传感技术学报
中国微米纳米技术学会
全国高校传感技术研究会 主办

基于三维加速度信息的上肢动作质量评价的研究

作　者：杨先军, 王昌喜, 潘磊, 马祖长, 孙怡宁

单　位：中国科学技术大学

基金项目：

摘　要：

本文主要利用主成份分析对基于加速度信息的上肢动作质量进行评价，并利用评价结果驱动人机交互游戏中球的线路、旋转或者球速。研究结果表明在本套系统内影响上肢动作质量主要有爆发力和耐力两个因素。

关键词：加速度，上肢动作质量，主成份分析，人机交互游戏

Study of Quality Evaluation of Upper Limb Movements based on 3D Acceleration Information

Author's Name:

Institution:

Abstract:

In this paper, we used the principal component analysis for the quality evaluation of upper limb movements based on the acceleration information, and the result were utilized to drive the line, rotation and velocity of ball in the game of human-computer interaction. The result showed that the impact of quality of upper limb movements are two main factors which are explosive power and endurance in this system.

Keywords: acceleration, quality of upper limb movements , principal component analysis, game of human-computer interaction

投稿时间：**2010-05-14**

查看pdf文件