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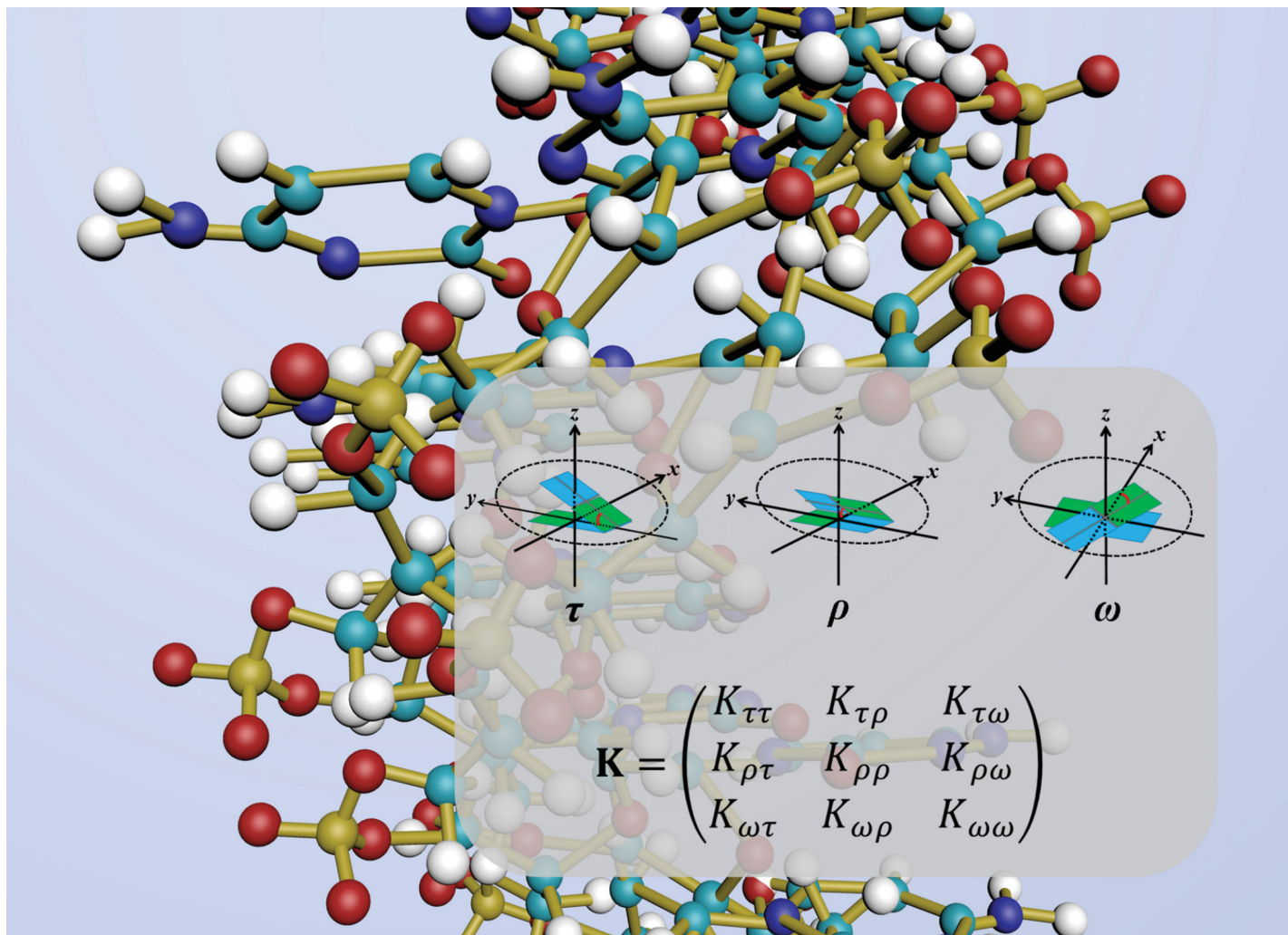


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**Showcasing research from the group of Prof. Shibei Li
at Wenzhou University, Wenzhou, China**

Influence of temperature on bend, twist and twist-bend coupling of dsDNA

The research activities of the Li group focus on the microstructures and physical properties of soft matter systems at various length scales. This work uses the stiffness matrix \mathbf{K} to analyse the temperature-dependent bend and twist elasticities of dsDNA, based on the trajectory data from the all-atom molecular simulations. Our analysis indicates that the bend and twist stiffnesses, as well as their couplings, decrease as the temperature rises, primarily owing to entropic influences stemming from thermodynamic fluctuations.

As featured in:



See Shibei Li *et al.*,
Phys. Chem. Chem. Phys.,
2024, **26**, 8077.