Photoluminescence spectroscopy, interferometry, XRD and TEM study of the crystallization mechanism in photosensitive glasses

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The heterogeneous crystallization mechanism for a specific type of photosensitive glasses has been verified step-by-step by a combined approach involving spectroscopy, X-Ray Diffraction (XRD), optical interferometry and Transmission Electron Microscopy (TEM). TEM observation of irradiated glasses led to the identification of AgF_2 and AgF_3 crystalline nanoparticles rather than Ag^+-Ag^+ pairs found by photoluminescence.

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