

Abstract Submitted
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Probing the Release of Shocked Material DANAE POLSIN, THOMAS BOEHLI, STEVEN IVANCIC, MICHELLE GREGOR, CHAD MCCOY, PHILLIP NILSON, Laboratory for Laser Energetics, Univ. of Rochester, DAYNE FRATANDUONO, PETER CELLIERS, Lawrence Livermore National Laboratory, LABORATORY FOR LASER ENERGETICS, UNIV. OF ROCHESTER COLLABORATION, LAWRENCE LIVERMORE NATIONAL LABORATORY COLLABORATION — The behavior of shocked material as it releases to lower pressures is important for equation of state experiments and inertial confinement fusion research. We present results of experiments that used a 10-ps, 266-nm probe beam to image the release plumes of various target material shocked to multi-megabar pressures by the OMEGA-EP laser. Simultaneous VISAR measurement provide the initial shocked state from which these material release. This work was supported by the U.S. Department of Energy Office of Inertial Confinement Fusion under Cooperative Agreement No. DE-FC52-08NA28302.

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