

Abstract Submitted
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Double Shock in Polystyrene ZAIRE K. SPROWAL, THOMAS BOEHLI BOEHLI, DANAE POLSIN, University of Rochester, DAMIEN HICKS, Swinburne Institute of Technology, J. RYAN RYGG, GILBERT COLLINS, MARGARET HUFF, University of Rochester — We present the findings of a double-shock experiment in polystyrene, where the reflectance of the second shock front through the transparent first shock was observed in addition to the resulting single shock. We deduce transport and optical properties of the double-shocked material with data obtained from the VISAR (velocity interferometer system for any reflector) and the SOP (streaked optical pyrometer) diagnostics. We conclude with a comparison of our findings to previous single-shock data conducted on polystyrene. This material is based upon work supported by the Department of Energy National Nuclear Security Administration under Award Number DE-NA0003856, the University of Rochester, and the New York State Energy Research and Development Authority.

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