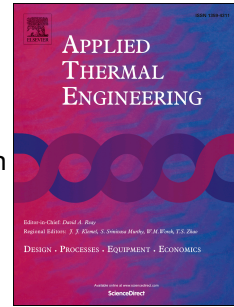


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An Experimental Study of Flow Boiling Heat Transfer from Porous Foam Structures in a Channel

I. Pranoto, K.C. Leong



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**Research Highlights**

- “Pocofoam” 61% porosity foam enhanced the cooling performance by up to 2.5 times.
- The coolant mass flux had affected significantly the cooling performance.
- The evaporator gap had significant effect on the flow boiling heat transfer.
- Flow boiling heat transfer coefficient of  $16.5 \text{ kW/m}^2 \cdot \text{K}$  was achieved in this study.
- “Laminar” and “turbulent” bubble regimes were observed in this study.

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