



Light-induced, site-selective isomerization of glyoxylic acid in solid xenon.

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Streszczenie

The isomerization of glyoxylic acid (GA) and its water complex was studied in a low temperature xenon matrix. The aim of these studies was to understand how xenon environment affects the cis-trans GA interconversion upon near infrared irradiation. In solid xenon, the GA conformers are embedded in two different matrix sites. These show up as different vibrational bands of GA that exhibit different kinetic rates of isomerization. Upon complexation with water, the isomerization process slows down. Xenon matrix appears not to affect energy relaxation process via intramolecular or intermolecular hydrogen bond as compared with previous experiments in an argon.

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