Abstract Submitted
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Off-Hugoniot measurements for diamond to TPa regime using reflected shock compression[1] NORIMASA OZAKI, Graduate School of Engineering, Osaka University, TSUTOMU MASHIMO, Kumamoto University, TOMOAKI KIMURA, KOHEI MIYANISHI, Graduate School of Engineering, Osaka University, TAKAYOSHI SANO, Institute of Laser Engineering, Osaka University, TOMOKAZU SANO, TATSUYA JITSUI, TOMOFUMI SODA, Graduate School of Engineering, Osaka University, YOUICHI SAKAWA, Institute of Laser Engineering, Osaka University, RYOSUKE KODAMA, Graduate School of Engineering, Osaka University — Carbon is one of the most important materials for several areas of modern science. We have performed shock compression experiments for diamond to 1.6 TPa pressure. Diamond off-Hugoniot states have been measured using reflected shock compression technique with shock anvil materials. The reshoked diamond temperature is significantly suppressed compared with single shocked diamond temperature at the same pressure.

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