

Supporting Information

Wu and Navrotsky 10.1073/pnas.1505874112

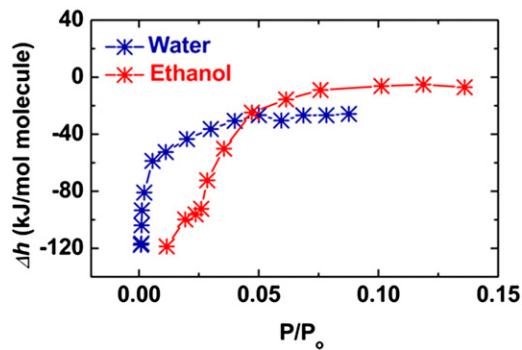


Fig. S1. Differential enthalpies of water and ethanol adsorption for NMT-2 as function of partial pressure (P/P_0) at 25 °C. It is suggested that at any P/P_0 below 0.05, the differential enthalpy of ethanol adsorption is more exothermic than that of water. The water adsorption calorimetry data for NMT-2 are reproduced from ref. 1.

1. Forbes TZ, Radha AV, Navrotsky A (2011) The energetics of nanophase calcite. *Geochim Cosmochim Acta* 75(24):7893–7905.

Table S1. Properties of calcite nanocrystals studied (1)

Sample	Source	Chemical composition	Transmission electron microscopy particle size, nm	Brunauer–Emmett–Teller surface area, m ² /mol
SM-1	Specialty Minerals, Inc.	Ca _{0.996} Mg _{0.004} CO ₃ ·0.052H ₂ O	92 ± 2	1,895 ± 16
SS-1	SpringSky Nanomaterials	Ca _{0.990} Mg _{0.010} CO ₃ ·0.055H ₂ O	133 ± 4	1,321 ± 18
NMT-1	NanoMaterials Technology Co., Ltd.	Ca _{0.990} Mg _{0.010} CO ₃ ·0.038H ₂ O	119 ± 3	1,488 ± 15
NMT-2	NanoMaterials Technology Co., Ltd.	Ca _{0.990} Mg _{0.010} CO ₃ ·0.069H ₂ O	65 ± 2	2,243 ± 9

1. Forbes TZ, Radha AV, Navrotsky A (2011) The energetics of nanophase calcite. *Geochim Cosmochim Acta* 75(24):7893–7905.