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(54) **PICOSECOND LASER-DRIVEN PLASMA  
X-RAY SOURCE**

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(57) **ABSTRACT**

A laser-produced plasma X-ray system includes a metal target, a laser pulse emitter producing laser pulses in the range of 150 fs to 25 ps, prepulses nanoseconds before the main pulse, and focusing optics directing the laser pulses onto the target surface, forming a laser-driven plasma that emits X-rays.

