

Abstract Submitted
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Thermal Conductivity of Encased Graphene WANYOUNG JANG,
ZHEN CHEN, WENZHONG BAO, C.N. LAU, CHRIS DAMES, DAMES TEAM,
LAU COLLABORATION — Understanding the thermal properties of graphene is
important for the future graphene-based nanoelectronics, interconnects, and heat
management structures, as well as fundamental physics. We use a “heat spreader
method” to experimentally study the heat dissipation along graphene layers encased
between two oxide layers and interpret the results by a 3-dimensional finite element
method (FEM). The thermal conductivity of encased graphene layers is less than
that of graphite, and increases with temperature and the number of layers.

Wanyoung Jang

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