

Abstract Submitted  
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**Condensation of micro-grown vertically aligned carbon nanotube forests** KATHERINE BARNETT, Brigham Young University — Similar to many materials made of fibers, carbon nanotube forests condense when they are saturated and dried. Previously larger-scale patterned nanotube forests have been shown to condense and form extremely thin, dense, vertical sheets of nanotubes. While larger features condense into patterned features readily, smaller features require more delicate shrinking conditions and are highly dependant on temperature, solvent type, solvent vapor density, and heating rate. By optimizing these parameters, I have been able to successfully condense nanotube forests so that they maintain their original patterns, they simply become thinner and denser. Shrinking features that are on the micrometer order of magnitude, allows us to use these larger patterns to get extremely small features.

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