

量子技術を適用した生命科学基盤の創出  
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動物磁気感受のためのクリプトクロム時空間計測

## § 1. 研究成果の概要

Our current research focuses on cryptochrome radical pair dynamics, structural changes, and protein-protein interactions. A home-built fluorescence microspectroscope designed for investigating the above focal points of our research is currently operational. Experiments, such as magnetic field effects (MFEs) and anisotropy measurements, on low concentration model cryptochrome systems, have displayed clear magnetic field induced changes on fluorescence of less than 0.1 %. The sensitivity of the instrument has also been able to characterize the influence of photodegradation on the radical pair dynamics and MFEs thereon. HeLa cells with expressed cryptochrome variants are currently being investigated with the above techniques. Concurrently, we are in the final stages of ErCRY4 purification.

### 【代表的な原著論文情報】

該当なし