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【914】 Large-Scale Ordered Block Copolymer Gyroid Films by Solvent Evaporation Annealing

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The development and research on metamaterials opens the doors for futuristic technologies using their custom-designed properties to interact with and manipulate the flow of light.

The effectiveness of such materials depends vastly on the size of the interactive material and research is driving into the direction of fabricating larger connected and homogeneous surfaces of metamaterials. Here we present a two-step block copolymer self-assembly method enabling large-sized homogeneous domains of nanostructures. Voiding the polymer templates and the replication with specific metals gives rise to intriguing optical polarization and magnetic properties.

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