

## Prof. Bayram Çelik

### Personal Information

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### International Researcher IDs

ScholarID: bNdW2fcAAAAJ

ORCID: 0000-0002-7025-6330

Publons / Web Of Science ResearcherID: H-5460-2013

ScopusID: 14043223900

Yoksis Researcher ID: 115650

### Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Uzay Bilimleri Ve Teknolojisi (Dr), Turkey 1997 - 2006

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Uzay Bilimleri Ve Teknolojisi (Dr), Turkey 1993 - 1997

Undergraduate, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uzay Mühendisliği Bölümü, Turkey 1989 - 1993

### Dissertations

Doctorate, Analysis of micro flows using a finite element method, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Uzay Bilimleri Ve Teknolojisi (Dr), 2006

Postgraduate, 3-boyutlu maxwell denklemlerinin çözümü, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Uzay Bilimleri Ve Teknolojisi (Dr), 1997

### Research Areas

Technical Sciences, Aeronautical and Space Engineering, Space Engineering, Task, Software, Mathematical Modeling Techniques, Numerical modeling, Simulation

### Academic Titles / Tasks

Professor, İstanbul Technical University, Uçak Ve Uzay Bilimleri, 2024 - Continues

Associate Professor, İstanbul Technical University, Uçak Ve Uzay Bilimleri, Uzay Mühendisliği, 2019 - 2024

Assistant Professor, İstanbul Technical University, Uçak Ve Uzay Bilimleri, Uzay Mühendisliği, 2018 - 2019

Assistant Professor, İstanbul Technical University, Uçak Ve Uzay Bilimleri, Uzay Mühendisliği, 2010 - 2018

Research Assistant, İstanbul Technical University, Uçak Ve Uzay Bilimleri, Uzay Mühendisliği, 2000 - 2010

## **Academic and Administrative Experience**

Vice Dean, İstanbul Technical University, Uçak ve Uzay Bilimleri, 2020 - Continues

Vice Dean, İstanbul Technical University, Uçak ve Uzay Bilimleri, 2019 - Continues

İstanbul Teknik Üniversitesi, Uçak Ve Uzay Bilimleri Fakültesi, Uzay Mühendisliği Bölümü, 2015 - Continues

İstanbul Teknik Üniversitesi, Uçak Ve Uzay Bilimleri Fakültesi, Uzay Mühendisliği Bölümü, 2012 - Continues

## **Advising Theses**

Çelik B., Isıl dengeden uzak azot gazı içindeki kamaya ait şok uzaklığının HAD ile belirlenmesi, Postgraduate, U.YILDIZ(Student), 2023

Çelik B., Investigation of Shock-Vortex Interactions in Supersonic Flows via a High-Order Finite Volume Solver, Postgraduate, L.NİL(Student), 2023

Çelik B., Investigation and Improvement of Supersonic Intake Flow Characteristics Using Boundary Layer Control Techniques, Postgraduate, F.ÇETİN(Student), 2023

Çelik B., THE EFFECTS OF STRAKE FINENESS RATIO ON A DOUBLE DELTA WING IN TRANSONIC REGIME, Postgraduate, M.EFE(Student), 2023

Çelik B., A high-order finite-volume solver for supersonic flows, Doctorate, G.GERARDO(Student), 2022

Çelik B., Aeroacoustic investigations for a refrigerator air duct and flow systems, Postgraduate, H.BERFİN(Student), 2022

Çelik B., Basitleştirilmiş orta gerilim kesici panonun hesaplamalı yöntemlerle modellenmesi ve ısıl analizi, Postgraduate, A.EFE(Student), 2020

Çelik B., Computational investigations for shock wave – boundary layer interactions of a thermally nonequilibrium hypersonic flow, Postgraduate, D.VATANSEVER(Student), 2020

Çelik B., Dipten yanma üniteli topçu mermilerindeki dip bölgesi sürükleme kuvveti azaltımının hesaplamalı yöntemlerle araştırılması, Postgraduate, A.AT(Student), 2019

Çelik B., A numerical investigation on passive flow controls of open cavities at transonic speeds, Postgraduate, O.DEMİR(Student), 2019

Çelik B., Development of a modular overset grid based adaptive mesh refinement algorithm, Postgraduate, M.EL(Student), 2018

Çelik B., Hipersonik akışta şok-şok ve şok-sınır tabaka etkileşim mekanizmalarının incelenmesi ve ortaya çıkan yüzey ısı transferi açısından değerlendirilmesi, Doctorate, A.SELİM(Student), 2018

Çelik B., Numerical model of flue gas desulfurization spray tower in power plant, Postgraduate, O.GÖZÜTOK(Student), 2018

Çelik B., An investigation of heat transfer performance of rectangular channel by using vortex generators, Postgraduate, S.GİRGIN(Student), 2017

Çelik B., Eğik şok kaynaklı laminer sınır tabaka ayrılmasının hesaplamalı yöntemlerle incelenmesi, Postgraduate, H.AVŞAR(Student), 2017

## **Research Infrastructure Information**

Çelik B., Hesaplamalı Mühendislik Laboratuvarı, September 2014

## **Published journal articles indexed by SCI, SSCI, and AHCI**

- I. Shock stand-off distances over sharp wedges for thermally non-equilibrium dissociating nitrogen flows

Yıldız U., Vatansever D., Çelik B.

Theoretical and Computational Fluid Dynamics, vol.37, no.6, pp.799-821, 2023 (SCI-Expanded)

- II. **Vortexlet formation in Schardin's problem**  
Kofoğlu L. N., Spinelli G. G., Çelik B.  
Physics of Fluids, vol.34, no.12, 2022 (SCI-Expanded)
- III. **Applications of a central ENO and AUSM schemes based compressible N-S solver with reconstructed conservative variables**  
Spinelli G. G., Çelik B.  
Computers and Fluids, vol.227, 2021 (SCI-Expanded)
- IV. **Unsteady shock interaction mechanisms of high enthalpy reacting flows over double wedges at Mach 7**  
Vatansever D., Çelik B.  
PHYSICS OF FLUIDS, vol.33, no.5, 2021 (SCI-Expanded)
- V. **Leveling out interface temperature for conjugate heat transfer problems**  
Spinelli G. G., Çelik B.  
COMPUTERS & FLUIDS, vol.210, 2020 (SCI-Expanded)
- VI. **Effects of Double-Wedge Aft Angle on Hypersonic Laminar Flows**  
Durna A. S., Çelik B.  
AIAA JOURNAL, vol.58, no.4, pp.1689-1703, 2020 (SCI-Expanded)
- VII. **Time-periodic shock interaction mechanisms over double wedges at Mach 7**  
Durna A. S., Celik B.  
SHOCK WAVES, vol.29, no.3, pp.381-399, 2019 (SCI-Expanded)
- VIII. **Assessment of predictive capabilities for aerodynamic heating in hypersonic flow**  
KNIGHT D., CHAZOT O., AUSTIN J., BADR M. A., CANDLER G., Çelik B., ROSA D. d., DONELLI R., KOMIVES J., LANI A., et al.  
Progress in Aerospace Sciences, vol.90, pp.39-53, 2017 (SCI-Expanded)
- IX. **Shock interaction mechanisms on a double wedge at Mach 7**  
Durna A. S., BARADA M. E. H. A., Çelik B.  
PHYSICS OF FLUIDS, vol.28, no.9, 2016 (SCI-Expanded)
- X. **Heat transfer enhancement in a straight channel via a rotationally oscillating adiabatic cylinder**  
Beskok A., RAISEE M., Çelik B., Yagiz B., CHERAGHI M.  
INTERNATIONAL JOURNAL OF THERMAL SCIENCES, vol.58, pp.61-69, 2012 (SCI-Expanded)
- XI. **Heat transfer enhancement in a slot channel via a transversely oscillating adiabatic circular cylinder**  
Celik B., RAISEE M., Beskok A.  
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.53, no.4, pp.626-634, 2010 (SCI-Expanded)
- XII. **Mixing induced by a transversely oscillating circular cylinder in a straight channel**  
Celik B., Beskok A.  
PHYSICS OF FLUIDS, vol.21, no.7, 2009 (SCI-Expanded)
- XIII. **Micro-scale synthetic-jet actuator flow simulation with characteristic-based-split method**  
Çelik B., Edis F. O.  
AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.81, no.3, pp.239-246, 2009 (SCI-Expanded)
- XIV. **Flow past an oscillating circular cylinder in a channel with an upstream splitter plate**  
Celik B., Akdag U., GÜNEŞ S., Beskok A.  
PHYSICS OF FLUIDS, vol.20, no.10, 2008 (SCI-Expanded)
- XV. **Computational investigation of micro backward-facing step duct flow in slip regime**  
Çelik B., Edis F. O.  
NANOSCALE AND MICROSCALE THERMOPHYSICAL ENGINEERING, vol.11, pp.319-331, 2007 (SCI-Expanded)
- XVI. **Analysis of fluid flow through micro-fluidic devices using characteristic-based-split procedure**  
Celik B., Edis F. O.  
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.51, pp.1041-1057, 2006 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **Temperature Field and Power Loss Calculation With Coupled Simulations for a Medium-Voltage Simplified Switchgear**  
Şeker A. E., Çelik B., Yıldırım D., Sakacı E. A., Deniz A.  
Electrica, vol.23, no.1, pp.107-120, 2023 (Scopus)
- II. **Noise Reduction of Open Cavities by Passive Flow Control Methods at Transonic Speeds using OpenFOAM**  
Demir O., Çelik B., Güleren K. M.  
Havacılık ve Uzay Teknolojileri Dergisi, vol.14, no.2, pp.193-208, 2021 (Peer-Reviewed Journal)
- III. **An open-source hypersonic solver for non-equilibrium flows**  
Vatansever D., Çelik B.  
Journal of Aeronautics and Space Technologies, vol.14, no.1, pp.35-53, 2021 (Peer-Reviewed Journal)
- IV. **Journal of Aeronautics and Space Technologies**  
Demir O., ÇELİK B., GÜLEREN K. M.  
Havacılık ve Uzay Teknolojileri Dergisi, vol.14, no.2, pp.193-208, 2021 (Peer-Reviewed Journal)
- V. **Conjugate Heat Transfer Characteristics of Laminar Flows Through a Backward Facing Step Duct**  
Çelik B.  
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.21, pp.820, 2017 (Peer-Reviewed Journal)
- VI. **A 2-D Finite Volume Navier-Stokes Solver for Supersonic Flows**  
Türk A. G., Çelik B.  
Anadolu Üniversitesi Bilim ve Teknoloji Dergisi :A-Uygulamalı Bilimler ve Mühendislik, vol.18, pp.1042-1056, 2017 (Peer-Reviewed Journal)
- VII. **Conjugate Heat Transfer Computations Via lattice Boltzmann Method**  
Spinelli G. G., Çelik B.  
Havacılık ve Uzay Teknolojileri Dergisi, vol.10, pp.49-59, 2017 (Peer-Reviewed Journal)
- VIII. **Propulsive Force of a Heaving-Plunging Rigid Airfoil with Thickness**  
Çelik B., Pamuk B., Tan M., Gülçat Ü.  
Havacılık ve Uzay Teknolojileri Dergisi, vol.10, pp.55-65, 2017 (Peer-Reviewed Journal)
- IX. **Mikro boyuttaki ters basamak geometrisi içindeki akışın KTA yöntemiyle analizi**  
ÇELİK B., EDİS F. O.  
İTÜ Dergisi Seri D: Mühendislik, vol.5, no.6, pp.49-60, 2006 (Peer-Reviewed Journal)

## **Books & Book Chapters**

- I. **Characterization of Chaotic Stirring and Mixing Using Numerical Tools**  
Qian S., ÇELİK B., Beskok A.  
in: Microfluidics and Nanofluidics Handbook: Fabrication, Implementation, and Applications, Sushanta K. Mitra and Suman Chakraborty, Editor, CRC Press, Boca Raton, Florida, pp.195-214, 2011

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **The effect of tip clearance on the performance of KJ-66 RC microjet engine compressor at transonic regime**  
Can A., ÇELİK B.  
57th 3AF International Conference, Aero2023, Bordeaux, France, 29 March 2023
- II. **The effect of strake fineness ratio on a double delta wing at transonic regime**  
Kahraman M. E., ÇELİK B.  
57th 3AF International Conference, Aero2023, Bordeaux, France, 29 March 2023

- III. Supersonic flow jet interaction**  
Cop B., ÇELİK B.  
57th 3AF International Conference, Aero2023, Bordeaux, France, 29 March 2023
- IV. Modelling Vortexlets Formation of Schardin's Problem viaa High Order EulerSolver**  
Kofoğlu L. N., Spinelli G. G., Çelik B.  
AIAA SCITECH 2023 Forum, Maryland, United States Of America, 23 - 27 January 2023, pp.1-12
- V. Aeroacoustic Investigation of Refrigerator Air Duct and Flow Systems**  
Demir H. B., ÇELİK B., Erdoğan K.  
Euronoise 2021, Madeira, Portugal, 25 October - 27 December 2021
- VI. APPLICATIONS OF ADAPTIVE MESH REFINEMENT ON HIGH ORDER SOLVER FOR SUPERSONIC FLOWS**  
Spinelli G. G., ÇELİK B.  
ParCFD'2020, 32nd International Conference on Parallel Computational Fluid Dynamics, Nice, France, 11 May 2021
- VII. ISİL DENGEDEKİ HİPERSONİK BİR TEPKİMELİ AKIŞ ÇÖZÜCÜSÜNÜN GELİŞTİRİLMESİ VE DOĞRULANMASI**  
Vatansever D., Çelik B.  
8. Ulusal Havacılık ve Uzay Konferansı, 9 - 11 September 2020, no.44, pp.1-17
- VIII. Experimental and Computational Investigations of Shock Wave – Boundary Layer Interaction on a Transonic Airfoil with and without Bump**  
MALKOÇOĞLU U. E., BARADA M. E. H. A., ÇETİN F., ÇELİK B., YÜCEİL K. B.  
AIAA AVIATION 2020 FORUM, VIRTUAL EVENT, United States Of America, 15 - 19 June 2020
- IX. Thermal Analyses for a Simplified Medium-Voltage Switchgear: Numerical and Experimental Benchmark Studies**  
Seker A. E., Sakaci E. A., Deniz A., ÇELİK B., YILDIRIM D.  
International Conference on Electrical and Electronics Engineering ELECO, Turkey, 28 - 30 November 2019
- X. An Overset Grid Based Adaptive Mesh Refinement Algorithm**  
Elhajj Ali Barada M., ÇELİK B.  
10th ANKARA INTERNATIONAL AEROSPACE CONFERENCE, 18 - 20 September 2019
- XI. High Enthalpy Reacting Flow Analyses for a Double Wedge Geometry**  
VATANSEVER D., ÇELİK B.  
OpenFOAM Workshop 2019, 23 - 26 July 2019
- XII. Investigation of Shock wave -boundary layer interactions over a wing via OpenFOAM**  
biçer b., Metin Ç. A. S., ÇELİK B.  
OpenFOAM Workshop 2019, 23 - 26 July 2019
- XIII. Three-dimensionality of Double Wedge Flow at HypersonicSpeeds**  
DURNA A. S., ÇELİK B.  
the 32nd International Symposium on Shock Waves (ISSW32), 14 - 19 July 2019
- XIV. Noise reduction of Open Cavities by Passive Flow Control Methods at Transonic Speeds Using OpenFOAM**  
Demir O., ÇELİK B., GÜLEREN K. M.  
31st International Conference on Parallel Computational Fluid Dynamics, Antalya, Turkey, 14 - 17 May 2019
- XV. Conjugate Heat Transfer Problems via a lattice Boltzmann solver on CPU and GPU: A Performance Comparison**  
Spinelli G. G., ÇELİK B.  
31st International Conference on Parallel Computational Fluid Dynamics, 14 - 17 May 2019
- XVI. A Two-Dimensional Central Non-Oscillatory Scheme for Inviscid Compressible Flows**  
Spinelli G. G., ÇELİK B.  
4th World Congress on Momentum, Heat and Mass Transfer (MHMT'19), 10 - 12 April 2019
- XVII. Thermal Management Process in Automotive Exterior Lighting Products**  
Gözütok O., ÇELİK B.  
IV. International Congress on Natural and Engineering Sciences, 9 - 12 November 2018

- XVIII. **Transonik Akışlarda Girdap Üreteçlerinin Kavite Gürültüsüne Etkisi**  
Demir O., ÇELİK B., GÜLEREN K. M.  
7. Ulusal Havacılık ve Uzay Konferansı, Turkey, 12 - 14 September 2018
- XIX. **Hipersonik akışta iki açılı rampa etrafındaki akışın hesaplamalı yöntemlerle üç boyutluluğunun incelenmesi**  
DURNA A. S., ÇELİK B.  
VII. Ulusal Havacılık ve Uzay Konferansı (UHUK), Samsun, Turkey, 12 - 14 September 2018
- XX. **Numerical simulation of unsteady shock-boundary layer interaction at hypersonic speeds**  
DURNA A. S., ÇELİK B.  
Symposium on Advances in Thermal Fluid Sciences, İzmir, Turkey, 26 - 28 July 2018
- XXI. **Conjugate Heat Transfer Computations with lattice Boltzmann Method and Comparison its Results with Finite Volume Method**  
Spinelli G. G., ÇELİK B.  
9th Ankara International Aerospace Conference, Ankara, Turkey, 20 - 22 September 2017, pp.59
- XXII. **Hipersonik Akışta İki Açılı Rampa Etrafındaki Akışın Hesaplamalı Yöntemlerle Modellenmesi**  
DURNA A. S., ÇELİK B.  
VI. Ulusal Havacılık ve Uzay Konferansı, Kocaeli, Turkey, 28 - 30 September 2016, pp.139
- XXIII. **Shock boundary layer interaction and surface heat flux distribution on a double wedge at M 7**  
DURNA A. S., ÇELİK B.  
11th European Fluid Mechanics Conference, 12 - 16 September 2016
- XXIV. **Shock Interaction Mechanism for 3 D Laminar Hypersonic flow over a Double Wedge**  
DURNA A. S., ÇELİK B.  
9th International Conference on Computational Fluid Dynamics, 11 - 15 July 2016
- XXV. **Induced Shock Wave Laminar Boundary Layer Interaction**  
Avşar H., ÇELİK B.  
ECCOMAS Congress 2016 - European Congress on Computational Methods in Applied Sciences and Engineering, Creteil, France, 5 - 10 June 2016
- XXVI. **Heat And Mass Transfer Characteristics of a Micro Serpentine Channel with a Viscoelastic Coolant**  
Ozan O., ÇELİK B., ŞAHİN M.  
8th International Conference on computaional heat and mass transfer, 25 - 28 May 2015
- XXVII. **Hypersonic flows of air and nitrogen over a double wedge geometry**  
At A., ÇELİK B.  
8th International Conference on Computaional Heat and Mass Transfer, İstanbul, Turkey, 25 - 28 September 2015, pp.129
- XXVIII. **GPU accelarated multi block lattice Boltzmann solver for viscous flow problems**  
Spinelli G., ÇELİK B.  
8th Ankara International Aerospace Conference, Ankara, Turkey, 10 - 12 September 2015
- XXIX. **Conjugate heat transfer analysis for internally cooled solid structure**  
Topbaş B. S., ÇELİK B.  
20. ULUSAL ISI BİLİMİ VE TEKNİĞİ KONGRESİ, Balikesir, Turkey, Balikesir, Turkey, 2 - 05 September 2015
- XXX. **Heat and Mass Transfer Characteristics of a Micro Serpentine Channel with a Viscoelastic Coolant**  
Oduncu O., Çelik B., Şahin M.  
8th International conference on computational heat and mass transfer, İstanbul, Turkey, 25 - 28 May 2015, pp.122-127
- XXXI. **Çırpan ince kanatta ortalama itki kuvvetinin sayısal analizi**  
Pamuk B., ÇELİK B., Gülcüt Ü.  
V. Ulusal Havacılık ve Uzay Konferansı, Kayseri, Turkey, 8 - 10 September 2014, pp.30
- XXXII. **Computational simulations of shock wave laminar boundary layer interaction**  
Avşar H., At A., ÇELİK B.  
7th Ankara International Aerospace Conference, Ankara, Turkey, 11 - 13 September 2013, pp.147
- XXXIII. **Düz bir kanal içerisinde bir çember yayı boyunca basit harmonik harekete zorlanan silindirin**

- meydana getirdiği akış**  
Koyun E., ÇELİK B.  
XVIII. Ulusal Mekanik Kongresi, Manisa, Turkey, 26 - 30 August 2013, pp.384-391
- XXXIV. Bir Çırpan Kanat Etrafında Meydana Gelen Girdap Mekanizmasının İncelenmesi**  
DURNA A. S., ÇELİK B., MISIRLIOĞLU A.  
IV. Ulusal Havacılık ve Uzay Konferansı, İstanbul, Turkey, 12 - 14 September 2012, pp.145
- XXXV. Vortex wake formation and its effects on thrust and propulsive efficiency for an oscillating airfoil**  
DURNA A. S., ÇELİK B., MISIRLIOĞLU A.  
ICCFD 2012: International Conference on Computational Fluid Dynamics, 22 - 23 August 2012
- XXXVI. Vortex Wake Formation and Its Effects on Thrust and Propulsive Efficiency of an Oscillating Airfoil**  
DURNA A. S., ÇELİK B., MISIRLIOĞLU A.  
International Conference on Computational Fluid Dynamics, Paris, France, 22 - 23 August 2012
- XXXVII. Heat transfer enhancement in a straight channel via transversely oscillating adiabatic circular cylinder**  
Çelik B., Beskok A., Raissee M.  
1st International Conference on Computational Methods for Thermal Problems, THERMACOMP 2009, Naples, Italy, 8 - 10 September 2009, vol.0, pp.121-124
- XXXVIII. Mikro-Akışlı sistemlerde Elektrokinetik Taşınım**  
Beşkok A., ÇELİK B.  
II: Ulusal Havacılık ve Uzay Konferansı, İstanbul, Turkey, 15 - 17 October 2008
- XXXIX. Mixing potential of an oscillating circular cylinder in a micro channel**  
ÇELİK B., AKDAĞ Ü., Beşkök A.  
American Physical Society, 60th Annual Meeting of the Division of Fluid Dynamics, 18 - 20 October 2007
- XL. Flow over a micro backward facing step using a finite element method**  
ÇELİK B., EDİS F. O.  
13th conference on finite elements for flow problem, Swansea, United Kingdom, 4 - 06 April 2005
- XLI. Şekil değiştiren bir ağ üzerinde CBS sonlu elemanlar metodu kullanılarak sentetik mikro jet akışı analizi**  
ÇELİK B., EDİS F. O., MISIRLIOĞLU A.  
XIII. Ulusal Mekanik Kongresi, Gaziantep, Turkey, 08 September 2003 - 12 September 2013, pp.311-319
- XLII. Analysis of micro synthetic jets using CBS finite element method on moving deforming grid**  
ÇELİK B., EDİS F. O., MISIRLIOĞLU A.  
International Symposium on Transient Convective Heat and Mass Transfer, İzmir, Turkey, 17 - 22 August 2003, pp.417-425
- XLIII. Analysis Of Synthetic Micro Jets Using CBS Finite Element Method On Moving Deforming Grids**  
ÇELİK B., EDİS F. O., MISIRLIOĞLU A.  
International Symposium on Transient Convective Heat and Mass Transfer in Single and Two Phase Flows, Çeşme, Turkey, 17 - 22 August 2003
- XLIV. Implementation of pseudo-second order velocity interpolation within the characteristic based split procedure**  
ASLAN A. R., EDİS F. O., ÇELİK B.  
ECCOMAS CFD 2001, Swansea, United Kingdom, 4 - 07 September 2001

## Expert Reports

- I. **STO-TR-AVT-205 - Assessment of Predictive Capabilities for Aerodynamic Heating of Hypersonic Systems**  
KNIGHT D., Çelik B., LANI A., REIMANN B., LEVIN D., ROSA D. D., PEZZELLA G., CANDLER G., NOMPELIS I., KOMIVES J., et al.  
NATO Science and Technology Organization, pp.51, Washington, 2016

## **Supported Projects**

Çelik B., Project Supported by Higher Education Institutions, Hipersonik akışta şok-şok ve şok-sınır tabaka etkileşim mekanizmalarının incelenmesi ve ortaya çıkan yüzey ısı transferi açısından değerlendirilmesi, 2016 - 2018

Çelik B., Project Supported by Higher Education Institutions, Hipersonik sistemlerde Karşılaşılan Aero Termodinamik Isınmanın Önce den Tahmin Edilebilirliğinin Değerlendirilmesi, 2014 - 2018

Çelik B., Project Supported by Higher Education Institutions, Eğik Şokun indüklediği Laminer Sınır Tabaka ayrılması Hesaplamalı Yöntemlerle İncelenmesi, 2014 - 2017

Çelik B., Project Supported by Higher Education Institutions, Gaz Türbinlerinde Birleşik Isı Geçişi, 2013 - 2017

Çelik B., Project Supported by Higher Education Institutions, Akişkan-Yapı Etkileşimi Benzetimleri için Grafik İşleme Birimleri Üzerinde Çoklu Blok Yaklaşımı Kullanan Etkin Lattice Boltzmanın Metodu Çözucusü, 2012 - 2015

## **Scientific Refereeing**

JOURNAL OF FLUID MECHANICS, SCI Journal, June 2020

JOURNAL OF FLUID MECHANICS, SCI Journal, May 2020

PHYSICS OF FLUIDS, SCI Journal, April 2020

PHYSICS OF FLUIDS, SCI Journal, February 2020

PHYSICS OF FLUIDS, SCI Journal, January 2020

PHYSICS OF FLUIDS, SCI Journal, September 2019

PHYSICS OF FLUIDS, SCI Journal, April 2019

JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME, SCI Journal, February 2019

JOURNAL OF FLUIDS AND STRUCTURES, SCI Journal, November 2018

PHYSICS OF FLUIDS, SCI Journal, November 2018

PHYSICS OF FLUIDS, SCI Journal, August 2018

PHYSICS OF FLUIDS, SCI Journal, April 2018

PHYSICS OF FLUIDS, SCI Journal, March 2018

JOURNAL OF FLUIDS AND STRUCTURES, SCI Journal, March 2018

PHYSICS OF FLUIDS, SCI Journal, November 2017

PHYSICS OF FLUIDS, SCI Journal, October 2017

PHYSICS OF FLUIDS, SCI Journal, August 2017

PHYSICS OF FLUIDS, SCI Journal, July 2017

PHYSICS OF FLUIDS, SCI Journal, June 2017

JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME, SCI Journal, May 2017

PHYSICS OF FLUIDS, SCI Journal, September 2016

PHYSICS OF FLUIDS, SCI Journal, July 2016

JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME, SCI Journal, August 2014

JOURNAL OF FLUIDS ENGINEERING-TRANSACTIONS OF THE ASME, SCI Journal, July 2014

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## Non Academic Experience

Old Dominion University, Virginia ABD