

Abstract Submitted  
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**Analysis of the mechanisms of cavitation erosion** BEN ZHAO, OLIVIER COUTIER-DELGOSHA, Virginia Tech — Erosion related to the collapse of a single cavitation bubble is investigated. The bubble is created using a pulsed high intensity laser focused in a water tank, and the mechanisms of erosion are studied with high speed visualizations, a small time response hydrophone, and a pressure sensor located on the material. The effects of the distance of the bubble to the wall, the bubble size, and the softness of the material are investigated. A specific attention is paid to the feedback on the material on the bubble collapse, depending on the material stiffness. First results based on the use of two lasers creating two interacting bubbles will be also presented.

Olivier Coutier-Delgosha  
Virginia Tech

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