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**Enhanced laser processing through plasmonic interactions<sup>1</sup>**

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The strong interaction between laser light and plasmonic materials can be used to enhance traditional laser processing techniques. In this talk, I will review some aspects of the extinction of laser light by nanoparticles and how that may be utilized to form nanoalloys, porate soft material surfaces, and to study nano-particle interactions on surfaces. This processing technique is broadly applicable to diverse areas such as drug delivery, nonlinear optics, and micro-machining.

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