

Abstract Submitted
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Generation and characterization of broadband isolated attosecond pulse¹ QI ZHANG, KUN ZHAO, MICHAEL CHINI, YI WU, College of Optics and Photonics and Department of Physics, University of Central Florida, XIAOWEI WANG, National University of Defense of China, Department of Physics, ZENGHU CHANG, College of Optics and Photonics and Department of Physics, University of Central Florida — A 7.5 fs, 780 nm infrared laser was tightly focused on a Ne gas target to generate an XUV supercontinuum spectrum by applying the Double Optical Gating (DOG) method. This supercontinuum reaches a cutoff at 120 eV photon energy. The XUV pulse was filtered by a Zr filter to compensate the intrinsic chirp from the XUV generation. The spectrum after the filter supports an isolated pulse as short as 60 as centered at 80 eV photon energy. The spectral phase of the XUV pulse was extracted from the measured attosecond streaking trace by the Phase Retrieval by Omega Oscillation Filtering (PROOF).

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