Coalescence of two colliding liquid droplets with lattice Boltzmann method\(^1\) YIKUN WEI, YUEHONG QIAN, Institute of Applied Mathematics and Mechanics, Shanghai University — In this talk, we present two-dimensional numerical simulations of the head-on and off-center binary collision of van der Waals liquid droplets using the lattice Boltzmann method (LBM). The effects of the Weber number, impact velocity, droplet size ratio on the coalescence process are investigated. Numerical results are found in a good agreement with experimental findings.


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