

Photoactive materials studied by X-ray techniques

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The capability of transforming matter has accompanied human kind since very early in history. The advent, few decades ago, of intense short pulse lasers have motivated scientists to undertake the difficult task of trying to transform matter with light.

Contrary to molecules, materials are intrinsically multi-scale systems that need to be studied with different techniques and looked at different time scales.

In this presentation I will summarize some recent effort of our group to complement optical spectroscopy studies with a variety of X-ray techniques extending from picosecond to millisecond time delays allowing to explore from the atomic motions to heat diffusion.