Applied Aerodynamics

Papers Presented at the AIAA SciTech Forum and Exposition 2021

Online
11-15 & 19-21 January 2021

Volume 1 of 5

ISBN: 978-1-7138-2607-1

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571

Some format issues inherent in the e-media version may also appear in this print version.

TABLE OF CONTENTS

VOLUME 1

AERODYNAMIC AND PROPULSION SYSTEMS INTEGRATION

AERODYNAMIC DESIGN: ANALYSIS, METHODOLOGIES AND OPTIMIZATION TECHNIQUES VI

AERO-STRUCTURAL INTERACTIONS I

PROPELLER, ROTORCRAFT AND DISTRIBUTED PROPULSION AERODYNAMICS I

SPECIAL SESSION: HOVER PREDICTION WORKSHOP I

VOLUME 3

AERO-STRUCTURAL INTERACTIONS II

PROPELLER, ROTORCRAFT AND DISTRIBUTED PROPULSION AERODYNAMICS II

SPECIAL SESSION: HOVER PREDICTION WORKSHOP II

AERODYNAMIC TESTING: GROUND, WIND-TUNNEL AND FLIGHT TESTING I

HYPERSONIC AERODYNAMICS I

SPECIAL SESSION: CREATE HPC MULTI-PHYSICS IV

SPECIAL SESSION: SLOTTED, NATURAL-LAMINAR-FLOW AIRFOIL DEVELOPMENT FROM THE NASA UNIVERSITY LEADERSHIP INITIATIVE I

SUPERSONIC AERODYNAMICS AND PROPULSION SYSTEMS

COMPUTATIONAL-EXPERIMENTAL HIGH-SPEED FLUID THERMAL STRUCTURAL INTERACTIONS

HYPERSONIC AERODYNAMICS II

SPECIAL SESSION: CREATE HPC MULTI-PHYSICS V

HYPERSONIC AERODYNAMICS III

VOLUME 4

SPECIAL SESSION: CREATE HPC MULTI-PHYSICS VI

FLOW CONTROL APPLICATIONS I

LOW SPEED AND LOW REYNOLDS NUMBER AERODYNAMICS

PROPELLER, ROTORCRAFT AND DISTRIBUTED PROPULSION AERODYNAMICS III

SPECIAL SESSION: INTEGRATION ENVIRONMENTS FOR LARGE-SCALE MULTIDISCIPLINARY MODELING AND SIMULATION I

FLOW CONTROL APPLICATIONS II

SPECIAL SESSION: INTEGRATION ENVIRONMENTS FOR LARGE-SCALE MULTIDISCIPLINARY MODELING AND SIMULATION II

APPLIED COMPUTATIONAL FLUID DYNAMICS I

TRANSONIC AERODYNAMICS

APPLIED COMPUTATIONAL FLUID DYNAMICS II

VOLUME 5

AIRFOIL/WING/CONFIGURATION AERODYNAMICS III

PROPELLER/ROTORCRAFT/WIND TURBINE MODELING APPROACHES

UNSTEADY AERODYNAMICS II

APPLIED COMPUTATIONAL FLUID DYNAMICS III