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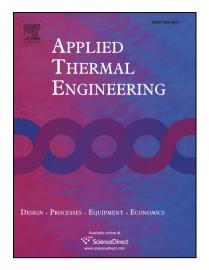
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### **ACCEPTED MANUSCRIPT**

# Modeling thermocapillary migration of interfacial droplets by a hybrid lattice Boltzmann finite difference scheme

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#### **Highlights:**

- The thermocapillary motion behavior of interfacial droplets was modeled.
- The ternary phase field model was employed to capture phase interfaces.
- The continuum surface force model was used to treat thermocapillary forces.
- A hybrid lattice Boltzmann finite difference scheme was developed and validated.
- The effect from the deformation of interfaces on droplet transfer was revealed.

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