**Controlled dimensions using Block copolymers for various applications**

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Spatial arrangement and precise positoning of 1D nanomaterials and scaling is one of the key factor for advanced electronics and photonics over two decades. The various lithographic methods, optic lithography, electron beam lithography, interference lithography, zone-plate array lithography, focused ion beam lithography has been used for nanoarray formation. The applied lithographic methods are able to obtain nanoarray fromation for the sub-100 nm features sizes, but these are not possible to produce large arae dimension. Moreover morphological structures and chemical properties in the nanoscaled components may lead to complexity properties that are completly turned complex nanostructures. The controlled chemical segmentation of nanoarrays is required more controlled dimensions. To fabricate in small, desirable and scalable dimension on electronic industry, block copolymer lithography which present with a promising future in electronic industry due to their ability to self-organize at nanometer scales. Of particular importance is that BCP lithography is generally known to be capable of large-scale fabrication combined with hard mask techniques to create surfaces and selected area deposition.

In this perspective, block copolymer nanopatterning techniques for development and pre-development with graphene patterns were studied, the procedures for obtaining nanopatterns, the recent advances in the chemical and physical aspects of self-organized morphologies, nano-enabled surfaces or membranes and controlled self-assembled nanostructures will be presented.

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**Biography:**   
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