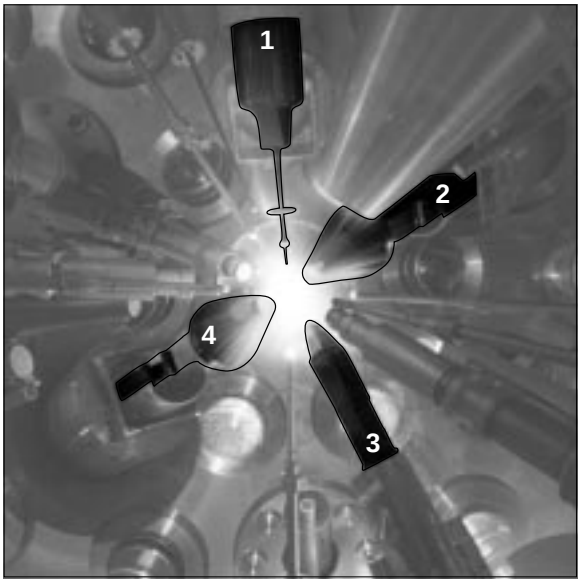
About the Cover:

The central photograph illustrates the OMEGA target chamber during the experimental campaign to study laser–plasma interactions in long-scale-length plasmas with parameters relevant to the peak of the direct-drive National Ignition Facility laser pulses. (Key elements of the target chamber are defined in the photograph below.) The CH target is suspended from the positioner seen at the top of the chamber; magnified views of the solid 1.5-mm-diam partial sphere before and during the 12-kJ laser pulse are shown in the left and right insets, respectively. The interaction beam is delivered to the plasma from the bottom of the target chamber, and stimulated Raman scattering and stimulated Brillouin scattering signals are collected with the *f*/6 OMEGA focusing lens of the interaction beam and relayed to time-resolved visible spectrometers (not shown). *K*-shell spectra of Ti and Ca embedded microdots, recorded with the TIM-based x-ray diagnostics, are used to characterize the plasma electron temperature.



The photograph on the left defines the layout of the central cover photograph of the OMEGA target chamber by highlighting the key elements. The target positioner and the streaked x-ray crystal spectrograph are labeled 1 and 3, respectively, and the two time-integrated crystal spectrographs are labeled 2 and 4.

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