LENGTH EFFECT ON THERMAL CONDUCTIVITY OF SINGLE WALL CARBON NANOTUBES AND BUNDLES

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SUMMARY: The effect of length on thermal conductivity of a single wall carbon nanotube is overviewed, and the values are compared with different thermal conductivity calculation methods and experimental measurements. Using a one-dimensional heat conduction model, a hexagonal packing of single wall carbon nanotube bundle is modeled to approximate the effective thermal conductivity in a water medium.