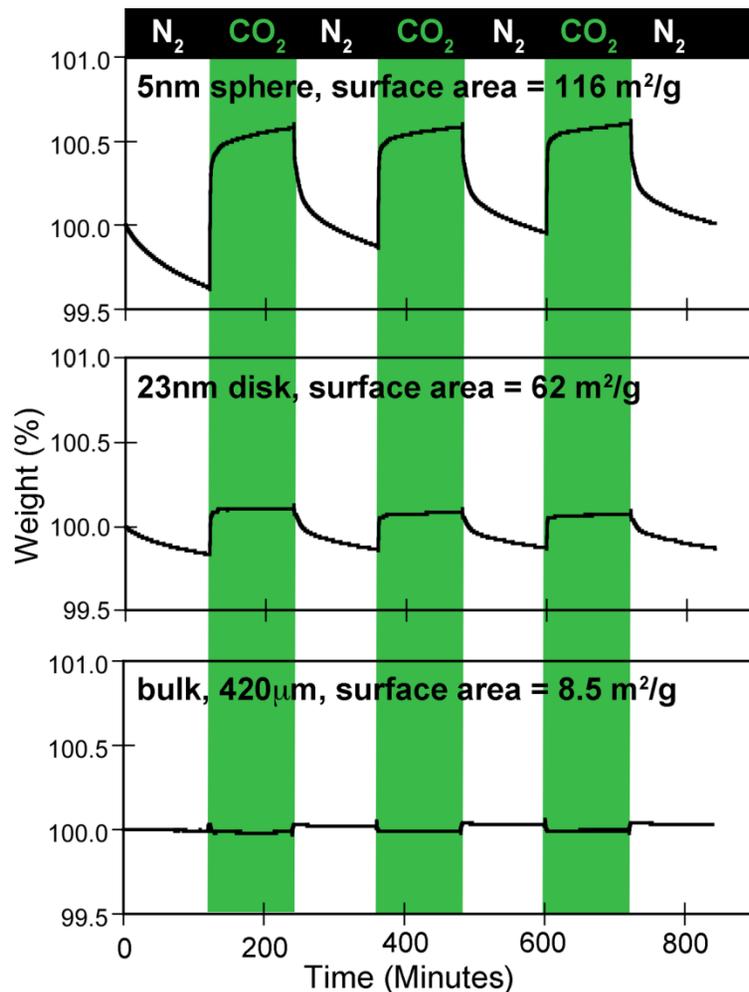




## Does rock size have a significant impact on CO<sub>2</sub> capture capacity?



- Basic metal oxides have previously shown high CO<sub>2</sub> gas adsorption involving chemisorption. Can this adsorption be controlled and enhanced at the nanoscale level?
- The carbon dioxide storage capacity of magnesium oxide materials was examined as a function of particle size, shape, and surface area.
- Thermogravimetric analysis (Figure) of magnesium oxide materials cycled between pure N<sub>2</sub> and CO<sub>2</sub> environments clearly showed enhanced CO<sub>2</sub> capacity (larger % weight gain upon adsorption) with smaller magnesium oxide particles having larger surface area.

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