Structure and Thermodynamics of Empty Clathrate Hydrates Below the Freezing Point of Water

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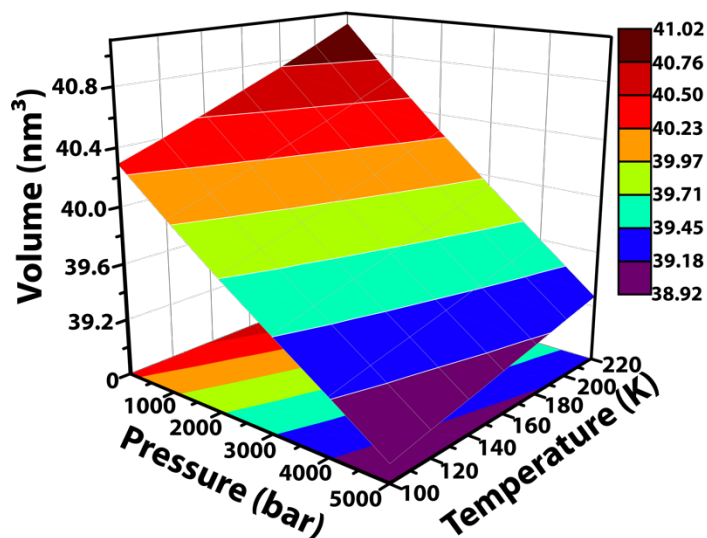
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Figure SI1. Thermodynamical p–V–T surface of the empty sII clathrates, in the ranges $100 \leq T$ (K) ≤ 220 K and $p \leq$ 5000 bar.
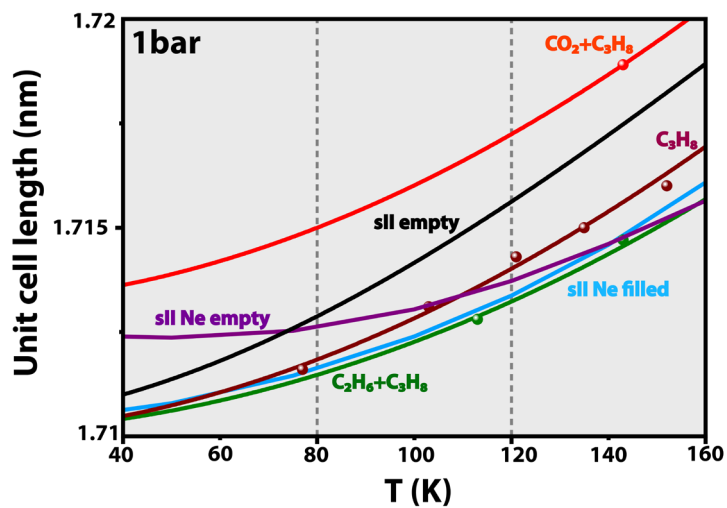

Figure SI2. Magnification of Figure 3b) in the range $40 \leq T$ (K) ≤ 160.

Table SI1. Parameters of the Shomate equation employed to model $C_p = A + Bp + Cp^2 + Dp^3$.

Cp (kJ· K^{-1}·mol^{-1})	sI	sII	Ih
A	0.05387	0.05398	0.02552
B	-3.5388×10^{-8}	-1.54546×10^{-7}	6.27072×10^{-7}
C	8.30304×10^{-11}	4.48321×10^{-11}	-1.85816×10^{-10}
D	-4.60746×10^{-14}	-5.06250×10^{-15}	1.85929×10^{-14}