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[132] Beam-Induced Dynamics in Oxide Glasses

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Atomic scale X-Ray Photon Correlation Spectroscopy (aXPCS) is a powerful technique to study the dynamics on an atomic scale in hard condensed matter by using coherent high flux X-ray radiation. It is shown that using such beams to probe the dynamics in hard condensed matter also induce dynamics in the material. Measurements of the influence of X-rays on the dynamics in a wide range of different oxide glasses were performed including the whole range of alkali borate glasses with different alkali concentrations, alkali and lead silicates, vanadium phosphate glasses and vitrous boron oxide. Results obtained from different materials are compared and first conclusions about the phenomenon are presented.

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