

Abstract Submitted  
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**Lasing without Inversion in He-like Boron: Transient Response<sup>1</sup>**

EYOB SETE, ANATOLY SVIDZINSKY, Texas A&M University, YURI ROSTOVTSEV, The University of North Texas, HICHEM ELEUCH, PANKAJ JHA, Texas A&M University, SZYMON SUCKEWER, Princeton University, MARLAN SCULLY, Texas A&M University and Princeton University — Lasing without population is more attractive in short wavelength spectral regimes, as traditional lasing conditions are difficult to achieve due to fast spontaneous life time for shorter spectral domain. We thus here propose a scheme for demonstration of lasing without inversion in short wavelength regime. Using Helium-like Boron as our gain medium, we show that it is possible to have transient lasing without inversion at 6.1nm.

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