



Scalability of Localized ARC Filament Plasma Actuators

By Clifford A. Brown

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 24 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.Temporal flow control of a jet has been widely studied in the past to enhance jet mixing or reduce jet noise. Most of this research, however, has been done using small diameter low Reynolds number jets that often have little resemblance to the much larger jets common in real world applications because the flow actuators available lacked either the power or bandwidth to sufficiently impact these larger higher energy jets. The Localized Arc Filament Plasma Actuators (LAFPA), developed at the Ohio State University (OSU), have demonstrated the ability to impact a small high speed jet in experiments conducted at OSU and the power to perturb a larger high Reynolds number jet in experiments conducted at the NASA Glenn Research Center. However, the response measured in the large-scale experiments was significantly reduced for the same number of actuators compared to the jet response found in the small-scale experiments. A computational study has been initiated to simulate the LAFPA system with additional actuators on a large-scale jet to determine the number of actuators required to achieve the same desired response for a given...



Reviews

This book is definitely not straightforward to get started on studying but extremely exciting to read. It is really simplistic but shocks in the 50 percent of the ebook. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- Ally Reichel

This publication is amazing. It is definitely basic but shocks in the fifty percent of your publication. You wont feel monotony at anytime of your own time (that's what catalogues are for concerning if you question me).

-- Prof. Kirk Cruickshank DDS