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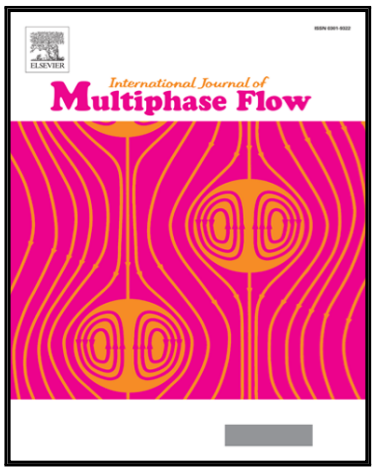

High-Frequency Thermal-Fluidic Characterization of Dynamic Microchannel Flow Boiling Instabilities: Part 1 - Rapid-Bubble-Growth Instability at the Onset of Boiling

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Highlights

- The rapid-bubble-growth instability at the onset of flow boiling is studied.
- The effects of flow inertia and inlet liquid subcooling are investigated.
- Flow visualizations are synchronized to transient thermal-fluidic signatures.
- The rapid-bubble-growth instability at the onset of boiling causes flow reversal.

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