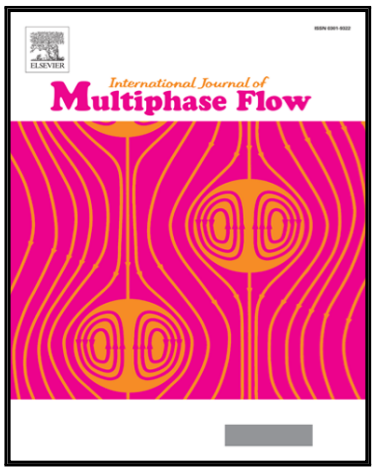

Effect of the Wall Presence on the Bubble Interfacial Forces in a Shear Flow Field

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Highlights

- Effect of wall distance, bubble deformation and relative velocity on the interfacial forces are evaluated with level-set interface tracking method
- Full flow field is resolved without the need for interfacial closure laws: the interfacial force coefficients are evaluated based on the momentum balance
- The sign change of net transverse lift force is observed at certain conditions
- A bubble migration map based on the simulation results is created