

## Available Supporting Information

### Freestanding Monolithic Silicon Aerogels

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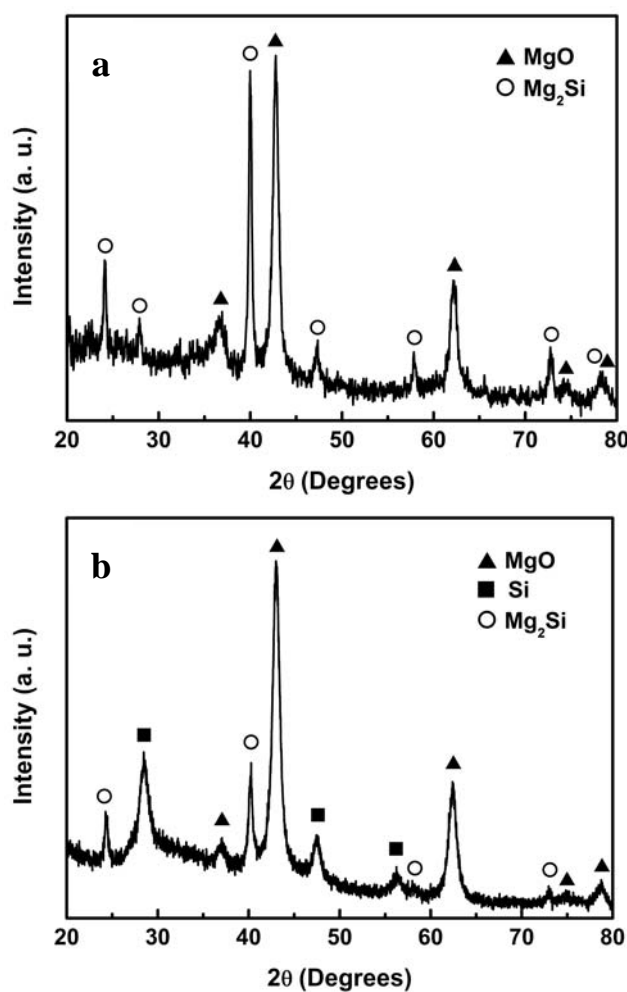


Figure S2. XRD patterns of the converted products after magnesiothermic reaction of silica aerogels in the region I. The product of **a** located closer to Mg source than the product of **b**.

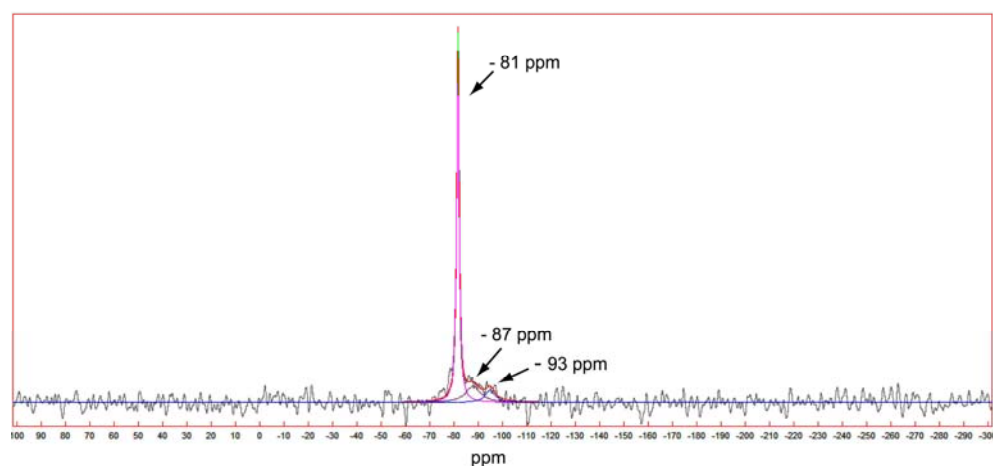


Figure S3. Solid state  $^{29}\text{Si}$  MAS NMR spectrum of the HF-treated silicon aerogels.

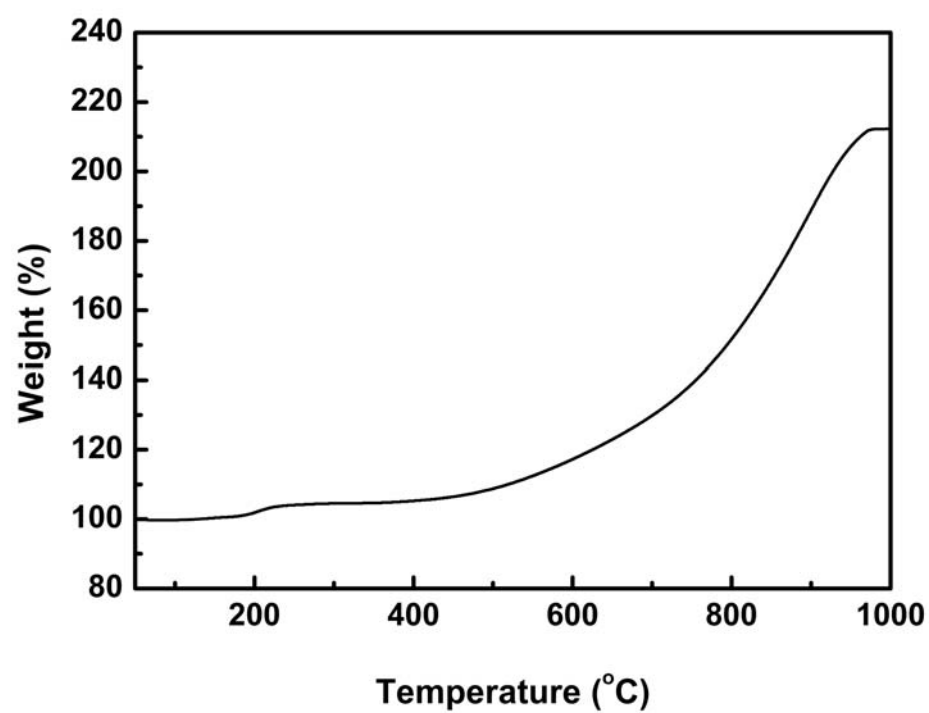


Figure S4. TG analysis of the HF-treated silicon aerogel conducted in air at a heating rate of  $5^\circ\text{C}/\text{min}$ .

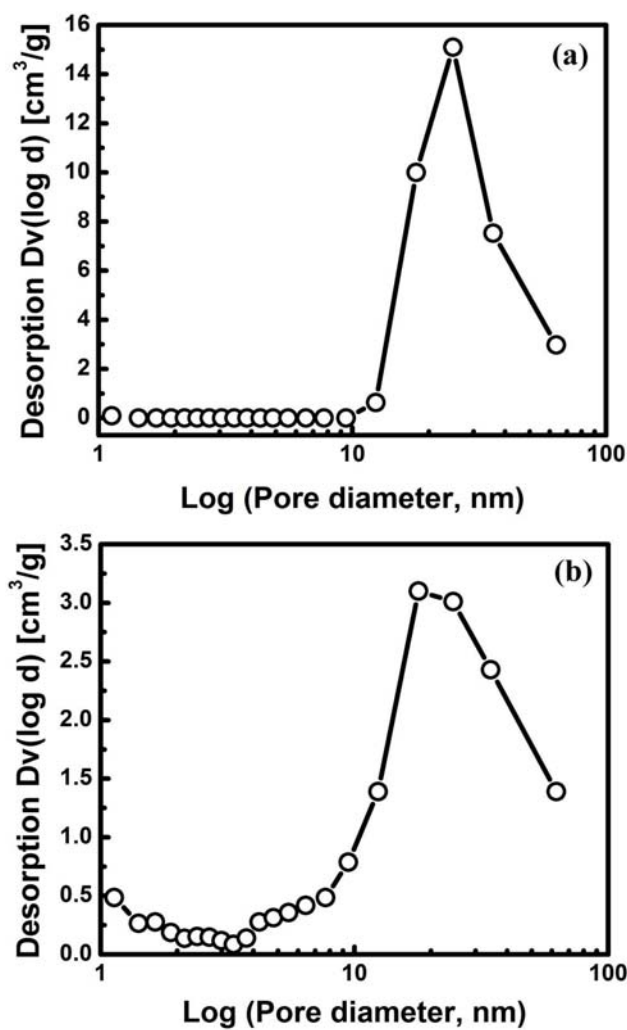


Figure S5. BJH analyses of (a) a  $\text{SiO}_2$  aerogel and (b) a converted Si aerogel.