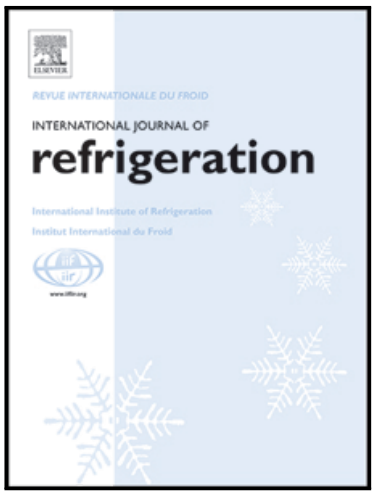

Efficient configurations for desiccant wheel cooling systems using different heat sources for regeneration

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Highlights

- Area ratio of desiccant wheel (A_{ratio}) and number of stages (SN) are investigated
- A_{ratio}=1 and SN=3~4 are preferred for systems with vapor compression cycle
- A_{ratio}=2 and SN=1 are preferred for systems with electric heater/ natural gas burner
- A_{ratio}=1 and $NTU \geq 2$ are preferred for single stage systems with heat recovery
- Efficient desiccant wheel systems with low primary energy cost are proposed