

Prof.Dr. HAMDULLAH YÜCEL

Kişisel Bilgiler

İş Telefonu: [+90 312 210 5607](tel:+903122105607)

E-posta: yucelh@metu.edu.tr

Web: <https://blog.metu.edu.tr/yucelh/>

Posta Adresi: Uygulamalı Matematik Enst. S231

Uluslararası Araştırmacı ID'leri

ScholarID: bpkVrb0AAAAJ

ORCID: 0000-0002-0313-9767

Publons / Web Of Science ResearcherID: J-5488-2017

ScopusID: 55762734500

Yoksis Araştırmacı ID: 164565

Eğitim Bilgileri

Bütünleşik Doktora, Orta Doğu Teknik Üniversitesi, Uygulamalı Matematik Enstitüsü, Bilimsel Hesaplama (Dr), Türkiye 2007 - 2012

Lisans, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Matematik Bölümü, Türkiye 2002 - 2007

Yaptığı Tezler

Bütünleşik Doktora, Adaptive discontinuous Galerkin methods for convection dominated optimal control problems, Orta Doğu Teknik Üniversitesi, Uygulamalı Matematik Enstitüsü, 2012

Araştırma Alanları

Kısmi diferansiyel eşitlikler, Optimizasyon, Sayısal Analiz

Akademik Unvanlar / Görevler

Araştırmacı, Max Planck Institute For Dynamics Of Complex Technical Systems, 2012 - 2015

Araştırma Görevlisi, Orta Doğu Teknik Üniversitesi, Fen Edebiyat Fakültesi, Matematik Bölümü, 2007 - 2012

Araştırmacı, Rice University, Department Of Computational And Applied Mathematics, 2010 - 2011

Araştırmacı, Technische Universitaet Darmstadt, Department Of Mathematics, 2008 - 2008

Verdiği Dersler

FINITE ELEMENT METHODS FOR PARTIAL DIFFERENTIAL EQUATIONS: THEORY AND APPLICATIONS, Yüksek Lisans, 2023 - 2024, 2021 - 2022, 2020 - 2021, 2017 - 2018, 2016 - 2017

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. A strategy based on statistical modelling and multi-objective optimization to design a dishwasher cleaning cycle
Anapa K., YÜCEL H.
Expert Systems with Applications, cilt.249, 2024 (SCI-Expanded)
- II. A stochastic gradient algorithm with momentum terms for optimal control problems governed by a convection-diffusion equation with random diffusivity
TORAMAN S. C., YÜCEL H.
Journal of Computational and Applied Mathematics, cilt.422, 2023 (SCI-Expanded)
- III. Stochastic discontinuous Galerkin methods for robust deterministic control of convection-diffusion equations with uncertain coefficients
Çiloğlu P., Yücel H.
ADVANCES IN COMPUTATIONAL MATHEMATICS, cilt.49, ss.16, 2023 (SCI-Expanded)
- IV. Stochastic discontinuous Galerkin methods with low-rank solvers for convection diffusion equations
ÇİLOĞLU P., YÜCEL H.
Applied Numerical Mathematics, cilt.172, ss.157-185, 2022 (SCI-Expanded)
- V. Intra- and inter-cluster link scheduling in CUPS-based ad hoc networks
Eksert M. L., Yücel H., Onur E.
Computer Networks, cilt.185, 2021 (SCI-Expanded)
- VI. Goal-oriented a posteriori error estimation for Dirichlet boundary control problems
YÜCEL H.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, cilt.381, 2021 (SCI-Expanded)
- VII. Energy Stable Discontinuous Galerkin Finite Element Method for the Allen-Cahn Equation
KARASÖZEN B., Uzunca M., Sarriaydin-Filibelioglu A., YÜCEL H.
INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS, cilt.15, sa.3, 2018 (SCI-Expanded)
- VIII. ADAPTIVE DISCONTINUOUS GALERKIN APPROXIMATION OF OPTIMAL CONTROL PROBLEMS GOVERNED BY TRANSIENT CONVECTION-DIFFUSION EQUATIONS
YÜCEL H., Stoll M., Benner P.
ELECTRONIC TRANSACTIONS ON NUMERICAL ANALYSIS, cilt.48, ss.407-434, 2018 (SCI-Expanded)
- IX. Optimal control of convective FitzHugh-Nagumo equation
Uzunca M., Kucukseyhan T., YÜCEL H., KARASÖZEN B.
COMPUTERS & MATHEMATICS WITH APPLICATIONS, cilt.73, sa.9, ss.2151-2169, 2017 (SCI-Expanded)
- X. ADAPTIVE SYMMETRIC INTERIOR PENALTY GALERKIN METHOD FOR BOUNDARY CONTROL PROBLEMS
BENNER P., Yuecel H.
SIAM JOURNAL ON NUMERICAL ANALYSIS, cilt.55, sa.2, ss.1101-1133, 2017 (SCI-Expanded)
- XI. A discontinuous Galerkin method for optimal control problems governed by a system of convection-diffusion PDEs with nonlinear reaction terms
Yuecel H., STOLL M., BENNER P.
COMPUTERS & MATHEMATICS WITH APPLICATIONS, cilt.70, sa.10, ss.2414-2431, 2015 (SCI-Expanded)
- XII. Adaptive discontinuous Galerkin methods for state constrained optimal control problems governed by convection diffusion equations
Yuecel H., BENNER P.
COMPUTATIONAL OPTIMIZATION AND APPLICATIONS, cilt.62, sa.1, ss.291-321, 2015 (SCI-Expanded)
- XIII. Distributed optimal control of time-dependent diffusion-convection-reaction equations using space-time discretization
Seymen Z. K., YÜCEL H., KARASÖZEN B.
JOURNAL OF COMPUTATIONAL AND APPLIED MATHEMATICS, cilt.261, ss.146-157, 2014 (SCI-Expanded)
- XIV. A priori error analysis of the upwind symmetric interior penalty Galerkin (SIPG) method for the optimal control problems governed by unsteady convection diffusion equations
AKMAN T., Yucel H., KARASÖZEN B.
COMPUTATIONAL OPTIMIZATION AND APPLICATIONS, cilt.57, sa.3, ss.703-729, 2014 (SCI-Expanded)

- XV. **Adaptive Symmetric Interior Penalty Galerkin (SIPG) method for optimal control of convection diffusion equations with control constraints**
Yucel H., Karasozan B.
OPTIMIZATION, cilt.63, sa.1, ss.145-166, 2014 (SCI-Expanded)
- XVI. **Discontinuous Galerkin finite element methods with shock-capturing for nonlinear convection dominated models**
Yucel H., STOLL M., BENNER P.
COMPUTERS & CHEMICAL ENGINEERING, cilt.58, ss.278-287, 2013 (SCI-Expanded)

Diger Dergilerde Yayınlanan Makaleler

- I. **Symmetric interior penalty Galerkin method for fractional-in-space phase-field equations**
Stoll M., YÜCEL H.
AIMS MATHEMATICS, cilt.3, sa.1, ss.66-95, 2018 (ESCI)
- II. **Distributed optimal control problems governed by coupled convection dominated PDEs with control constraints**
Yücel H., Benner P.
Lecture Notes in Computational Science and Engineering, cilt.103, ss.469-478, 2015 (Scopus)

Etkinlik Organizasyonlarındaki Görevler

Yücel H., BEYOND 2019: Computational Science and Engineering Conference, Çalıştay Organizasyonu, Ankara, Türkiye, Eylül 2019

Yücel H., BEYOND: Workshop on Computational Science and Engineering, Çalıştay Organizasyonu, Ankara, Türkiye, Ekim 2018

Metrikler

Yayın: 44
Atıf (WoS): 119
Atıf (Scopus): 133
H-İndeks (WoS): 8
H-İndeks (Scopus): 8

Ödüller

Yücel H., Bilim Akademisi Genç Bilim İnsanı Ödülü, Bilim Akademisi, Mart 2022