

Prof. AHMET ÜNAL

Personal Information

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Address: KTÜ Mühendislik Fakültesi Makine Mühendisliği Bölümü TRABZON

Education Information

Doctorate, Texas Tech University, Graduate School, Mechanical Engineering, United States Of America 1988 - 1992

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Bölümü, Turkey 1981 - 1983

Undergraduate, Karadeniz Technical University, Makine-Elektrik Fakültesi, Makine Mühendisliği Bölümü, Turkey 1976 - 1981

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Operational stability analysis for superconductors under thermal disturbances, Texas Tech University, Graduate School, Mechanical Engineering, 1992

Postgraduate, Güneş enerjisiyle konut ısıtılmasında çeşitli parametrelerin sistemin boyutlarına ve maliyetine etkisi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Bölümü, 1983

Research Areas

Mechanical Engineering, Energy, Energy storage technologies, Thermodynamics, Heat and Mass Transfer, Heating, Refrigerating and Air Conditioning, Engineering and Technology

Academic Titles / Tasks

Professor, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 2005 - Continues

Associate Professor, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 1999 - 2005

Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, 1993 - 1999

Research Assistant PhD, Karadeniz Technical University, Mühendislik Mimarlık Fakültesi, Makine Mühendisliği Bölümü, 1993 - 1993

Research Assistant, Karadeniz Technical University, Mühendislik Mimarlık Fakültesi, Makine Mühendisliği Bölümü, 1982 - 1992

Courses

ENGINEERING THERMODYNAMICS II, Undergraduate, 2014 - 2015
ISI İLETİMİ, Postgraduate, 2014 - 2015
AKIŞKANLAR MEKANİĞİ I, Undergraduate, 2015 - 2016
FLUID MECHANICS II, Undergraduate, 2014 - 2015
İLERİ MÜHENDİSLİK MATEMATİĞİ, Postgraduate, 2015 - 2016
HEAT TRANSFER, Undergraduate, 2014 - 2015
MÜHENDİSLİK TERMODİNAMİĞİ I, Undergraduate, 2011 - 2012

Advising Theses

ÜNAL A., Eş eksenli üç borulu ısı eşanjörlerinde faz değiştiren madde kullanarak ısı enerji depolanmasının incelenmesi, Postgraduate, B.Başal(Student), 2007
ÜNAL A., Konsantrik üç borulu, zıt akışlı ısı eşanjörlerinin teorik olarak incelenmesi, Postgraduate, B.Öztürk(Student), 1998
ÜNAL A., Silindir kurutuculara sahip bir kağıt makinasının kurutma kısmının matematiksel modellemesi, Postgraduate, A.Apaydın(Student), 1996

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Numerical evaluation of a triple concentric-tube latent heat thermal energy storage**
BASAL B., ÜNAL A.
SOLAR ENERGY, vol.92, pp.196-205, 2013 (SCI-Expanded)
- II. **Active immunotherapy for cancer patients using tumor lysate pulsed dendritic cell vaccine: a safety study**
OVALI E., DIKMEN T., Sonmez M., YILMAZ M., UNAL A., DALBASTI T., KUZEYLI K., ERTURK M., OMA S. B.
JOURNAL OF EXPERIMENTAL & CLINICAL CANCER RESEARCH, vol.26, no.2, pp.209-214, 2007 (SCI-Expanded)
- III. **Effectiveness-NTU relations for triple concentric-tube heat exchangers**
Unal A.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.30, no.2, pp.261-272, 2003 (SCI-Expanded)
- IV. **Theoretical analysis of triple concentric-tube heat exchangers part 2: Case studies**
Unal A.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.28, no.2, pp.243-256, 2001 (SCI-Expanded)
- V. **Heat transfer from a cylinder in the wake flow**
Daloglu A. C., UNAL A.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.27, no.4, pp.569-580, 2000 (SCI-Expanded)
- VI. **A numerical study on buoyancy-driven flow in an inclined square enclosure heated and cooled on adjacent walls**
Aydin O., Unal A., AYHAN T.
NUMERICAL HEAT TRANSFER PART A-APPLICATIONS, vol.36, no.6, pp.585-599, 1999 (SCI-Expanded)
- VII. **Natural convection in rectangular enclosures heated from one side and cooled from the ceiling**
Aydin O., Unal A., AYHAN T.
INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER, vol.42, no.13, pp.2345-2355, 1999 (SCI-Expanded)
- VIII. **Theoretical analysis of triple concentric-tube heat exchangers Part 1: Mathematical modelling**
Unal A.
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.25, no.7, pp.949-958, 1998 (SCI-Expanded)

- IX. **INSTABILITY BEHAVIOR OF SUPERCONDUCTOR WIRES CYLINDERS UNDER FINITE LINEAR THERMAL DISTURBANCE**
UNAL A., Chyu M.
CRYOGENICS, vol.35, no.2, pp.87-92, 1995 (SCI-Expanded)
- X. **QUENCHING RECOVERY OF TAPE/FILM TYPE SUPERCONDUCTORS**
UNAL A., Chyu M.
CRYOGENICS, vol.34, no.2, pp.123-128, 1994 (SCI-Expanded)
- XI. **Stablity and recovery behavior of tape/film type superconductors**
ÜNAL A., Chyu M., Kuzay T. M.
JOURNAL OF HEAT TRANSFER-TRANSACTIONS OF THE ASME, vol.115, pp.467-469, 1993 (SCI-Expanded)
- XII. **Günlük ortalama güneş ışınımı ve sıcaklık değerlerinin sürekli fonksiyonlarla ifadesi, fonksiyon parametrelerinin Türkiye' deki dağılımı**
ÜNAL A., Tanes Y., Onur H. Ş.
ISI BİLİMİ VE TEKNİĞİ DERGİSİ-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.8, no.4, pp.37-45, 1986 (SCI-Expanded)

Articles Published in Other Journals

- I. **Study of quenching and recovery of superconductor wires and cylinders**
ÜNAL A., Chyu M.
IEEE TRANSACTIONS ON APPLIED SUPERCONDUCTIVITY, vol.3, pp.305-308, 1993 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Üç Borulu Isı Eşanjörlerinde Faz Değiştiren Madde Kullanarak Isıl Enerji Depolanma**
BAŞAL B., ÜNAL A.
17. ULUSAL ISI BİLİMİ ve TEKNİĞİ KONGRESİ, Sivas, Turkey, 24 - 27 June 2009

Metrics

Publication: 14
Citation (WoS): 286
Citation (Scopus): 346
H-Index (WoS): 9
H-Index (Scopus): 8

Non Academic Experience

KTÜ Müh. Fakültesi