

대면적 콜로이드 광자 결정 필름의 제조

Fabrication of Large-area Colloidal Photonic Crystal Films

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Abstract

Concentrated colloidal suspensions of hydrophobic silica particles in viscous polymerizable liquids were prepared. By conventional coating process on substrates, large-area uniform colloidal crystal films were successfully produced, in which the number of layers were controlled precisely by changing spinning rate or particle concentrations. Then, composite colloidal crystals were solidified by the UV-curing or crystalline arrays of silica particles were produced rapid thermal decomposition of viscous liquids.