

激光动漫系统研究

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摘要: 激光动漫是我们实验室提出的最新概念,它采用高科技的激光技术表现艺术动漫的效果,是技术与艺术的完美结合。激光动漫技术集激光,精密光机,光电控制、图象处理、多媒体和艺术于一体,广泛应用于信息广告、科教、游乐和娱乐等领域。本文描述激光动漫技术的原理,针对我们参展第二届文博会项目“激光动漫”,建立了激光动漫演示装置:包括激光器、光束扫描系统、颜色调制、系统控制等。运用 PANGOLIN 软件,控制和编辑激光动漫,获得了良好的激光动漫效果。

关键词: 激光技术; 激光动漫; 软件控制

Study on Laser Animation System

Abstract: Laser Animation is a new concept presented by our lab, which apply Laser technology to show animation. That is a perfect combination of Hi-tech and art. It integrates laser, precise optical mechanics, optoelectronic control, image processing, multimedia and art together, and will find a lot of applications in advertising, education and entertainment. In this paper, the principle of the laser animation was described. The laser animation systems, which consist of Laser, beam scanner, color modulation and system controller, for “International Cultural Industry Exhibition” have been developed. By using PANGOLIN software to edit and control animations, the laser effects were perfect.

Key Words: Laser technology; Laser Animation; Software control

教师点评: 激光动漫技术集激光、精密光机、光电控制、图象处理、多媒体和艺术于一体,广泛应用于信息广告、科教、游乐和娱乐等领域。本文描述激光动漫技术的基本原理,研究激光动漫的光机电系统结构、激光光束偏转、控制和激光动漫编辑技术等,获得好的结果。在第二届文博会的成果展示中,获得专家和观众的一致好评。