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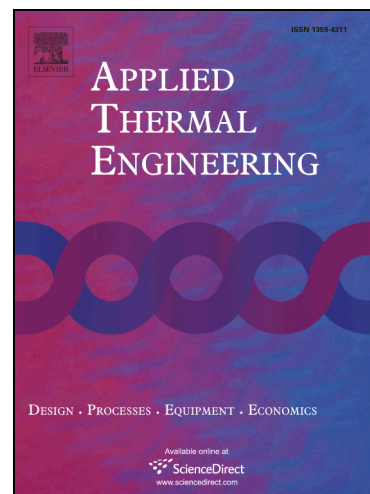
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A review on adsorbent-adsorbate pairs for cooling applications

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Abstract

This paper presents a review on physical adsorbent-adsorbate pairs for adsorption cooling applications. Adsorption isotherm models used to estimate adsorption equilibrium uptake of the studied pairs have been presented. Employing ideal adsorption cooling cycle, adsorption uptake difference along with the specific cooling capacity of various pairs have been investigated and compared for cooling and refrigeration applications. The specific cooling power (SCP) and coefficient of performance (COP) of selected systems built based on selected pairs have also been reported.

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