

Prof. YUSUF ÖZYÖRÜK

Personal Information

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Education Information

Under Graduate, İstanbul Teknik Üniversitesi, Uçak Ve Uzay Bilimleri Fakültesi, Havacılık Ve Uzay Mühendisliği Bölümü, Turkey 1984 - 1988

Foreign Languages

English, C1 Advanced

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2005 - Continues

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2000 - 2005

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 1998 - 2000

Instructor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 1997 - 1998

Advising Theses

ÖZYÖRÜK Y., Use of detached eddy simulation for aerodynamics and aeroacoustics of blade sections, Doctorate, K.CENGİZ(Student), 2018

ÖZYÖRÜK Y., Wind noise prediction of a car model through solutions of Navier-Stokes and Ffowcs Williams & Hawkings equations, Post Graduate, B.GÜMÜŞ(Student), 2017

ÖZYÖRÜK Y., Navier-Stokes computations of helicopter rotor flow fields, Post Graduate, A.OĞUZ(Student), 2017

ÖZYÖRÜK Y., Development of a high-order Navier-Stokes solver for aeroacoustic predictions of wind turbine blade sections, Post Graduate, Ö.YALÇIN(Student), 2015

ÖZYÖRÜK Y., Performance prediction of nozzleless solid propellant rocket motors, Post Graduate, A.CAN(Student), 2015

ÖZYÖRÜK Y., ALEMDAROĞLU H. N. , Aerodynamic and three-degree-of-freedom flight mechanics analysis of a slender body of rectangular cross section, Post Graduate, B.TUĞCAN(Student), 2014

ÖZYÖRÜK Y., AERODYNAMIC HEATING ANALYSIS OF HIGH SPEED MISSILE AND PROJECTILE GEOMETRIES, Post Graduate, E.GÜLAY(Student), 2012

ÖZYÖRÜK Y., ALEMDAROĞLU H. N. , Trajectory computation of small solid particles released and carried by flowfields of helicopters in forward flight, Post Graduate, Y.OKAN(Student), 2010

ÖZYÖRÜK Y., Development of an iterative method for liquid-propellant combustion chamber instability analysis, Post Graduate, K.CENGİZ(Student), 2010

ULAŞ A., ÖZYÖRÜK Y., One and two dimensional numerical simulation of deflagration to detonation transition phenomenon in solid energetic materials, Doctorate, B.NARİN(Student), 2010

ÖZYÖRÜK Y., UNSTEADY FLOW ANALYSIS of a SOLID ROCKET MOTOR THRUST VECTOR CONTROL SYSTEM, Post

Graduate, B.MIÇAK(Student), 2009

ÖZGEN S., ÖZYÖRÜK Y., Development of forward flight trim and longitudinal dynamic stability codes and their application to a UH-60 helicopter, Post Graduate, S.ÇALIŞKAN(Student), 2009

ÖZYÖRÜK Y., A numerical investigation of helicopter flow fields including thermal effects of exhaust hot gases, Post Graduate, Z.ECE(Student), 2009

ÖZYÖRÜK Y., Reynolds-averaged Navier-Stokes computations of jet flows emanating from turbofan exhausts, Post Graduate, S.KAYA(Student), 2008

ÖZYÖRÜK Y., Experimental and Numerical Investigation of Onset of Combustion Instabilities in a T-burner Resonator, Post Graduate, E.KAPLAN(Student), 2008

ÖZYÖRÜK Y., Numerical determination of wave shaper effects in shaped charge jet performance, Post Graduate, O.AYISIT(Student), 2008

ÖZYÖRÜK Y., Assessment of an iterative approach for solution of frequency domain linearized Euler equations for noise propagation through turbofan jet flows, Post Graduate, İ.EVRİM(Student), 2007

ÖZYÖRÜK Y., Frequency domain computation of turbofan exhaust noise radiation, Post Graduate, Y.BARAROS(Student), 2006

ÖZYÖRÜK Y., Conceptual internal design and computational fluid dynamics analysis of a supersonic inlet, Post Graduate, M.ALEMDAROĞLU(Student), 2005

ÖZYÖRÜK Y., ALEMDAROĞLU H. N. , Aerodynamic analysis of fighter aircraft F-16 with external stores, Post Graduate, H.ERHAN(Student), 2003

ÖZYÖRÜK Y., Parallel, Navier-Stokes computation of the flowfield of a hovering helicopter rotor, Post Graduate, M.GEÇGEL(Student), 2003

ÖZYÖRÜK Y., ALEMDAROĞLU H. N. , Aerodynamic analysis of a full aircraft configuration using a panel method, Post Graduate, D.FUNDA(Student), 2002

ÖZYÖRÜK Y., Three dimensional aerodynamic analysis of missiles by a panel method, Post Graduate, O.BAŞOĞLU(Student), 2002

ÖZYÖRÜK Y., Numerical simulation of rotary wing flowfields on parallel computers, Post Graduate, E.ALPMAN(Student), 2001

ÖZYÖRÜK Y., ALEMDAROĞLU H. N. , Euler solutions for a medium range cargo aircraft, Post Graduate, C.BAHAR(Student), 2001

ÖZYÖRÜK Y., Frequency-domain simulation of sound propagation in acoustically treated ducts with flow, Post Graduate, A.ŞİRZAI(Student), 2000

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Experiences with two detached eddy simulation approaches through use of a high-order finite volume solver**
Cengiz K., ÖZYÖRÜK Y.
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.92, pp.899-921, 2020 (Journal Indexed in SCI)
- **Three dimensional axisymmetric sound propagation through a duct with aerosol**
Arslan E., ÇALIŞKAN M., ÖZYÖRÜK Y.
JOURNAL OF SOUND AND VIBRATION, vol.434, pp.261-272, 2018 (Journal Indexed in SCI)
- **High-order detached eddy simulation of unsteady flow around NREL S826 airfoil**
YALÇIN Ö., Cengiz K., ÖZYÖRÜK Y.
JOURNAL OF WIND ENGINEERING AND INDUSTRIAL AERODYNAMICS, vol.179, pp.125-134, 2018 (Journal Indexed in SCI)
- **Numerical Analysis of One-Dimensional Sound Propagation Through a Duct Containing Water Droplets**
Arslan E., ÖZYÖRÜK Y., ÇALIŞKAN M.
JOURNAL OF COMPUTATIONAL ACOUSTICS, vol.25, 2017 (Journal Indexed in SCI)

- **Two dimensional numerical prediction of deflagration-to-detonation transition in porous energetic materials**
Narin B., ÖZYÖRÜK Y., ULAŞ A.
JOURNAL OF HAZARDOUS MATERIALS, vol.273, pp.44-52, 2014 (Journal Indexed in SCI)
- **Application of frequency-domain linearized Euler solutions to the prediction of aft fan tones and comparison with experimental measurements on model scale turbofan exhaust nozzles**
ÖZYÖRÜK Y., Tester B. J.
JOURNAL OF SOUND AND VIBRATION, vol.330, pp.3846-3858, 2011 (Journal Indexed in SCI)
- **Numerical prediction of aft radiation of turbofan tones through exhaust jets**
Ozyoruk Y.
JOURNAL OF SOUND AND VIBRATION, vol.325, pp.122-144, 2009 (Journal Indexed in SCI)
- **Numerical simulation of fore and aft sound fields of a turbofan**
Ozyoruk Y., Ahuja V.
AIAA JOURNAL, vol.42, pp.2028-2034, 2004 (Journal Indexed in SCI)
- **Frequency-domain prediction of turbofan noise radiation**
Ozyoruk Y., Alpman E., Ahuja V., Long L.
JOURNAL OF SOUND AND VIBRATION, vol.270, pp.933-950, 2004 (Journal Indexed in SCI)
- **Euler solutions for a medium-range cargo aircraft**
Bahar C., Alemdaroglu N., Ozyoruk Y., Temel E.
JOURNAL OF AIRCRAFT, vol.40, pp.393-395, 2003 (Journal Indexed in SCI)
- **Parallel computation of forward radiated noise of ducted fans with acoustic treatment**
Ozyoruk Y.
AIAA JOURNAL, vol.40, pp.450-455, 2002 (Journal Indexed in SCI)
- **Time-domain calculation of sound propagation in lined ducts with sheared flows**
Ozyoruk Y., Long L.
AIAA JOURNAL, vol.38, pp.768-773, 2000 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

- **Aerodynamic Performance Analyses of Iced Wind Turbine Blade Profile with Transitional DDES**
YALÇIN Ö., YIRTICI Ö., ÖZYÖRÜK Y., TUNCER İ. H.
10th Ankara International Aerospace Conference, 18 - 20 September 2019
- **NUMERICAL INVESTIGATION OF SPINNING MODE TRANSMISSION THROUGH VARIABLE AREA ANNULAR DUCTS WITH FLOW**
ÖZYÖRÜK Y., Coupland J., Tester B. J.
22nd International Congress on Sound and Vibration (ICSV), Florence, Italy, 12 - 16 July 2015
- **PREDICTING FAR-FIELD BROADBAND NOISE LEVELS FROM IN-DUCT PHASED ARRAY MEASUREMENTS**
Tester B. J., ÖZYÖRÜK Y., Sutliff D. L., Bozak R. F.
22nd International Congress on Sound and Vibration (ICSV), Florence, Italy, 12 - 16 July 2015
- **Assessment of a frequency-domain linearised Euler solver for turbofan aft radiation predictions and comparison with measurements**
ÖZYÖRÜK Y., Tester B. J.
IUTAM Symposium on Computational Aero-Acoustics for Aircraft Noise Prediction, Southampton, United Kingdom, 29 - 31 March 2010, vol.6, pp.153-162

Citations

Total Citations (WOS):78

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