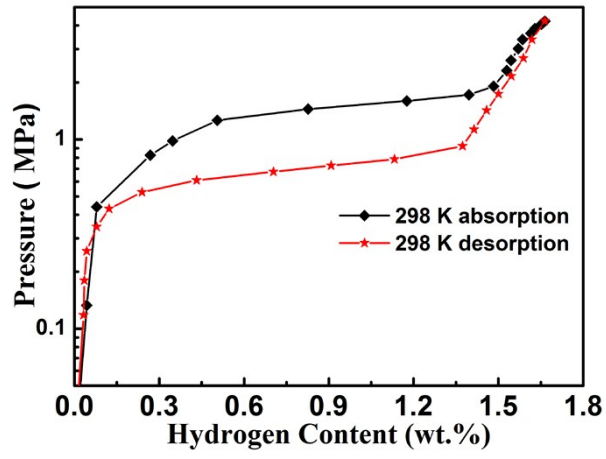


Fig. S2. P-C isotherm curves at 298 K for the $(\text{Ti}_{0.85}\text{Zr}_{0.15})_{1.05}\text{Mn}_{1.2}\text{Cr}_{0.6}\text{V}_{0.1}\text{Cu}_{0.1}$ alloy.

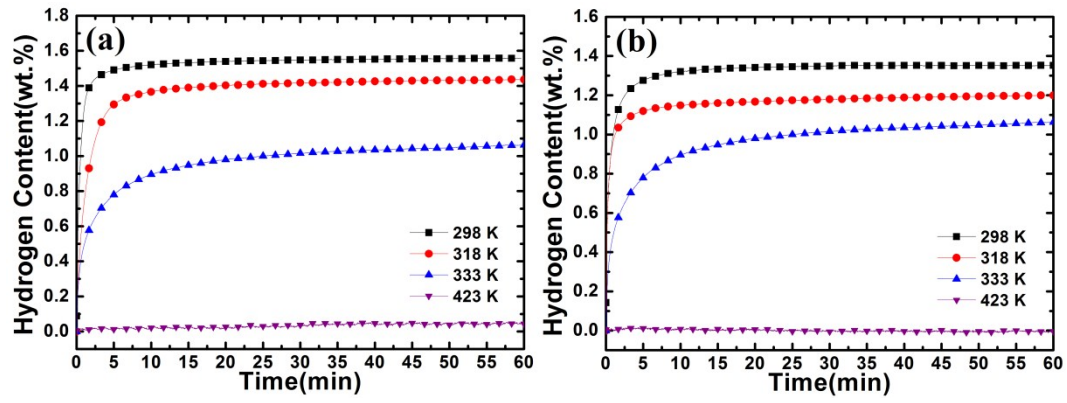


Fig. S3. (a) Hydrogen absorption curves under 4 MPa hydrogen pressure; (b) desorption curves under 100 Pa of the $(\text{Ti}_{0.85}\text{Zr}_{0.15})_{1.05}\text{Mn}_{1.2}\text{Cr}_{0.6}\text{V}_{0.1}\text{Cu}_{0.1}$ alloy.