

Preparation of ultraviolet lights protective microcapsules

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Protection reagents against ultraviolet lights based on the Bragg reflection at the optical stop band of colloidal photonic crystals were examined. We found that the colloidal crystals composed of monodisperse polystyrene particles with the particle diameter of 160 nm could reflect the lights below the wavelength of 400 nm. In addition, we examined a method for preparation of microcapsules with the colloidal crystal shells by microfluidic techniques.