

Title	<b>Bow-tie nano-antenna assisted generation of extreme ultraviolet radiation</b>
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Abstract	<p>We report on the generation of extreme ultraviolet radiation utilizing the plasmonic field enhancement in arrays of bow-tie gold optical antennae. Furthermore, their suitability to support high-order harmonic generation is examined by means of finite-difference time-domain calculations and experiments. Particular emphasis is paid to the thermal properties, which become significant at the employed peak intensities. A damage threshold depending on the antenna length is predicted and confirmed by our experimental findings. Moreover, the gas density in the vicinity of the antennae is characterized experimentally to determine the number of atoms contributing to the measured radiation, which is almost an order of magnitude larger than previously reported.</p>
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