



Journal of Nanotechnology

Special Issue on
Block Copolymer Nanopatterning and Emerging Applications

CALL FOR PAPERS

The wide scope of block copolymer research has brought new fundamental insights opening up rich diverse applications. The application of block copolymers as “on-chip etch masks” for next-generation lithographic patterning has been an active area of research efforts over the past decade. Block copolymer nanoscale patterns have been studied to augment the current lithographic process for patterning integrated circuit device features. The expertise and knowledge gained through “directed self-assembly” of block copolymers provide an exceptional toolset for new applications beyond nanoelectronics. In particular, innovative methods based around inorganic infiltration have been demonstrated using block copolymer templates in solar cells, lithium ion batteries, biosensors, neuroprosthetics, energy harvesting, nano- and ultrafiltration membranes, and optical based devices. Low-costs, tunable nanoscale dimensions, rapid processing periods, and scalability make block copolymer nanopatterning a key templating method in emerging functional nanotechnologies.

This special issue aims to publish high quality original research papers that are not yet published or currently under review, concerning novel block copolymer based nanopatterning for device applications.

Potential topics include, but are not limited to:

- ▶ Self-assembly and directed self-assembly
- ▶ Polymer based nanofabrication
- ▶ Nanopatterning substrates, such as Si, Ge, SiN, and III-IV compounds
- ▶ Block copolymer templates for biosensors
- ▶ Fuel cell and solar cell

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/jnt/bcnea/>.

Lead Guest Editor

Sozaraj Rasappa, Technical University of Denmark, Kongens Lyngby, Denmark
sozr@nanotech.dtu.dk

Guest Editors

Cian Cummins, National University of Ireland, Cork, Ireland
cumminci@tcd.ie

Nitin Deepak, Liverpool University, Liverpool, UK
nitin.deepak@liverpool.ac.uk

Colm O'Regan, National University of Singapore, Singapore
dbsocp@nus.edu.sg

Manuscript Due

Friday, 17 June 2016

First Round of Reviews

Friday, 9 September 2016

Publication Date

Friday, 4 November 2016