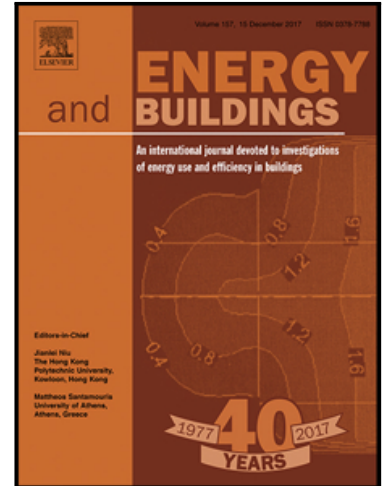


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The evacuated tube solar collector assisted heat pump for heating greenhouses

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Highlights

- The viability of using the ETC to assist heat pump for greenhouse heating was investigated.
- The annual required heat energy and the provided heat of ETC were calculated.
- The efficiency of the ETC was 0.45.
- The payback period of the ETC was 4.1 years in winter season operation only.

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