

论文

PMMA型非线性光学膜的制备及其极化取向

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摘要:

采用封管反应, 以较高产率(80%以上)合成了一种PMMA型的极化非线性光学聚合物材料. 该材料具有很好的成膜性, 用电晕极化的方法使其旋涂膜中的生色团极化取向, 并利用偏振红外光谱和偏振紫外光谱等方法, 对膜中生色团极化前后的取向进行了研究.

关键词: 非线性光学膜 极化取向 偏振红外 偏振紫外

Preparation and Polarizing Orientation of PMMA Types of NLO Film

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Abstract:

The poly[(DR₁A)-co-(MMA)-co-(MA)] nonlinear optical polymeric materials were prepared through sealed-tube reactive method in high yields. The material can be made into good films by spin coating, the chromophore in the films can be oriented by corona polarization. We study the chromophore oriented before and after polarization by polarized infrared spectrometry and polarized ultraviolet spectrometry.

Keywords: Nonlinear optic(NLO) film Polarization orientation Polarized infrared spectrometry Polarized ultraviolet spectrometry

收稿日期 2008-03-17 修回日期 1900-01-01 网络版发布日期

DOI:

基金项目:

扩展功能

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Supporting info

PDF(290KB)

[HTML全文](OKB)

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