

the silver foils used in the present work had a (110) [112] texture.

Barrett and Massalski observed that in fcc metals the predominant dislocation slip plane is the closest-packed (111) plane. Many metals alter their slip plane at high or low temperature or high strain rate. In copper and tungsten, however, the same slip systems operate under shock as in quasistatic deformation.^{57,73} For crystallites with (110) planes parallel to the foil surfaces, three (111) planes will be at 45° to the foil surface. The maximum resolved shear stress in uniaxial shock compression is approximately at 45° to the foil surface, so that dislocations on (111) slip planes would be subjected to this maximum shear stress $\frac{1}{2}(\sigma_x - \sigma_y)$. This leads us to observe that differences in crystallite preferred orientation in the two types of foil studied could lead to differences in defect production by the shock. No such differences in crystallite orientations are expected, however.

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