

||||| 特集：国際宇宙ステーションの応用利用 |||||
(研究紹介)

コロイド粒子でつくる3次元フォトリック結晶の 光学的特性評価

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Optical Characterization of 3-Dimensional Photonic Crystals Constructed with Colloidal Particles

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Abstract

Characterization methods for colloidal photonic crystals based on light diffraction phenomena are described. Kossel diffraction and imaging spectroscopy are extensively illustrated as simple and effective methods for characterizing large colloidal crystal samples. These methods can be applied to 3-dimensional photonic crystals with colloidal particles grown in space especially for the purpose of evaluating the crystallographic homogeneity.