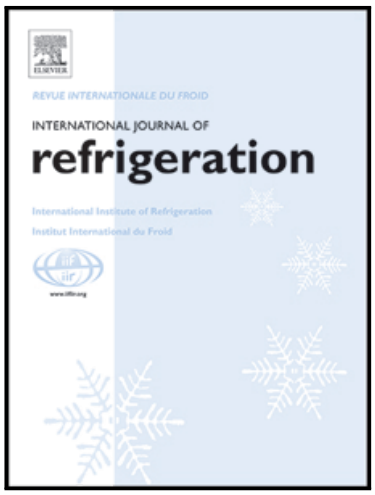

New approach for estimating the cooling capacity of the absorption and compression chillers in a trigeneration system

Mohammad Mustafa Ghafurian , Hamid Niazmand

PII: S0140-7007(17)30480-2
DOI: 10.1016/j.ijrefrig.2017.11.026
Reference: JIJR 3833

To appear in: *International Journal of Refrigeration*

Received date: 18 August 2017
Revised date: 19 November 2017
Accepted date: 25 November 2017

Please cite this article as: Mohammad Mustafa Ghafurian , Hamid Niazmand , New approach for estimating the cooling capacity of the absorption and compression chillers in a trigeneration system, *International Journal of Refrigeration* (2017), doi: 10.1016/j.ijrefrig.2017.11.026

Highlights

- Optimum selection of refrigeration system in trigeneration system by multi-objective Genetic Algorithm.
- Defining new objective functions NFWBD and global exergy efficiency for optimization.
- Sensitivity analysis of the objective functions by increasing the number of equipment (gas engine and chillers).
- Emission analysis (CO_2,CO and NO_x) and investigating the payback period in optimum selection point for different scenarios