

Journal of Turbomachinery

Publication Title History

October, 2010 | Volume 132 | Issue 4

Email Alerts | RSS 
BASIC
VIEW | EXPANDED VIEW

Research Papers

Film-Cooling Effectiveness on a Rotating Turbine Platform Using Pressure Sensitive Paint Technique

A. Suryanarayanan, B. Ozturk, M. T. Schobeiri and J. C. Han

J. Turbomach. 2010;132(4):041001-041001-13. doi:10.1115/1.3142860.

A Novel Turbomachinery Air-Brake Concept for Quiet Aircraft

P. N. Shah, D. D. Mobed and Z. S. Spakovszky

J. Turbomach. 2010;132(4):041002-041002-11. doi:10.1115/1.3192145.

Volume Dynamics Propulsion System Modeling for Supersonics Vehicle Research

George Kopasakis, Joseph W. Connolly, Daniel E. Paxson and Peter Ma

J. Turbomach. 2010;132(4):041003-041003-8. doi:10.1115/1.3192148.

Improved Understanding of Blow-Down in Filament Seals

Gervas Franceschini, Terry V. Jones and David R. H. Gillespie

J. Turbomach. 2010;132(4):041004-041004-10. doi:10.1115/1.3213552.

Endwall Film Cooling Effects on Secondary Flows in a Contoured Endwall Nozzle Vane

Giovanna Barigozzi, Giuseppe Franchini, Antonio Perdichizzi and Marco Quattre

J. Turbomach. 2010;132(4):041005-041005-9. doi:10.1115/1.3192147.

Velocity Distributions for Low Pressure Turbines

J. D. Coull, R. L. Thomas and H. P. Hodson

J. Turbomach. 2010;132(4):041006-041006-13. doi:10.1115/1.3192149.

Unsteady Analysis of Blade and Tip Heat Transfer as Influenced by the Upstream Momentum and Thermal Wakes

Ali A. Ameri, David L. Rigby, Erlendur Steinthorsson, James Heidmann and John C. Fabian

J. Turbomach. 2010;132(4):041007-041007-7. doi:10.1115/1.3213549.

Adiabatic and Overall Effectiveness Measurements of an Effusion Cooling Array for Turbine Endwall Application

Bruno Facchini, Lorenzo Tarchi, Lorenzo Toni and Alberto Ceccherini

J. Turbomach. 2010;132(4):041008-041008-11. doi:10.1115/1.3213555.

Multi-Objective Aerodynamic Optimization of Axial Turbine Blades Using a Novel Multilevel Genetic Algorithm

Özhan Öksüz and İbrahim Sinan Akmandor

J. Turbomach. 2010;132(4):041009-041009-14. doi:10.1115/1.3213558.

Investigation of Leakage Flow and Heat Transfer in a Gas Turbine Blade Tip With Emphasis on the Effect of Rotation

Dianliang Yang, Xiaobing Yu and Zhenping Feng

J. Turbomach. 2010;132(4):041010-041010-9. doi:10.1115/1.3213560.

Aerodynamics of a Letterbox Trailing Edge: Effects of Blowing Rate, Reynolds Number, and External Turbulence on Aerodynamic Losses and Pressure Distribution

N. J. Fiala, J. D. Johnson and F. E. Ames

J. Turbomach. 2010;132(4):041011-041011-11. doi:10.1115/1.3195035.

Numerical Analysis of the Vaned Diffuser of a Transonic Centrifugal Compressor

Michele Marconcini, Filippo Rubecchini, Andrea Arnone and Seiichi Ibaraki

J. Turbomach. 2010;132(4):041012-041012-8. doi:10.1115/1.2988481.

Prediction of Evaporative Effects Within the Blading of an Industrial Axial Compressor

Charles Matz, Giovanni Cataldi, Wolfgang Kappis, Gerd Mundinger, Stefan Bischoff, Eivind Helland and Matthias Ripken

J. Turbomach. 2010;132(4):041013-041013-11. doi:10.1115/1.3149285.

High-Fidelity Numerical Analysis of Per-Rev-Type Inlet Distortion Transfer in Multistage Fans—Part I: Simulations With Selected Blade Rows

Jixian Yao, Steven E. Gorrell and Aspi R. Wadia

J. Turbomach. 2010;132(4):041014-041014-10. doi:10.1115/1.3148478.

High-Fidelity Numerical Analysis of Per-Rev-Type Inlet Distortion Transfer in Multistage Fans—Part II: Entire Component Simulation and Investigation

Jixian Yao, Steven E. Gorrell and Aspi R. Wadia

J. Turbomach. 2010;132(4):041015-041015-17. doi:10.1115/1.3148479.

The Effects of Inlet Guide Vane-Wake Impingement on the Boundary Layer and the Near-Wake of a Rotor Blade

Francesco Soranna, Yi-Chih Chow, Oguz Uzol and Joseph Katz

J. Turbomach. 2010;132(4):041016-041016-13. doi:10.1115/1.3149282.

Preparing for the Future: Reducing Gas Turbine Environmental Impact—IGTI Scholar Lecture

Nicholas A. Cumpsty

J. Turbomach. 2010;132(4):041017-041017-17. doi:10.1115/1.4001221.

Some Lessons Learned

N. A. Cumpsty

J. Turbomach. 2010;132(4):041018-041018-7. doi:10.1115/1.4001222

Technical Briefs

Computation of Eigenvalues and Eigenvectors of a Mistuned Bladed Disk Via Unidirectional Taylor Series Expansions

Alok Sinha

J. Turbomach. 2010;132(4):044501-044501-4. doi:10.1115/1.3142863.