

Title	<b>High-energy 1 Hz titanium sapphire amplifier for PetaWatt class lasers</b>
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Abstract	<p>We have obtained 23 J uncompressed laser pulses at a repetition rate of 1 Hz with a spectral width of 41 nm FWHM which could produce 600 TW if compressed ; this is the highest energy obtained to date from a Titanium Sapphire amplifier working at a such repetition rate. This amplifier is part of a 1.3 PW laser system under construction by Thales Optronique for the BELLA project of LBNL aiming laser wakefield acceleration of electrons up to 10 GeV.</p>
Laser Quantum Product	<b>Finesse 5W</b>
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