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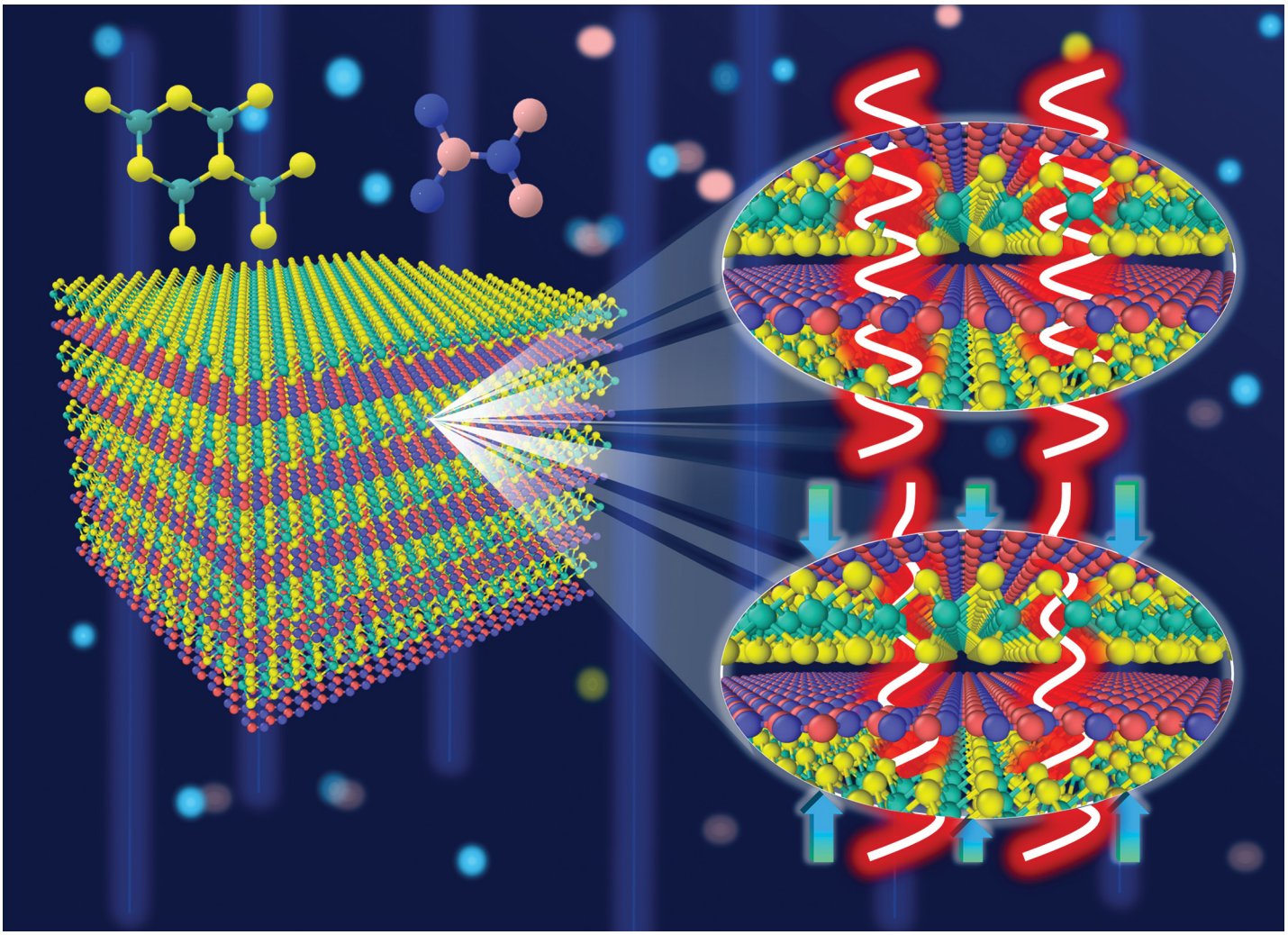

Showcasing research from the group of Prof. Lifeng Wang at Nanjing University of Aeronautics and Astronautics, and from Teesside University

Tunable elastic wave bandgaps by strain engineering of multilayered van der Waals metamaterials

This study uses molecular dynamics simulations to investigate the bandgap characteristics of elastic waves in multilayered h-BN/MoS_2 vdW metamaterials. It demonstrates that the position and width of the broadband terahertz elastic wave bandgap in these materials can be adjusted by modifying the longitudinal strain and stacking order. This research offers a novel method for tuning elastic wave propagation in multilayered vdW heterostructures.

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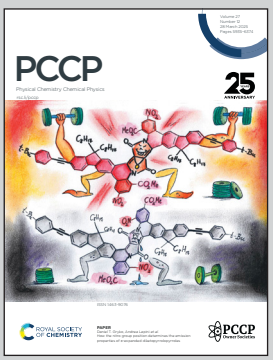

See Lifeng Wang *et al.*, *Phys. Chem. Chem. Phys.*, 2025, **27**, 5984.

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