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Personal Information

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International Researcher IDs

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Education Information

Doctorate, Georgia Institute of Technology, School Of Aerospace Engineering, United States Of America 2003 - 2009

Postgraduate, Georgia Institute of Technology, School Of Aerospace Engineering, United States Of America 2003 - 2007

Postgraduate, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uzay Mühendisliği Bölümü, Turkey 2000 - 2004

Undergraduate Double Major, Istanbul Technical University, Makine Fakültesi, Makine Mühendisliği Bölümü, Turkey 1996 - 2001

Undergraduate, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uzay Mühendisliği Bölümü, Turkey 1995 - 2000

Foreign Languages

English

Dissertations

Doctorate, A New Two-scale Model for Large Eddy Simulation of Wall-bounded Flows, Georgia Institute Of Technology, School Of Aerospace Engineering, 2009

Postgraduate, Analysis of fluid mechanic problems using a finite element method, İstanbul Teknik Üniversitesi, Uçak Ve Uzay Bilimleri Fakültesi, Uzay Mühendisliği Bölümü, 2004

Research Areas

Technical Sciences, Aeronautical and Space Engineering

Academic Titles / Tasks

Professor, Istanbul Technical University, Uçak Ve Uzay Bilimleri, Uzay Mühendisliği, 2024 - Continues

Associate Professor, Istanbul Technical University, Uçak Ve Uzay Bilimleri, Uzay Mühendisliği, 2018 - 2024

Assistant Professor, Istanbul Technical University, Uçak ve Uzay Bilimleri, Uzay Mühendisliği, 2012 - 2018

Instructor, Air War Academy Command, Air Force Academy (Dean's Office), 2016 - 2017

Instructor, Koc University, Faculty Of Engineering, Department Of Mechanical Engineering, 2013 - 2013

Research Assistant, Istanbul Technical University, Uçak ve Uzay Bilimleri, Uzay Mühendisliği, 2001 - 2012

Research Assistant, Georgia Institute of Technology, School Of Aerospace Engineering, 2003 - 2009

Academic and Administrative Experience

İstanbul Teknik Üniversitesi, Uçak Ve Uzay Bilimleri Fakültesi, 2012 - 2014

Courses

Aerodynamics, Undergraduate, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Energy transfer mechanisms in adverse pressure gradient turbulent boundary layers: production and inter-component redistribution**
Gungor T. R., Maciel Y., Güngör A. G.
JOURNAL OF FLUID MECHANICS, vol.948, 2022 (SCI-Expanded)
- II. **Large eddy simulation of turbulence-combustion interactions in a stagnation point reverse flow combustor**
Ozgunoglu M., Güngör A. G.
FUEL, vol.257, 2019 (SCI-Expanded)
- III. **Outer scales and parameters of adverse-pressure-gradient turbulent boundary layers**
MACIEL Y., Güngör A. G., Simens M. P.
JOURNAL OF FLUID MECHANICS, vol.844, pp.5-35, 2018 (SCI-Expanded)
- IV. **Influence of the transition of a laminar separation bubble on the downstream evolution of strong adverse pressure gradient turbulent boundary layers**
Simens M. P., Güngör A. G.
EUROPEAN JOURNAL OF MECHANICS B-FLUIDS, vol.67, pp.70-78, 2018 (SCI-Expanded)
- V. **Direct numerical simulation of a self-similar adverse pressure gradient turbulent boundary layer at the verge of separation**
KITSIOS V., SEKIMOTO A., ATKINSON C., SILLERO J. A., BORRELL G., Güngör A. G., JIMENEZ J., SORIA J.
JOURNAL OF FLUID MECHANICS, vol.829, pp.392-419, 2017 (SCI-Expanded)
- VI. **Structural differences between small and large momentum-defect turbulent boundary layers**
Maciel Y., Güngör A. G., Simens M.
INTERNATIONAL JOURNAL OF HEAT AND FLUID FLOW, vol.67, pp.95-110, 2017 (SCI-Expanded)
- VII. **Coherent Structures in a Non-equilibrium Large-Velocity-Defect Turbulent Boundary Layer**
Maciel Y., Simens M. P., Güngör A. G.
FLOW TURBULENCE AND COMBUSTION, vol.98, no.1, pp.1-20, 2017 (SCI-Expanded)
- VIII. **Scaling and statistics of large-defect adverse pressure gradient turbulent boundary layers**
Gungor A. G., Maciel Y., SIMENS M. P., SORIA J.
INTERNATIONAL JOURNAL OF HEAT AND FLUID FLOW, vol.59, pp.109-124, 2016 (SCI-Expanded)
- IX. **Direct numerical simulation of a self similar adverse pressure gradient turbulent boundary layer**
Kitsios V., Atkinson C., Sillero J., Borrell G., Güngör A. G., Jimenez J., Soria J.
International Journal of Heat and Fluid Flow, vol.61, pp.129-136, 2016 (SCI-Expanded)
- X. **DNS of unsteady effects on the control of laminar separated boundary layers**
Karaca S., Gungor A. G.

EUROPEAN JOURNAL OF MECHANICS B-FLUIDS, vol.56, pp.71-81, 2016 (SCI-Expanded)

XI. The Effect of Surface Roughness on Laminar Separated Boundary Layers

Simens M. P., Güngör A. G.

JOURNAL OF TURBOMACHINERY-TRANSACTIONS OF THE ASME, vol.136, no.3, 2014 (SCI-Expanded)

XII. Direct Numerical Simulations of Wake-Perturbed Separated Boundary Layers

Gungor A. G., SIMENS M. P., JIMENEZ J.

JOURNAL OF TURBOMACHINERY-TRANSACTIONS OF THE ASME, vol.134, no.6, 2012 (SCI-Expanded)

XIII. A new two-scale model for large eddy simulation of wall-bounded flows

Gungor A. G., MENON S.

PROGRESS IN AEROSPACE SCIENCES, vol.46, no.1, pp.28-45, 2010 (SCI-Expanded)

Supported Projects

Güngör A. G., Tutkun B., TUBITAK Project, Development of a high fidelity in-house reacting flow solver for turbulent combustion problems, 2020 - 2022

Güngör A. G., Project Supported by Higher Education Institutions, Basınç Değişimlerinin Sınır Tabakadaki Türbülans Yapılarına Etkisi, 2014 - 2018

Güngör A. G., TUBITAK Project, Modern Gaz Türbini Tasarımında Karşılaşılan Akış Problemlerinin Yüksek Doğruluklu Çözümüne Yönelik Les Metodolojisi Geliştirilmesi, 2014 - 2017

Scientific Refereeing

Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi , National Scientific Refreed Journal, March 2017

Journal of Fluid Mechanics, SCI Journal, January 2017

AIAA Journal, SCI Journal, June 2016

Metrics

Publication: 86

Citation (WoS): 124

Citation (Scopus): 279

H-Index (WoS): 8

H-Index (Scopus): 9

Congress and Symposium Activities

9th International Conference on Computational Fluid Dynamics, Invited Speaker, İstanbul, Turkey, 2016

Non Academic Experience

Cambridge Üniversitesi

Universidad Politecnica de Madrid

Universidad Politecnica de Madrid

Universidad Politecnica de Madrid

Universidad Politecnica de Madrid