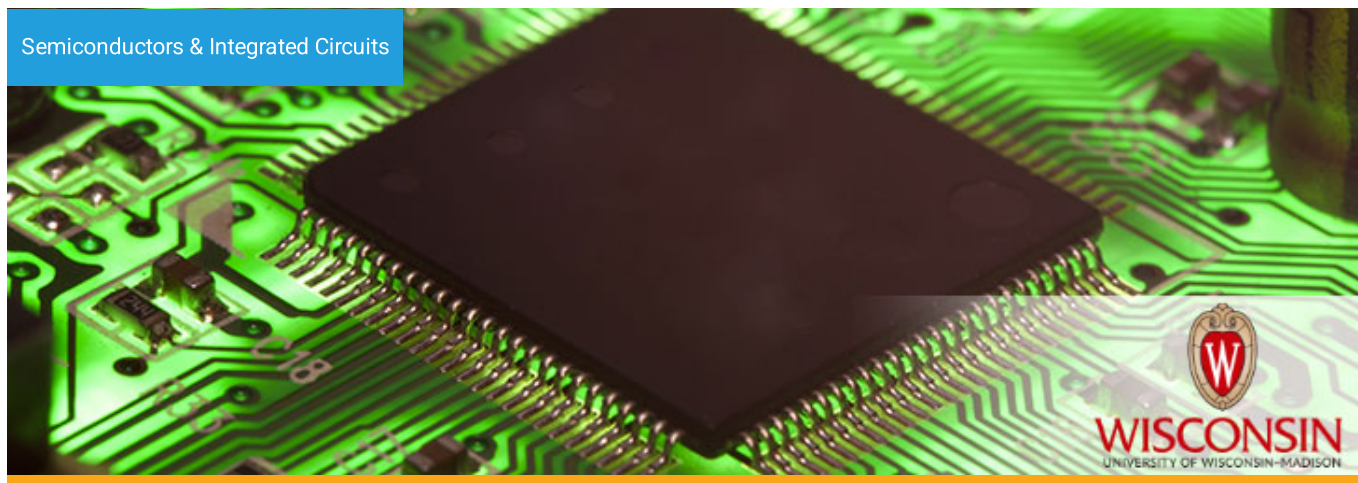




## SELECTED-AREA DEPOSITION OF HIGHLY ALIGNED CARBON NANOTUBE FILMS USING CHEMICALLY AND TOPOGRAPHICALLY PATTERNED SUBSTRATES

[View U.S. Patent Application Publication No. US-2022-0255001 in PDF format.](#)

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### The Invention

UW Madison researchers have developed methods for forming films of aligned carbon nanotubes. The methods also provide for making electronic devices that incorporate the films as active layers. The films are formed by flowing a suspension of carbon nanotubes over a substrate surface that is chemically and topographically patterned. The methods provide a rapid and scalable means of forming films of densely packed and aligned carbon nanotubes over large surface areas.

### Additional Information

#### For More Information About the Inventors

- [Padma Gopalan](#)
- [Michael Arnold](#)

#### Publications

- [Dwyer, J., Suresh, A., Jenkins, K., Zheng, X., Arnold, M., Berson, A. and Gopalan, P., 2021. Chemical and topographical patterns combined with solution shear for selective-area deposition of highly-aligned semiconducting carbon nanotubes. Nanoscale Advanc](#)

#### Tech Fields

- [Semiconductors & Integrated Circuits : Design & fabrication](#)

For current licensing status, please contact Jeanine Burmania at [jeanine@warf.org](mailto:jeanine@warf.org) or 608-960-9846