

## Special Issue on Nanopackaging

Publication Date: Summer of 2016

The Nanopackaging technical committees of IEEE CPMT and the IEEE Nanotechnology Council are launching a special section in "IEEE Transactions on CPMT", with a comprehensive collection of the latest scientific and technical advances in the areas of nanopackaging:

- *Modeling and design with nanomaterials*
- *Materials and structures at the nanoscale:* e.g. nanoparticles, nanocomposites, nanolaminates, CNTs, nanowires, graphene and others
- *Applications:* Interconnections, thermal interfaces and heat-spreaders; underfills, encapsulants; Functional components for power, RF, energy storage:
- *Processes:* chemical, electrochemical, and physical processes with vapors, solutions and suspensions, and pastes (e.g. Printing)
- *Devices and Systems:* electronic, optoelectronic and bioelectronic

Papers focusing on technology readiness or technical challenges for commercialization are highly encouraged.

### Papers are invited from

Scientists, engineers and technical leaders from, universities and industry (semiconductors, electronic systems, energy, defense and aerospace).

### Instructions to Authors:

Manuscripts should be on new and significant (unpublished) advances by the authors, but can also include a comprehensive review the state-of-the-art. State-of-the-art review papers with no new research results will only be considered in special cases, (and authors should contact the editors beforehand.)

All papers for the Transactions on CPMT must be submitted for peer-review through the on-line SCHOLARONE manuscript review site at:  
<https://mc.manuscriptcentral.com/ieee-tcpmt>

When submitting papers, authors must:

- Select "Special Section" under Manuscript Topics.
- Enter "This paper is submitted for the Special Section on Nanopackaging" in the Author's Cover Letter window.

Information and resources for authors are found at:  
<http://cpmt.ieee.org/transactions-on-cpmt/information-and-resources-for-authors.html>

The IEEE peer review standards of excellence will be applied consistently to all submissions. All accepted articles will be included in the print issue mailed to subscribers.

### Topics of Interest

Nanocomposites for packaging applications  
(ex. Dielectrics and Substrates)

- Modeling
- Synthesis
- Characterization

Interconnections:

- Nanostructured
- Nanopaste
- Nanowire interconnections:
- CNT, graphene

Nanomaterials for Reliability

- Encapsulants; Underfills; stress-buffers

Nanostructured passive & storage components:

- Capacitors and supercapacitors:
- Nanostructured inductors
- Nanobatteries
- RF components with nanomaterials

Nanoscale materials for TIM and heat-spreaders

- CNTs, graphene
- Nanofluids

EMI shielding and filters

*Manuscript Submission Deadline: 1/1/2016*  
*Revisions and Editorial Decision: 3/15/2016*  
*Anticipated Publication Date: Summer of 2016*

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