

Supporting information

Ultrafast Mechanism of Material Removal in the Femtosecond Laser Ablation of WS₂ and Its Diode Rectification Characteristics

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Two laser beams were obtained using a beam splitter, and one of the beams was incident on the sample surface at an angle of 45° to excite the material. The other beam had its first frequency doubled to 400 nm using a beta barium borate (BBO) crystal, and it was then perpendicularly focused on the pumped region to probe the state of the sample after irradiation. To achieve the time-resolved signal, the delay line was used to control the temporal interval between the pump and probe beam.

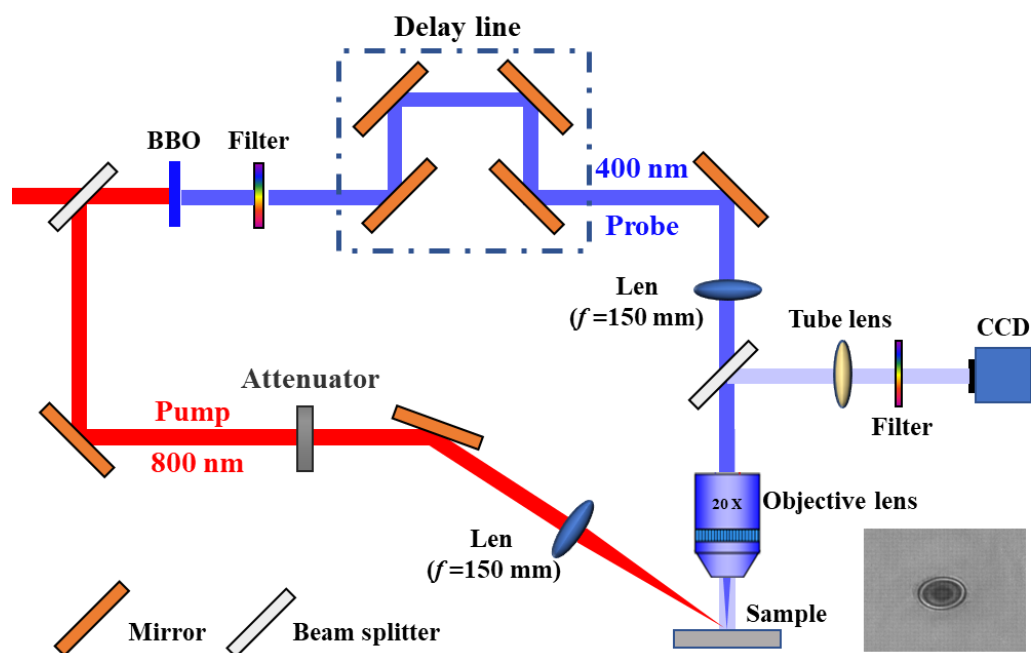


Figure S1. Schematic diagram of pump-probe system.

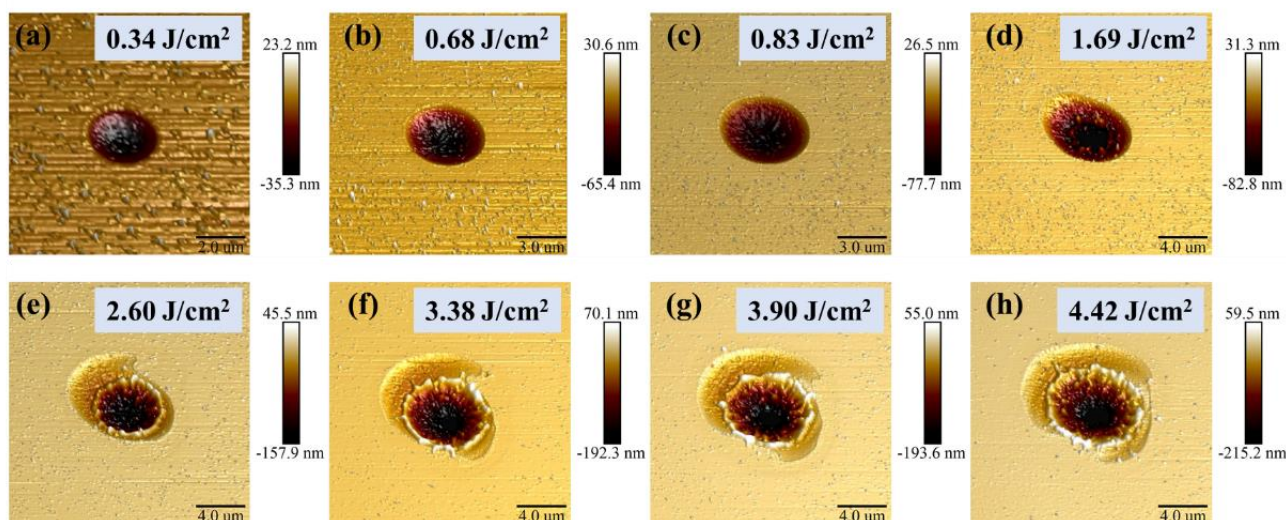


Figure S2. AFM micrographs of the craters ablated with different fluence.