

激光与光电子技术应用

对称法在激光制导信号编码识别中的应用

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摘要: 激光有源干扰是激光精确制导武器对抗的重要手段,而进行编码识别是提高有源干扰效率的前提。为了进一步提高编码识别的效率,分析了现有的几种编码识别方法的特点,并提出了使用对称法解决编码识别问题的方法。该方法从编码的倍周期入手,根据对称性找到编码的重复样式,进而找出编码的重复周期和编码样式,同时给出了一种解决倍周期的方法。结果表明,对称法具有一定优越性,为解决有源干扰编码识别的实际问题提供了参考。

关键词: 激光技术 对称法 激光制导 编码识别 优越性

Application of symmetry method in code recognition of laser guidance signal

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Abstract: Laser active jamming is an important method in laser guided weapon countermeasures, of which the code recognition is the premise. In order to further improve the efficiency of coding and recognition, the characteristics of several code recognition methods were analyzed, and the symmetry method was proposed to solve code recognition problem. Starting from the multi-period of code, the repeated style of the code was found, and then the real period and code style were found. Also, a method was put forward to solve the multi-periods problem. Experimental results showed the superiority of symmetry method, and it is a reference to solving practical problems of active jamming code recognition.

Keywords: laser technique symmetry method laser guided code recognize superiority

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