Paper ID: 18560 student

SPACE PROPULSION SYMPOSIUM (C4) Advanced and Combined Propulsion Systems (8)

Author: Mr. Tianyi Shi Peking University Health Science Center, China

EXPERIMENTAL RESEARCH ON CONTINUOUS DETONATION ENGINE

Abstract

Continuous detonation engine (CDE) is a new conceptual engine model. It has fundamentally comparative advantages to the traditional engines in terms of thermal efficiency and impulse. The experiments and research on continuous detonation engine mainly focus on the feasibility of the preliminary verification on continuous detonation. The authors conduct the research and successfully verify the feasibility of continuous detonation via using independent design of ignition system and combustion chamber.