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Investigations on the influence of swirl intensity on solid-fuel ramjet engine

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Highlights

- Experiments on solid-fuel ramjet engine have been carried out to validate the numerical model.
- We investigate the effect of swirl intensity on swirling reacting unsteady flow in a SFRJ.
- An in-house code to simulate the unsteady swirling reacting flows in a SFRJ is developed.
- Increase swirl intensity increases the residence time, heat transfer, regression rate and mixing degree.

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