

JOURNAL OF PROPULSION AND POWER

VOLUME 27, NUMBER 3

U-05-2-2

雙月
v.27
n.3

MAY-JUNE 2011

SURVEY PAPER

- Comprehensive Review of Planar Pulsed Inductive Plasma Thruster Research and Technology K. A. Polzin 513

FULL-LENGTH PAPERS

- In Situ Thermal Characterization of the Accelerator Grid of an Ion Thruster C. Bundesmann, M. Tartz, F. Scholze, H. Neumann, H. J. Leiter, F. Scortecci 532
- Modeling Neutral Densities Downstream of a Gridded Ion Thruster G. C. Soulas 538
- Neutral Flow Evolution in a Six-Kilowatt Hall Thruster W. Huang, A. D. Gallimore, R. R. Hofer 553
- Technique to Collimate Ions in a Hall-Effect Thruster Discharge Chamber K. G. Xu and M. L. R. Walker 564
- Evaluation of Facility Effects on Ion Migration in a Hall Thruster Plume D. L. Brown and A. D. Gallimore 573
- Experimental Investigations of the Performance of a Multitube Pulse Detonation Turbine System A. Rasheed, A. H. Furman, A. J. Dean 586
- Inflow-Driven Valve System for Pulse Detonation Engines K. Matsuoka, J. Yageta, T. Nakamichi, J. Kasahara, T. Yajima, T. Kojima 597
- Effects of Orifice Internal Flow on Liquid Jets in Subsonic Crossflows J. Song, K. Ahn, M.-k. Kim, Y. Yoon 608
- Numerical Prediction of Conjugate Heat Transfer in Fluid Network A. Majumdar and S. S. Ravindran 620
- Unsteady Aspects of Lean Premixed Pre vaporized Gas Turbine Combustors: Flame-Flame Interactions S. K. Dhanuka, J. E. Temme, J. F. Driscoll 631
- Erosion in Solid-Propellant Rocket Motor Nozzles with Unsteady Nonuniform Inlet Conditions J. Zhang, T. L. Jackson, J. Buckmaster, F. Najjar 642
- Reduced Agglomeration of Aluminum in Wide-Distribution Composite Propellants J. C. Mullen and M. Q. Brewster 650
- Poisson Ratio Effect on Stress Behavior of Propellant Grains Under Ignition Loading H.-T. Chu and J.-H. Chou 662
- Burning-Rate Characteristics of Composite Propellant Using Ammonium Perchlorate Modified by Ethylene Glycol M. Kohga and H. Tsuzuki 668
- Mechanism of Propagation Direction of Rotating Cavitations in a Cascade Y. Iga and Y. Yoshida 675

Table of Contents continued on back cover



CONTENTS—continued

Performance Characteristics of Hydrogen Peroxide/Kerosene Staged-Bipropellant Engine with Axial Fuel Injector	S. Jo, S. An, J. Kim, H. Yoon, S. Kwon	684
Blade-Mounted Single Dielectric Barrier Discharge Plasma Actuators in Turbine Cascade	J. E. Stephens, T. Corke, S. Morris	692
Study of Trailing-Edge Cooling Using Pressure Sensitive Paint Technique	Z. Yang and H. Hu	700
Gas Turbine Combustor Sector Flow Structure	B. S. Mohammad and S. M. Jeng	710
Experimental Investigation of a Hypersonic Inlet with and Without Sidewall Compression	P. Gruhn and A. Gülhan	718

TECHNICAL NOTES

Multiobjective Optimization of Circumferential Casing Grooves for a Transonic Axial Compressor	J.-H. Kim, K.-J. Choi, A. Husain, K.-Y. Kim	730
Demonstration of a Fluidic Spray Control Orifice	K.-T. Tseng and S. H. Collicott	733