

# Prof. CÜNEYT SERT

## Personal Information

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## International Researcher IDs

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Publons / Web Of Science ResearcherID: AAA-1202-2021

ScopusID: 8577050100

Yoksis Researcher ID: 164977

## Education Information

Doctorate, Texas A&M University, Makina Mühendisliği, United States Of America 1999 - 2003

Postgraduate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Makine Mühendisliği (YL) (Tezli), Turkey 1996 - 1998

Undergraduate, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, Turkey 1992 - 1996

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Nonconforming Formulations with Spectral Element Methods, Texas A&M University, Makina Mühendisliği, 2003

Postgraduate, Development of a Three-Dimensional Object-Oriented Euler Solver using C++ Programming Language, Middle East Technical University, Graduate School of Natural and Applied Sciences, Makine Mühendisliği (YL) (Tezli), 1998

## Research Areas

Mechanical Engineering, Energy, Fluid Mechanics, Engineering and Technology

## Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty of Engineering, Makina Müh., 2016 - Continues

Assistant Professor, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 2004 - 2016

Lecturer, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 2003 - 2004

Research Assistant, Middle East Technical University, Faculty of Engineering, Makine Mühendisliği Bölümü, 1996 - 1998

## Courses

COMPUTATIONAL FLUID DYNAMICS FOR INCOMPRESSIBLE FLOWS, Postgraduate, 2019 - 2020

FLUID MECHANICS II, Undergraduate, 2019 - 2020

INTRODUCTION TO FINITE ELEMENT ANALYSIS, Undergraduate, 2018 - 2019

NUMERICAL METHODS IN ME II, Postgraduate, 2012 - 2013

## Advising Theses

SERT C., Numerical modeling of charring ablative thermal protection systems under aerodynamic heating, Doctorate, V.COŞKUN(Student), 2022

YAVUZ M. M., SERT C., Simulation of aneurysm hemodynamics to predict intraluminal thrombus formation region, Doctorate, B.RAMAZANLI(Student), 2022

SERT C., Unsteady flow analysis of two different arm stroke techniques in front crawl swimming using computational fluid dynamics, Postgraduate, B.BOZKURT(Student), 2021

SERT C., Simulation of laminar microchannel flows with realistic 3D surface roughness, Postgraduate, B.Akbaş(Student), 2019

SERT C., Investigation of flowfield characteristics due to shock wave-boundary layer interaction on compression decompression corners using les, Postgraduate, I.Taylan(Student), 2019

Okutucu Özyurt H. T., Sert C., Optimizing heat exchanger parameters of a Joule-Thomson cryogenic cooler to improve the cooling performance, Doctorate, M.BAKI(Student), 2018

OKUTUCU ÖZYURT H. T., SERT C., Optimizing heat exchanger parameters of a joulethomson cryogenic cooler to improve the cooling performance, Doctorate, M.Baki(Student), 2018

Sert C., Yazıcıoğlu Y., Large eddy simulation of pressure fluctuations in stenosed blood vessels towards noninvasive diagnosis of atherosclerosis, Doctorate, K.ÖZDEN(Student), 2018

SERT C., OKUTUCU ÖZYURT H. T., Numerical and experimental investigation on laser damage threshold of highly reflective multilayer thin films, Doctorate, M.OCAK(Student), 2016

SERT C., AKSEL M. H., GPU accelerated high-order discontinuous galerkin level set methods for incompressible multiphase flows, Doctorate, A.KARAKUŞ(Student), 2015

SERT C., BARAN Ö. U., Design of a grid fin aerodynamic control device for transonic flight regime, Postgraduate, E.DİKBAŞ(Student), 2015

SERT C., Parallel implementation of the finite element method on graphics processors for the solution of incompressible flows, Postgraduate, M.MURAT(Student), 2014

SERT C., Performance prediction of darrieus type vertical axis wind turbines using numerical simulations, Postgraduate, F.SELÇUK(Student), 2014

Sert C., Yazıcıoğlu Y., Investigation of fluid structure interaction in cardiovascular system from diagnostic and pathological perspective, Postgraduate, H.ENES(Student), 2012

SERT C., Static aeroelastic analysis of a generic slender missile using a loosely coupled fluid structure interaction method, Postgraduate, M.AKGÜL(Student), 2012

GÜVENÇ YAZICIOĞLU A., SERT C., Experimental investigation of uninterrupted and interrupted microchannel heat sinks, Postgraduate, A.GÖZDE(Student), 2012

SERT C., Incompressible flow simulations using least squares spectral element method on adaptively refined triangular grids, Postgraduate, O.AKDAĞ(Student), 2012

SERT C., Simulation of conjugate heat transfer problems using least squares finite element method, Postgraduate, M.UĞUR(Student), 2012

SERT C., Least-squares finite element solution of euler equations with adaptive mesh refinement, Postgraduate, H.YİĞİT(Student), 2012

SERT C., Analysis of single phase fluid flow and heat transfer in slip flow regime by parallel implementation of Lattice Boltzmann method on gpus, Postgraduate, S.BERAT(Student), 2012

SERT C., Utilization of neural networks for simulation of vehicle induced flow in tunnel systems, Doctorate,

G.KOÇ(Student), 2012

AKSEL M. H., SERT C., Experimental comparison of fluid and thermal characteristics of microchannel and metal foam heat sinks, Postgraduate, A.MUAZ(Student), 2011

SERT C., Conduction based compact thermal modeling for thermal analysis of electronic components, Postgraduate, M.OCAK(Student), 2010

SERT C., Development of an incompressible, laminar flow solver based on least squares spectral element method with P-type adaptive refinement capabilities, Postgraduate, A.ÖZÇELİKKALE(Student), 2010

SERT C., Modeling and simulation of shaped charges, Postgraduate, E.GÜREL(Student), 2009

AKSEL M. H., SERT C., Development of a multigrid accelerated Euler solver on adaptively refined two- and three-dimensional cartesian grids, Postgraduate, M.ÇAKMAK(Student), 2009

SERT C., Experimental investigation and numerical analysis of microchannel heatsinks for phased array radar cooling application, Postgraduate, E.ALPSAN(Student), 2008

AKSEL M. H., SERT C., Experimental investigation and numerical analysis of microchannel heatsinks for phased array radar cooling applications, Postgraduate, E.ALPSAN(Student), 2008

SERT C., A two dimensional euler flow solver on adaptive cartesian grids, Postgraduate, B.SİYAHHAN(Student), 2008

TARI İ., SERT C., CFD analysis of a notebook computer thermal management solution, Postgraduate, F.SEZA(Student), 2008

SERT C., Development of a pressure-based solver for both incompressible and compressible flows, Postgraduate, K.DENK(Student), 2007

SERT C., Development of an educational CFD software for two dimensional incompressible flows, Postgraduate, G.NAKİBOĞLU(Student), 2007

KÜLAH H., SERT C., Design and fabrication of a DNA electrophoresis chip based on MEMS technology, Postgraduate, S.SUKAS(Student), 2007

TARI İ., SERT C., Spectral (h-p) element methods approach to the solution of poisson and helmholtz equations using matlab, Postgraduate, T.MARAL(Student), 2006

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

- I. **Effects of Thermal and Chemical Nonequilibrium on Response of Charring Ablative Materials**  
Coskun V., SERT C.  
Journal of Thermophysics and Heat Transfer, vol.38, no.2, pp.292-304, 2024 (SCI-Expanded)
- II. **EFFECT OF INLET VELOCITY PROFILE AND ENTRANCE LENGTH ON ABDOMINAL AORTIC ANEURYSM HEMODYNAMICS SIMULATIONS GİRİŞ HIZ PROFİLİ VE GİRİŞ UZUNLUĞUNUN ABDOMİNAL AORT ANEVRİZMASI HEMODİNAMIĞI SİMÜLASYONLARINA ETKİSİ**  
Ramazanli B., SERT C., YAVUZ M. M.  
Isi Bilimi Ve Teknigi Dergisi/ Journal of Thermal Science and Technology, vol.43, no.2, pp.159-174, 2023 (SCI-Expanded)
- III. **Simulation of turbulence induced sound generation inside stenosed femoral artery models with different severities and eccentricities**  
Ozden K., YAZICIOĞLU Y., SERT C.  
Computer Methods and Programs in Biomedicine, vol.208, 2021 (SCI-Expanded)
- IV. **Effect of stenosis shape on the sound emitted from a constricted blood vessel**  
Ozden K., SERT C., YAZICIOĞLU Y.  
MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.58, no.3, pp.643-658, 2020 (SCI-Expanded)
- V. **Numerical investigation of wall pressure fluctuations downstream of concentric and eccentric blunt stenosis models**  
Ozden K., SERT C., YAZICIOĞLU Y.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART H-JOURNAL OF ENGINEERING IN MEDICINE, vol.234, no.1, pp.48-60, 2020 (SCI-Expanded)
- VI. **Optimization of Joule-Thomson cryocooler heat exchanger using one-dimensional numerical**

## **modeling**

Baki M., Okutucu-Özyurt T., SERT C.

Cryogenics, vol.104, 2019 (SCI-Expanded)

- VII. **Use of artificial neural networks for the prediction of time-dependent air speed variation in metro stations**  
KOC G., SERT C., Albayrak K.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART F-JOURNAL OF RAIL AND RAPID TRANSIT, vol.232, no.8, pp.2186-2197, 2018 (SCI-Expanded)
- VIII. **Simplified Numerical Approach for the Prediction of Aerodynamic Forces on Grid Fins**  
DIKBAS E., Baran O. U., SERT C.  
JOURNAL OF SPACECRAFT AND ROCKETS, vol.55, no.4, pp.887-898, 2018 (SCI-Expanded)
- IX. **Effects of optical design modifications on thermal performance of a highly reflective HfO<sub>2</sub>/SiO<sub>2</sub>/TiO<sub>2</sub> three material coating**  
OCAK M., Sert C., Okutucu-Ozyurt T.  
HEAT AND MASS TRANSFER, vol.54, no.2, pp.377-384, 2018 (SCI-Expanded)
- X. **An adaptive fully discontinuous Galerkin level set method for incompressible multiphase flows**  
KARAKUS A., WARBURTON T., AKSEL M. H., SERT C.  
INTERNATIONAL JOURNAL OF NUMERICAL METHODS FOR HEAT & FLUID FLOW, vol.28, no.6, pp.1256-1278, 2018 (SCI-Expanded)
- XI. **Tracking free surface and estimating sloshing force using image processing**  
Tosun U., AGHAZADEH R., SERT C., Ozer M. B.  
EXPERIMENTAL THERMAL AND FLUID SCIENCE, vol.88, pp.423-433, 2017 (SCI-Expanded)
- XII. **A GPU accelerated level set reinitialization for an adaptive discontinuous Galerkin method**  
KARAKUS A., WARBURTON T., AKSEL M. H., SERT C.  
COMPUTERS & MATHEMATICS WITH APPLICATIONS, vol.72, no.3, pp.755-767, 2016 (SCI-Expanded)
- XIII. **A GPU-accelerated adaptive discontinuous Galerkin method for level set equation**  
KARAKUS A., WARBURTON T., AKSEL M. H., SERT C.  
INTERNATIONAL JOURNAL OF COMPUTATIONAL FLUID DYNAMICS, vol.30, no.1, pp.56-68, 2016 (SCI-Expanded)
- XIV. **Prediction of the maximum air velocities created by metro trains using an artificial neural network approach**  
KOC G., SERT C., Albayrak K.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART F-JOURNAL OF RAIL AND RAPID TRANSIT, vol.228, no.7, pp.759-767, 2014 (SCI-Expanded)
- XV. **Least-squares finite element solution of Euler equations with H-type mesh refinement and coarsening on triangular elements**  
AKARGUN H. Y., SERT C.  
INTERNATIONAL JOURNAL OF NUMERICAL METHODS FOR HEAT & FLUID FLOW, vol.24, no.7, pp.1487-1503, 2014 (SCI-Expanded)
- XVI. **Computational analysis of high frequency fluid-structure interactions in constricted flow**  
Salman H. E., SERT C., YAZICIOĞLU Y.  
COMPUTERS & STRUCTURES, vol.122, pp.145-154, 2013 (SCI-Expanded)
- XVII. **Least-squares spectral element solution of incompressible Navier-Stokes equations with adaptive refinement**  
Ozcelikkale A., SERT C.  
JOURNAL OF COMPUTATIONAL PHYSICS, vol.231, no.9, pp.3755-3769, 2012 (SCI-Expanded)
- XVIII. **A parylene-based dual channel micro-electrophoresis system for rapid mutation detection via heteroduplex analysis**  
SUKAS S., Erson A. E., SERT C., KÜLAH H.  
ELECTROPHORESIS, vol.29, no.18, pp.3752-3758, 2008 (SCI-Expanded)
- XIX. **Numerical Study of the Aerodynamic Effects of Septoplasty and Partial Lateral Turbinectomy**  
OZLUGEDIK S., NAKIBOĞLU G., SERT C., Elhan A., TÖNÜK E., Akyar S., Tekdemir I.

LARYNGOSCOPE, vol.118, no.2, pp.330-334, 2008 (SCI-Expanded)

- XX. **Spectral element formulations on non-conforming grids: A comparative study of pointwise matching and integral projection methods**

Sert C., BESKOK A.

JOURNAL OF COMPUTATIONAL PHYSICS, vol.211, no.1, pp.300-325, 2006 (SCI-Expanded)

- XXI. **Numerical simulation of reciprocating flow forced convection in two-dimensional channels**

Sert C., BESKOK A.

JOURNAL OF HEAT TRANSFER-TRANSACTIONS OF THE ASME, vol.125, no.3, pp.403-412, 2003 (SCI-Expanded)

- XXII. **Oscillatory flow forced convection in micro heat spreaders**

Sert C., BESKOK A.

NUMERICAL HEAT TRANSFER PART A-APPLICATIONS, vol.42, no.7, pp.685-705, 2002 (SCI-Expanded)

- XXIII. **Shear layer instability and mixing in micro heat spreaders**

Sert C., BESKOK A.

JOURNAL OF HEAT TRANSFER-TRANSACTIONS OF THE ASME, vol.123, no.4, pp.621, 2001 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Electrokinetically Driven Flows in Microchannels and Capillaries**

SERT C.

Mühendis ve Makina, vol.47, pp.111-123, 2006 (Peer-Reviewed Journal)

- II. **Object Oriented Multi Block Approach for the Solution of the Euler Equations**

SERT C., AKSEL M. H., DENER C.

Modeling, Simulation & Control B, vol.73, pp.1-24, 2004 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Simulation of Laminar Flow inside Microchannels with Realistic Surface Roughness**

Akbaş B., Sert C.

ASME - JSME - KSME Joint Fluids Engineering Conference 2019, California, United States Of America, 28 July - 01

August 2019

- II. **Development of a Material Response Solver for Charring Ablative Materials**

Coşkun V., Sert C., Acar B.

9th Int. Conference on Recent Advances in Space Tech. 2019, İstanbul, Turkey, 11 - 14 June 2019

- III. **Large Eddy Simulation of Blood Flow Inside Vessels for Acoustic Diagnosis of Atherosclerosis**

Sert C., Yazıcıoğlu Y., Özden K.

BEYOND: Workshop on Computational Sci. and Engrg., Ankara, Turkey, 20 - 21 October 2018

- IV. **Numerical Investigation of Wall Pressure Fluctuations Downstream of Ideal and Realistic Stenosed Vessel Models**

Özden K., Sert C., Yazıcıoğlu Y.

15th Int. Symposium on Computer Methods in Biomechanics and Biomedical Engineering, Lisbon, Portugal, 26 - 29

March 2018

- V. **Kriyojenik bir Soğutucunun Alt Parçası Olan, Ters Akışlı, Reküperatif, Helisel Sarımlı Kılcal Boru Isı Değiştiricinin Sayısal Modelinin Oluşturulması**

MURAT B., OKUTUCU ÖZYURT H. T., SERT C.

21. Ulusal Isı Bilimi ve Tekniği Kongresi, Turkey, 13 - 16 September 2017

- VI. **Investigation of Acoustic Radiation in Blunt and Elliptical Stenosed Vessels**

ÖZDEN K., SERT C., YAZICIOĞLU Y.

23rd Congress of the European Society of Biomechanics, Sevilla, Spain, 2 - 05 July 2017

- VII. **An Adaptive Fully Discontinuous Galerkin Level Set Method for Incompressible Free Surface Flows**

Karakuş A., Warburton T., Aksel M. H., Sert C.

ENUMATH, Ankara, Turkey, 14 - 18 September 2015, pp.1-6

- VIII. **Parallel Implementation of the Finite Element Method on Graphics Processors for the Solution of Incompressible Flows**  
Göçmen M. M., Sert C.  
ENUMATH, Ankara, Turkey, 14 - 18 September 2015, pp.1-6
- IX. **Analysis of Hinge Moment and Drag Coefficients of a Grid Fin in Comparison with a Planar Fin**  
Dikbaş E., Baran Ö. U., Sert C.  
Ankara Int. Aerospace Conf. (AIAC), Ankara, Turkey, 10 - 12 September 2015, pp.1-8
- X. **SIMULATION OF FLUID SLOSHING FOR DECREASING THE RESPONSE OF STRUCTURAL SYSTEMS**  
VURUSKAN I., SERT C., Ozer M. B.  
12th ASME Biennial Conference on Engineering Systems Design and Analysis (ESDA2014), Copenhagen, Denmark, 25 - 27 June 2014
- XI. **Analysis of Heat Transfer in Slip-Flow Regime by Parallel Implementation of Lattice-Boltzmann Method on GPUs**  
Çetin B., Çelik S. B., Sert C.  
4th ASME Micro/Nanoscale Heat & Mass Transfer Int. Conf., Victoria-City, Hong Kong, 11 - 14 December 2013, pp.1-10
- XII. **Experimental Investigation of Uninterrupted and Interrupted Microchannel Heat Sinks**  
SOYSAL A. G. U., SERT C., Yazicioglu A. G.  
19th International Workshop on Thermal Investigations of ICs and Systems (THERMINIC), Berlin, Germany, 25 - 27 September 2013, pp.147-150
- XIII. **Investigation of non-quarter wave design on multilayer optical thin film coatings from a heat transfer point of view**  
OCAK M., SERT C., Okutucu T. O.  
45th Annual Laser Damage Symposium on Laser-Induced Damage in Optical Materials, Colorado, United States Of America, 22 - 25 September 2013, vol.8885
- XIV. **A 2D Theoretical and Computational Study for Preliminary Determination of Grid Fin Geometric Parameters at Low Transonic Speeds**  
Dikbaş E., Baran Ö. U., Sert C.  
7th Ankara International Aerospace Conf., Ankara, Turkey, 11 - 13 September 2013, pp.1-8
- XV. **Sıcaklık Alan Teorisi İle Çok Katmanlı Optik İnce Film Kaplamaları Üzerindeki Sıcaklık Dağılımının Elde Edilmesi ve İyileştirilmesi**  
Ocak M., Sert C., Okutucu Özyurt T.  
ULIBTK, Samsun, Turkey, 9 - 12 September 2013, pp.1-6
- XVI. **Numerical Performance Prediction of Darrieus Type Vertical Axis Wind Turbines**  
Gömeç F. S., Sert C.  
3rd Int. 100% Renewable Energy Conf. (IRENEC), İstanbul, Turkey, 27 - 29 June 2013, pp.1-5
- XVII. **Computational Analysis of High Frequency Fluid-Structure Interactions in Constricted Flow**  
Salman H. E., Sert C., Yazıcıoğlu Y.  
7th MIT Conf. on Computational Fluid and Solid Mechanics, Massachusetts, United States Of America, 12 - 14 June 2013, pp.1
- XVIII. **Modeling of a Tuned Liquid Damper Based on CFD**  
Vuruşkan İ., Özer M. B., Sert C.  
2nd Int. Workshop on Physics Based Modeling of Material Properties and Experimental Observations, Antalya, Turkey, 15 - 17 May 2013
- XIX. **Utilization of neural networks for simulating vehicle induced air velocity in underground tunnels**  
Koç G., ALBAYRAK K., SERT C.  
6th European Congress on Computational Methods in Applied Sciences and Engineering, ECCOMAS 2012, Vienna, Austria, 10 - 14 September 2012, pp.3405-3416
- XX. **Gevşek Bağlı Bir Akışkan Katı Etkileşimi Yöntemi Kullanılarak Narin Bir Füzenin Statik Aeroelastik**

## **Analizlerinin Yapılması**

Akgül M., Akgül A., Sert C.

4. Ulusal Havacılık ve Uzay Kongresi (UHUK), İstanbul, Turkey, 12 - 14 September 2012, pp.1-11

- XXI. **Simulation of Channel Flow by Parallel Implementation of Thermal Lattice Boltzmann Method on GPU**  
Çelik S. B., Sert C., Çetin B.  
7th Int. Conf. on Comput. Heat and Mass Transfer, İstanbul, Turkey, 18 - 22 July 2011, pp.1-7
- XXII. **Simulation of Lid-driven Cavity Flow by Parallel Implementation of Lattice Boltzmann Method on GPUs**  
Çelik S. B., Sert C., Çetin B.  
2nd Int. Symp. on Computing in Science & Engineering, İzmir, Turkey, 1 - 04 June 2011, pp.1-8
- XXIII. **h- and p-Adaptive Incompressible Flow Solutions on Cartesian Grids Using Least Squares Spectral Element Method**  
Özçelikkale A., Sert C.  
5th European Conf. on CFD (ECCOMAS CFD), Lisbon, Portugal, 14 - 17 June 2010, pp.1-16
- XXIV. **Development of Two and Three-Dimensional Euler Solvers for Adaptively Refined Cartesian Grids with Multigrid Applications**  
Çakmak M., Aksel M. H., Sert C.  
5th European Conf. on CFD (ECCOMAS CFD), Lisbon, Portugal, 14 - 17 June 2010, pp.1-18
- XXV. **Bir DC-DC Çevirici İçin Basit Isıl Modellerin Sayısal ve Deneysel Olarak İncelenmesi**  
Çolakoğlu A., Sert C., Ocak M.  
17. Ulusal Isı Bilimi ve Tekniği Kongresi (ULIBTK), Sivas, Turkey, 24 - 27 June 2009, pp.1-6
- XXVI. **Faz Dizili Radar Soğutması Uygulamalarına Yönelik Mikrokanallı Isı Alıcılar Üzerinde Deneysel Araştırma ve Sayısal Analiz**  
Alpsan E., Etiz U., Aksel M. H., Sert C.  
II. Ulusal Havacılık ve Uzay Konferansı (UHUK), İstanbul, Turkey, 15 - 17 October 2008, pp.1-11
- XXVII. **Experimental Investigation and Numerical Analysis of Microchannel Heatsinks for Phased Array Radar Cooling Applications**  
Alpsan E., Aksel M. H., Sert C., Etiz U.  
ECI Int. Conf. on Heat Transfer and Fluid Flow in Microscale, Vancouver, Canada, 21 - 26 September 2008, pp.1-7
- XXVIII. **CFD ANALYSIS OF A NOTEBOOK COMPUTER THERMAL MANAGEMENT SOLUTION**  
YALCIN F. S., Sert C., TARI İ.  
ASME Heat Transfer Summer Conference, Florida, United States Of America, 10 - 14 August 2008, pp.805-811
- XXIX. **A Parylene Based Double-Channel Micro-Electrophoresis System for Rapid Mutation Detection**  
Külah H., Sukaş S., Erson Bensen A. E., Sert C.  
11th International Conference on Miniaturized Systems for Chemistry and Life Sciences, µTAS 2007 Conference, Paris, France, 7 - 11 October 2007, pp.643-636
- XXX. **Use of Computational Fluid Dynamics (CFD) in Teaching Fluid Mechanics**  
Nakiboğlu G., Sert C.  
ASEE Annual Conference and Exposition, Hawaii, United States Of America, 24 - 27 June 2007, pp.1-12
- XXXI. **hp-Spectral Element Solutions of Partial Differential Equations**  
Sert C.  
Int. Symposium of Mathematical Methods in Engineering, Ankara, Turkey, 27 - 29 April 2006, pp.1-10
- XXXII. **A Tutor Program for a Numerical Methods Course for Engineers**  
Sert C.  
ASEE Annual Conference and Exposition, Oregon, United States Of America, 12 - 15 June 2005, pp.1-9
- XXXIII. **Nonconforming Formulations with Spectral Element Methods**  
Sert C.  
4th European Congress on Comput. Meth. in Applied Sci. and Eng. (ECCOMAS), Jyväskylä, Finland, 24 - 28 July 2004, pp.1-19
- XXXIV. **Conceptual Design and Simulation of Forced Convection Micro Heat Spreaders**

Sert C.

52nd Annual Meeting of the APS Division of Fluid Dynamics, Louisiana, United States Of America, 21 - 23  
November 1999, vol.44, pp.23

## Supported Projects

SERT C., KARPUZCU I. T., Project Supported by Higher Education Institutions, SIKIŞTIRMA – GENİŞLETME RAMPASINDA OLUŞAN ŞOK DALGASI SINIR TABAKA ETKİLEŞİMLERİNİN BÜYÜK GİRDAP BENZETİMLERİ İLE İNCELENMESİ, 2018 - 2019

SERT C., YAZICIOĞLU Y., ÖZDEN K., Project Supported by Higher Education Institutions, Damarlardaki Daralmaların Oluşturduğu Akustik Yayılımın Büyük Girdap Benzetimleri ile İncelenmesi, 2017 - 2019

SERT C., YAZICIOĞLU Y., SALMAN H. E., ÖZDEN K., Project Supported by Higher Education Institutions, Kan Damarlarındaki Daralma Seviyesi ve Şekillerinin Tanısal Amaçlı Olarak Kullanımının Sayısal Benzetimlerle İncelenmesi, 2014 - 2016

Özer M. B., Sert C., TUBITAK Project, Çalkalanan Titreşim Sönümleyiciler Kullanarak Yapıların Depreme Dayanıklılığının Arttırılması, 2013 - 2015

SERT C., Project Supported by Higher Education Institutions, Cuda Programlama Aracı Kullanılarak Grafik Kartlarında Paralel Çalışacak Hesaplamalı Akışkanlar Dinamiği Kodu Geliştirilmesi, 2012 - 2012

Yazıcıoğlu Y., Sert C., Project Supported by Higher Education Institutions, Dolaşım Sistemindeki Kan Akışı ile Damarlar Arasındaki Etkileşimlerin Patolojik ve Tanısal Yönlerden İncelenmesi, 2010 - 2011

SERT C., Project Supported by Higher Education Institutions, Gpu Üzerinde Paralel Çalışacak Şekilde Sonlu Eleman Tabanlı Akış Çözücüsü Geliştirilmesi Ve Biyolojik Akış Benzetimleri İçin Kullanımı, 2009 - 2010

Sert C., Project Supported by Higher Education Institutions, Maxiler Sinüsün Havalanması İle İlgili Problemlerin Giderilmesi İçin Uygulanan Cerrahi Girişimlerin Hesaplamalı Akışkanlar Dinamiği Kullanılarak İncelenmesi, 2008 - 2008

Sert C., Project Supported by Higher Education Institutions, Sıvı-Katı Etkileşimi İçeren Mikroakışkan Sistemlerinde Kullanılmak Üzere bir Arbitrary Lagrangian Eulerian (ALE) Akış Çözücüsü Geliştirilmesi, 2005 - 2006

Sert C., Project Supported by Higher Education Institutions, Lisans ve Yüksek Lisans Derslerinde Kullanılmak Üzere Hesaplamalı Akışkanlar Dinamiği (HAD) Paket Programı Geliştirilmesi, 2004 - 2006

## Metrics

Publication: 59

Citation (WoS): 232

Citation (Scopus): 241

H-Index (WoS): 10

H-Index (Scopus): 10