

Lab-top femtosecond x-ray sources and their applications in the study of femtosecond atomic processes

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The femtosecond x-ray tube developed and used at LOA has allowed the first direct observation of ultrafast structural changes in the matter. This laser-produced plasma x-ray radiation is becoming widely used to probe the atomic dynamics at such ultimate timescale. Based on the experiments done at LOA, the capabilities of this existing source as well as the new generation of plasma x-ray source will be discussed.