

研究简报

注射成型掺酞菁铟反饱和吸收材料的研究

刘大军, 周奋国, 何兴权, 段潜

长春理工大学材料与化工学院; 长春理工大学材料与化工学院 长春

收稿日期 2005-1-17 修回日期 2005-4-26 网络版发布日期 接受日期

摘要

关键词 [反饱和吸收](#) [注射成型](#) [酞菁铟](#)

分类号

A REVERSE SATURABLE ABSORPTION MATERIAL WITH PHTHALOCYANINE INDIUM DISPERSED IN PMMA PREPARED BY INJECTION MOLDING

LIU Dajun,ZHOU Fenguo,HE Xingquan,DUAN Qian

College of Materials & Chemical Engineering; Changchun University of Science and Technology; Changchun 130022

Abstract A reverse saturable absorption material of phthalocyanine indium was prepared by the method of injection molding. From the SEM analysis of the cross section of the sample,we could judge the dispersion of phthalocyanine indium in PMMA matrix A UV-Vis spectrophotometer (UVI240) was used to test the UV-Visible spectrum of sample. The sample showed the typical absorption of Q-region at 620 nm to 730nm wavelength. There was a wide non-resonance area at 480 nm to 570 nm wavelength,and the phenomenon of reverse saturable absorption occurred accordingly An ns/ps Nd: YAG pulsating laser device was used to test the characteristic ryreverse saturable absorption of the sample The limited threshold of the sample reached 68.5 mJ/cm^2 ,its dynamic range was 1.07 and the damage threshold was more than 1200 mJ/cm^2 .

Key words [Reverse saturable absorption](#) [Injection molding](#) [Phthalocyanine indium](#)

DOI:

通讯作者 刘大军

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(510KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“反饱和吸收”的相关文章](#)
- ▶ [本文作者相关文章](#)

- [刘大军](#)
- [周奋国](#)
- [何兴权](#)
- [段潜](#)