

## Supporting Information

### **Role of mechanical deformation on the thermal transport of sI-type methane hydrate**

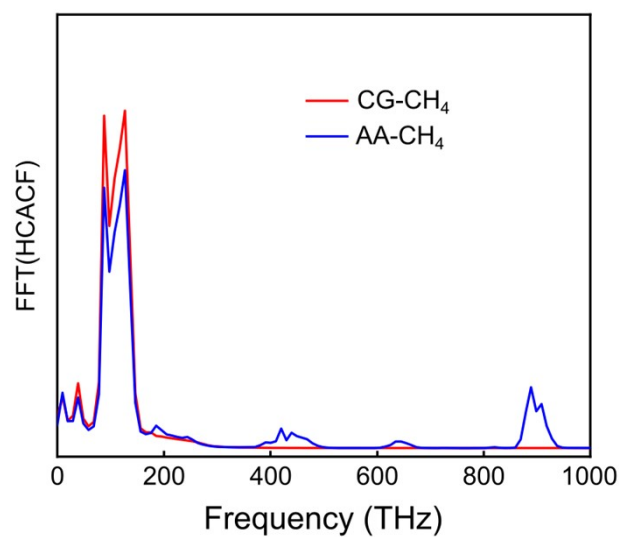
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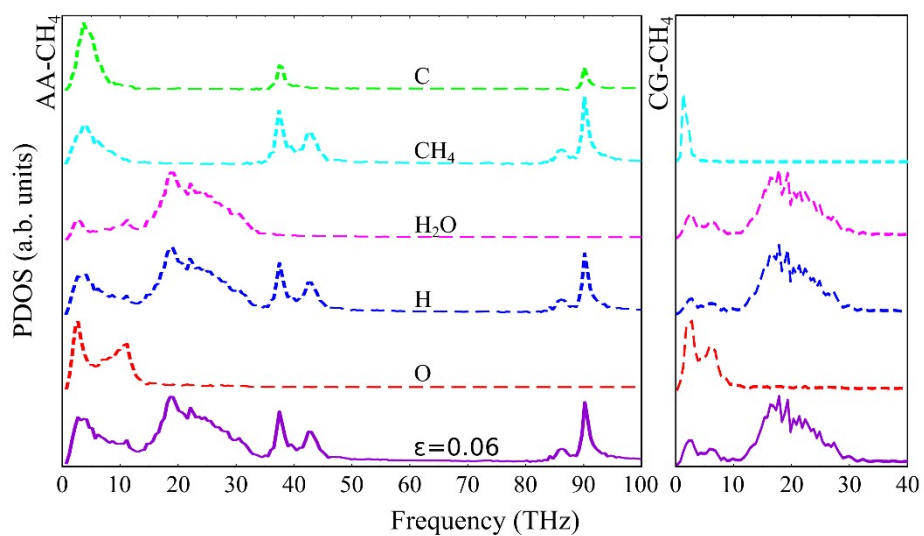
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**Figure S1** Fast Fourier Transform (FFT) of HCACF of monocrystalline sI clathrate hydrate (AA: blue, CG: red).



**Figure S2** PDOS of sI methane hydrate with (a) AA and (b) CG models of methane molecule at triaxial tension strain of 0.06.