

Supplementary Material

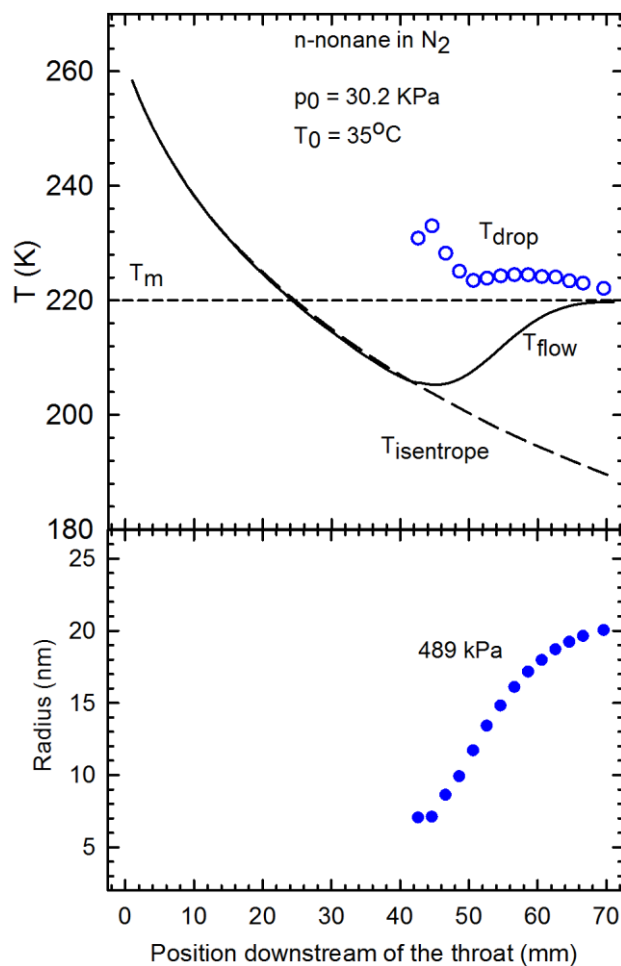


Figure S.1: (a) The temperatures of the condensing flow, T_{flow} (solid lines), the expected isentropic temperature profile, $T_{\text{isentropic}}$ (long dashed lines), and the aerosol droplets T_{drop} (open circles) as a function of position for experiments conducted with $p_{v0} = 489$ Pa. The short dashed line corresponds to the equilibrium melting temperature T_m of n-nonane. The droplet temperature is always above T_m and hence droplets are not frozen. (b) The mean particle radius as a function of position measured by SAXS.

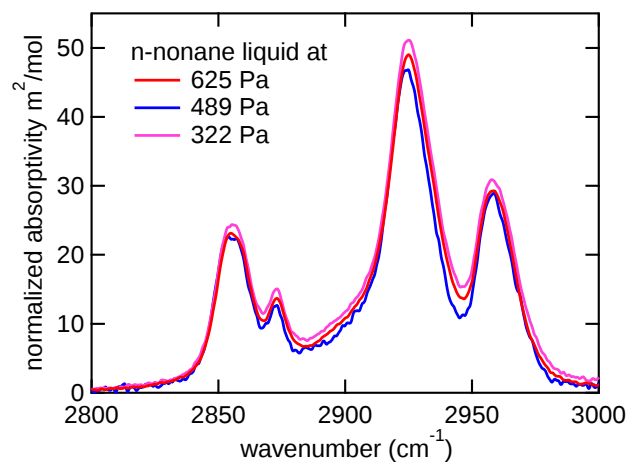


Figure S.1: The normalized liquid aerosol absorptivities of n-nonane measured in the supersonic nozzle for experiments conducted at three different partial pressures of condensible. The spectra corresponding to 625, 489 and 322 Pa were measured at temperatures of 229.8 K, 219.7 K and 202.9 K, respectively. Despite the ~25 K temperature difference, the spectra agree very well, validating our assumption that even at the lowest temperature the droplets are not frozen.