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Title:Fabrication of binary colloidal crystals with PS microspheres and other complex structures by horizontal deposition method

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Abstract:Various colloidal crystal films were fabricated by horizontal deposition method. Binary colloidal crystals and photonic crystals on nonplanar surface were obtained by this method, with using polystyrene (PS) spheres as building blocks. Colloidal crystals with linear defects were also achieved for the THz photonic crystal waveguides. All the results showed that highly ordered structure can be obtained via this method, and it indicates that horizontal deposition method can be widely used in the fabrication of photonic crystals.

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