

Abstract Submitted
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Ramp Compression Measurements of Al, Fe, Ta, and W to a Few Mbar¹ GILBERT COLLINS, JON EGGERT, RAY SMITH, Lawrence Livermore National Laboratory, MARINA BASTEA, DAVE REISMAN, Lawrence Livermore National Laboratory, Y. GUPTA, J.R. ASAY, Washington State University — We present ramp compression measurements of Ta, W, Al, and Fe using both pulse power and laser ramp compression platforms. Comparing both platforms allows us to span material thicknesses from 10 μm to 1mm and compression timescales from 1 ns to several hundred ns. While it is difficult to study precisely the same material on both platforms, we compare the stress density and elastic plastic transition for each of these metals under ramp loading to Mbar stress levels.

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Gilbert Collins
Lawrence Livermore National Laboratory

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