

Figure 1: Graphene sheet with a hole in it

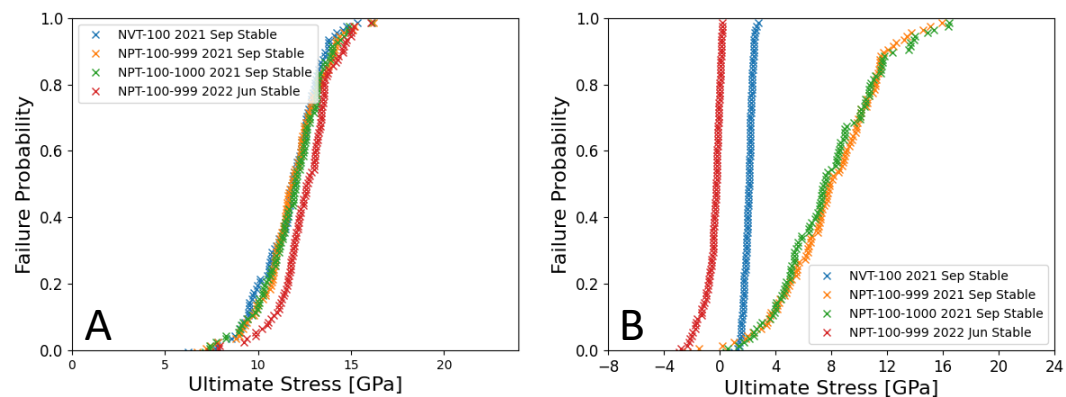


Figure 3 : Failure probability of 100 graphene sheets per damping parameter combination under tensile load.

- (A) Axial tensile behavior sampled at ultimate axial stress  
(B) Transverse tensile behavior sampled at ultimate axial stress

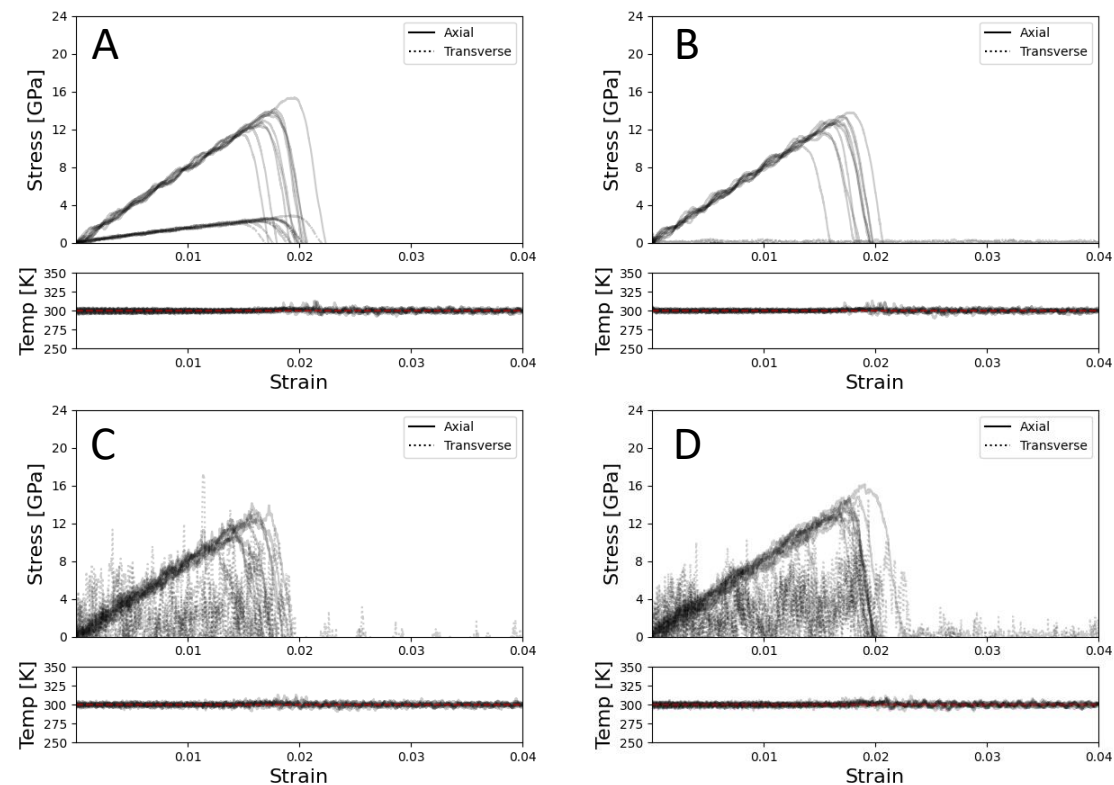


Figure 2 : Series of 10 graphene stress strain fracture curves with corresponding temperature.

- (A) NVT with thermostat 100 $\Delta$ , LAMMPS version Sep 2021 Stable  
(B) NPT with thermostat 100 $\Delta$ , barostat 999 $\Delta$ , LAMMPS version Jun 2022 Stable  
(C) NPT with thermostat 100 $\Delta$ , barostat 999 $\Delta$ , LAMMPS version Sep 2021 Stable  
(D) NPT with thermostat 100 $\Delta$ , barostat 1000 $\Delta$ , LAMMPS version Sep 2021 Stable