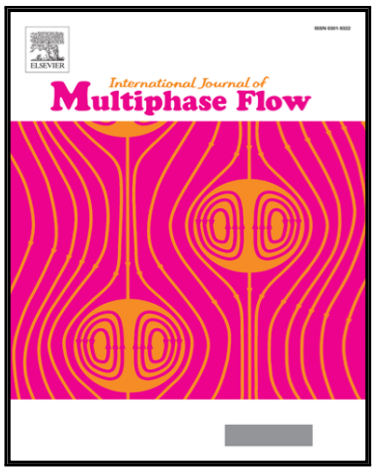

Incipient motion of a non-cohesive particle under Stokes flow conditions

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Highlights

- Development and validation of an improved numerical approach that confirms and generalises the existing analytical, experimental and other numerical studies.
- Determining the modes of entrainment based on the force/moment-magnitude approach for a single particle under creeping flow conditions.
- Determining the critical Shields number for different particles and bed substrates.
- Qualitative and quantitative comparison with existing experimental data.