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PDF文档

细菌视紫红质光学图像存储的灰阶特性研究

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细菌视紫红质（BR）是一种具有优良光致变色特性的光敏蛋白分子，具有极好的抗疲劳性和高的光转换量子效率，可用于光学图像信息的获取和存储。本文讨论了BR分子膜在受到随空间位置变化的光强调制下，BR 分子膜光吸收变化量的空间分布及其与存储图像灰度分布之间的关系；建立了BR灰度图像存储特性实验系统，并对BR-D96N薄膜存储的光学图像灰阶特性进行了实验研究,实验表明BR 薄膜图像存储具有出色的灰度表现能力。

Study on gray-level characteristic of bacteriorhodopsin film

Bacteriorhodopsin (BR) is a kind of light sensitive protein with excellent anti-fatigue property and high optical transition quantum efficiency, with which optical image information can be acquired and stored. The relationship between the space distribution of BR light absorption variation and the grey value distribution of the stored image has been discussed. The experimental study on gray-level characteristic of BR , using the

genetic manipulation of the BRD96N film as a sample , has been down by the self-made system. Excellent grey value exhibition ability has been shown by this experiment.

关键词