

TEMPERATURE-DEPENDENT THERMAL CONDUCTIVITY OF EICOSANE-BASED PHASE CHANGE MATERIALS WITH COPPER OXIDE NANOPARTICLES

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SUMMARY: This paper presents the effective thermal conductivity of eicosane-based phase change materials with copper oxide nanoparticles that were measured experimentally by using the transient plane source technique. The dependence of the thermal conductivity of the composites in both liquid and solid phases on temperature and the loading of nanoparticles are investigated.