

Generation of isolated attosecond pulses driven by a post-compressed Yb laser



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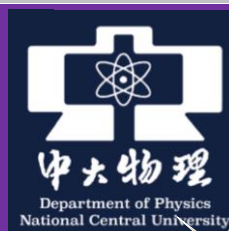
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We introduce a new post-compression, cascaded focus and compression, to achieve 50-fold compression of millijoule-level pulses at 1030 nm from 157 fs to 3.1 fs, with an output pulse energy of 0.98 mJ and transmission efficiency of 73%. When driving high-harmonic generation (HHG), these single-cycle pulses enable the creation of a carrier-envelope-phase-dependent extreme ultraviolet continuum with energies extending up to 180 eV, providing isolated ≈ 290 attoseconds pulses at the output.

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Colloquium