Abstract Submitted for the SHOCK09 Meeting of The American Physical Society

Wide Angle X-ray Diffraction for Shocked Periclase YOICHIRO HIRONAKA, KEISUKE SHIGEMORI, TOSHIHIKO KADONO, KEISUKE FUJIOKA, MINORU TANABE, AKIYUKI SHIROSHITA, NORIMASA OZAKI, KOHEI MIYANISHI, TADASHI KONDO, TASUHIRO SAKAIYA, KATSUYA SHIMIZU, KAZUTO OTANI — We performed wide angle X-ray diffraction for laser shocked single crystal to measure the perfect atomic uniaxial motion near the Hugoniot elastic limit Wide angle X-ray diffraction technique is enabled to identify the three dimensional lattice deformation under shocked crystal. We detected X-rays diffracted from multiple planes of MgO single crystal.

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Date submitted: 20 Feb 2009 Electronic form version 1.4