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Modeling of the entangled states transfer processes in microtubule tryptophan system

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The paper simulates the process of the entanglement states transferring along a chain of tryptophans a) into cell's microtubule, b) connected by dipole-dipole interaction. In the work the conditions under which the migration of the entanglement states in the microtubule is possible are obtained. The results of the work allow us to talk about the signal function of microtubule tryptophans working as a quantum repeater that transmits quantum entangled states by relaying through intermediate tryptophans. (see detail in the email)

Summary

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