

Abstract Submitted  
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**Thermal Properties of Carbon Nanotube and Nanofiber Nanopapers: Finite Element Analysis**<sup>1</sup> LAWRENZO D. MOSES, ALPER BULDUM, Department of Physics, The University of Akron — Carbon nanotube and nanofiber nanopapers are promising candidates as electronic thermal management materials. Here we present finite element method calculations of nanotube-nanotube, nanofiber-nanofiber junctions and extended two dimensional structures (nanopapers) containing these junctions. In the studies of individual junctions, different nanotube/nanofiber diameters, size of contact area and effects of fusing are considered. In the studies of nanopapers, different morphologies, effects of junction-junction separation are considered and thermal transport through multiple layers are studied.

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