有机半导体材料分子结构及性能研 究进展

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摘要

本文通过论述有机半导体材料分子结构及性能研究进展这一内容,可以清晰直观地了解到,有机半导体材料是由有机分子组成的,与传统的半导体材料区别很大,而且有机半导体材料分子结构必须含有碳 - 碳双键,而且有机半导体材料分子结构中碳 - 碳双键结构会不断的扩展到相邻的许多个原子上,因此将其划分为了小分子与高分子两大类型,其导电能力介于金属与绝缘体之间,可用掺杂方法改变其导电类型与电导率,其性能与用处显而易见。基于此,本文重点从有机半导体材料分子结构及性能研究进展方面做出探讨。

关键词: 半导体: 材料分子: 结构: 性能: 研究进展

ABSTRACT

This paper can clearly and intuitively understand the progress of organic semiconductor materials by studying the molecular structure and properties of organic semiconductor materials. Organic semiconductor materials are composed of organic molecules, which are very different from traditional semiconductor materials, and the molecular structure of organic semiconductor materials. It must contain carbon-carbon double bonds, and the carbon-carbon double bond structure in the molecular structure of organic semiconductor materials will continue to expand to many adjacent atoms, so it is divided into two types: small molecules and polymers. The ability is between the metal and the insulator, and the conductivity type and conductivity can be changed by the doping method, and its performance and use are obvious. Based on this, this paper focuses on the research progress of molecular structure and properties of organic semiconductor materials.

Keywords: semiconductor; material molecular; structure; properties; research progress

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