

# Femtosecond laser-induced partial rear side spallation of bilayer Ni/Cr film

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Ultrafast chirped interferometry was used to investigate with the temporal resolution of 1 ps the rear side motion of the bilayer Ni/Cr thin film on a glass substrate under picosecond loading, generated by femtosecond laser pulse. The surface morphology after laser exposure indicates the presence of spall fracture at the contact of chromium and nickel layers. From the determined rear surface velocity history the value of the strain rate and the arising tensile stress are estimated.