Abstract Submitted for the OSF10 Meeting of The American Physical Society

Theory of Coherent Perfect Absorption (CPA) applied to the layered polymer laser MICHAEL CRESCIMANNO, Youngstown State University, Dept. Physics, JAMES ANDREWS, Youngstown State Univ., Dept. Physics and Astronomy, GUILIN MAO, Youngstown State University, Dept. of Physics and Astronomy — Coherent perfect absorption (CPA) is a situation in which counterpropagating pump beams can be adjusted so that both beams are completely absorbed by the system. Using theory we delineate the conditions under which a CPA condition can be achieved in real polymeric laser films and remark on CPA's utility for enhancing these films utility.

Michael Crescimanno Youngstown State University, Dept. Physics

Date submitted: 14 Sep 2010 Electronic form version 1.4