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Bubble formation in co-fed gas-liquid flows in a rotor-stator spinning disc reactor

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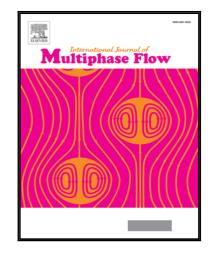
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## Highlights

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- Co-fed gas-liquid flows in a rotor-stator spinning disc reactor are studied.
- High speed imaging and spectral analysis of pressure drop signals is employed.
- Two bubble formation mechanisms observed: gas overpressure and turbulent vortices.
- Maximum homogeneously dispersed gas flow linearly proportional to turbulence intensity.
- Pressure signature of gas-liquid flows enables continuous monitoring of the process.

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