

# Electronic Supplementary Information For

## Structural Stability and Electronic Properties of (SiH)<sub>2</sub>O-formed Siloxene Sheet: A Computational Study

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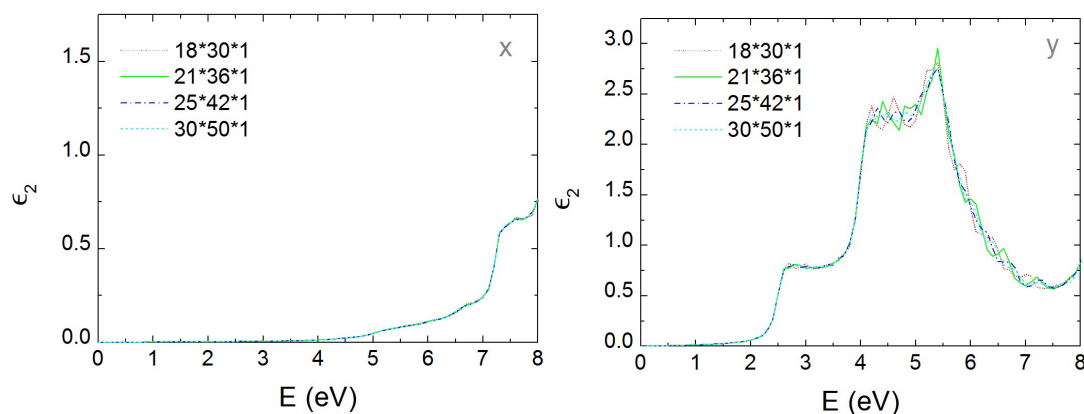


Figure S1: The convergence test for the imaginary part of dielectric function versus the k-point sampling.

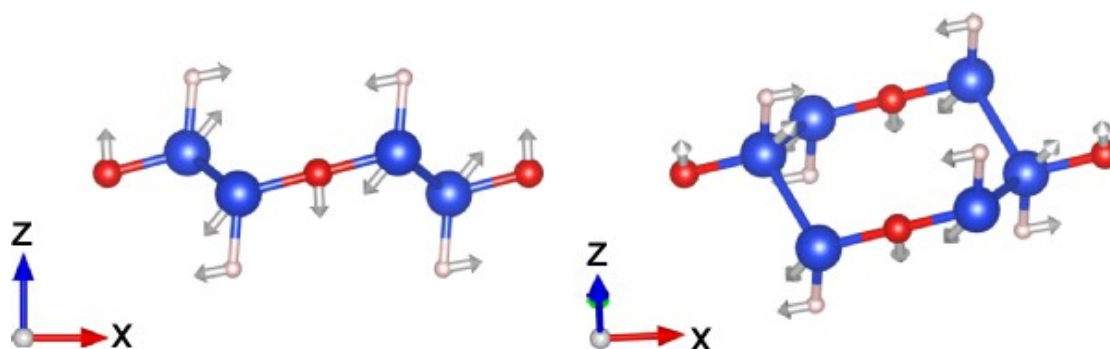


Figure S2: The pictures for the eigenvector of the lowest unstable mode at the  $\square$  point in the ideal (SiH)<sub>2</sub>O sheet. Arrows stand for the directions of atomic displacements.

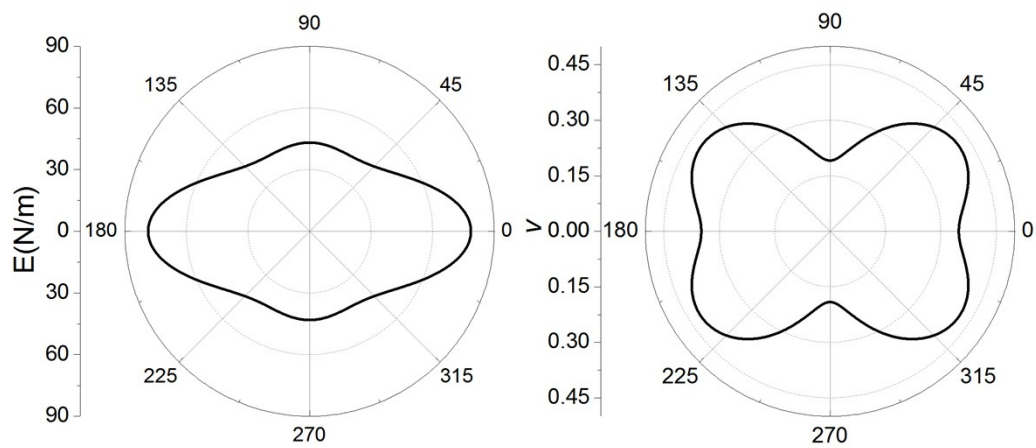


Figure S3: The orientation-dependent Young modulus and Poisson ratio for the ideal  $(\text{SiH})_2\text{O}$  sheet.