Prof. Dr. HAMZA POLAT

Kişisel Bilgiler

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Eğitim Bilgileri

Doktora, İnönü Üniversitesi, Fen Bilimleri Enstitüsü, Fizik (Dr), Türkiye 1985 - 1987
Yüksek Lisans, Hacettepe Üniversitesi, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Türkiye 1980 - 1982
Lisans, Hacettepe Üniversitesi, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Türkiye 1974 - 1979

Yaptığı Tezler

Doktora, Magnetik Alanda Basit Antiferromagnetik Ising Spin Sistemlerinin Kritik Sıcaklık İle Değişimi, İnönü Üniversitesi, Fen Bilimleri Enstitüsü, Fizik (Dr), 1987
Yüksek Lisans, Püskürtme Yöntemi ile CdS Filmlerinin Elde Edilmesi, Hacettepe Üniversitesi, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 1982

Akademik Unvanlar / Görevler

Prof. Dr., Dokuz Eylül Üniversitesi, Fen Fakültesi, Fizik Bölümü, 1997 - Devam Ediyor
Doç. Dr., Dokuz Eylül Üniversitesi, Fen Fakültesi, Fizik Bölümü, 1997 - 2003
Yrd. Doç. Dr., Bolu Abant İzzet Baysal Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, 1994 - 1997

Akademik İdari Deneyim

Dokuz Eylül Üniversitesi, 2009 - Devam Ediyor
Dokuz Eylül Üniversitesi, 2012 - 2015
Dokuz Eylül Üniversitesi, 2011 - 2014

Verdiği Dersler

Yüksek Lisans
İstatistik Mekanik-I, Yüksek Lisans, 2013 - 2014
İstatistik Mekanik, Yüksek Lisans, 2012 - 2013
Fizikte Stokastik Süreçler, Yüksek Lisans, 2012 - 2013
Lisans
Termal Fizik, Lisans, 2013 - 2014

Yönetilen Tezler

POLAT H., The general application of the quantum Monte Carlo method to spin systems, Doktora, U.KANBUR(Öğrenci), 2021
POLAT H., Sayısal matris mekaniği ile keyfi potansiyellere genişletilmiş Kronig - Penney modeli, Yüksek Lisans, S.ÖZER(Öğrenci), 2018
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POLAT H., Kesikli kuantum yürüyüş modeli ve uygulamaları., Doktora, M.GÖNÜLOL(Öğrenci), 2011
POLAT H., Magnetic properties of the spin-1 Blume-Emery-Griffiths model in the presence of magnetic field, Yüksek Lisans, Y.YÜKSEL(Öğrenci), 2008
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SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

I. **Thermal properties of rung-disordered two-leg quantum spin ladders: Quantum Monte Carlo study**
Kanbur U., POLAT H., VATANSEVER E.
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II. **Universality in the three-dimensional random bond quantum Heisenberg antiferromagnet**
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III. **Nonequilibrium dynamics of a mixed spin-1/2 and spin-3/2 Ising ferrimagnetic system with a time dependent oscillating magnetic field source**
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IV. **Non-equilibrium phase transition properties of disordered binary ferromagnetic alloy**
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V. **Dynamic phase transitions in a ferromagnetic thin film system: A Monte Carlo simulation study**
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THIN SOLID FILMS, cilt.589, ss.778-782, 2015 (SCI-Expanded)
VI. **Magnetic response of a disordered binary ferromagnetic alloy to an oscillating magnetic field**
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PHYSICS LETTERS A, cilt.379, ss.1568-1575, 2015 (SCI-Expanded)
VII. **Dynamic hysteretic features of Ising-type thin films**
Aktas B. O., AKINCI Ü., POLAT H.
PHYSICAL REVIEW E, cilt.90, sa.1, 2014 (SCI-Expanded)
VIII. **Critical phenomena in dynamical Ising-typed thin films by effective-field theory**
Aktas B. O., AKINCI Ü., POLAT H.
THIN SOLID FILMS, cilt.562, ss.680-691, 2014 (SCI-Expanded)
IX. **Non-equilibrium dynamics of a ferrimagnetic core-shell nanocubic particle**

VATANSEVER E., POLAT H.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, cilt.394, ss.82-89, 2014 (SCI-Expanded)

X. **Time dependent magnetic field effects on the +/- J Ising model**
VATANSEVER E., AKINCI Ü., POLAT H.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, cilt.344, ss.89-95, 2013 (SCI-Expanded)

XI. **Monte Carlo investigation of a spherical ferrimagnetic core-shell nanoparticle under a time dependent magnetic field**
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XII. **Investigation of critical phenomena and magnetism in amorphous Ising nanowire in the presence of transverse fields**
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XIII. **Nonequilibrium dynamics of a spin-3/2 Blume-Capel model with quenched random crystal field**
VATANSEVER E., POLAT H.
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XIV. **Investigation of oscillation frequency and disorder induced dynamic phase transitions in a quenched-bond diluted Ising ferromagnet**
VATANSEVER E., AKINCI Ü., YÜKSEL Y., POLAT H.
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XV. **Investigation of bond dilution effects on the magnetic properties of a cylindrical Ising nanowire**
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XVI. **Effective field investigation of dynamic phase transitions for site diluted Ising ferromagnets driven by a periodically oscillating magnetic field**
AKINCI Ü., YÜKSEL Y., VATANSEVER E., POLAT H.
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YÜKSEL Y., VATANSEVER E., AKINCI Ü., POLAT H.
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XIX. **Critical behavior and phase diagrams of a spin-1 Blume-Capel model with random crystal field interactions: An effective field theory analysis**
YÜKSEL Y., AKINCI Ü., POLAT H.
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XX. **Random field effects on the phase diagrams of spin-1/2 Ising model on a honeycomb lattice**
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XXII. **Effective-field-theory analysis of the three-dimensional random-field Ising model on isometric lattices**
AKINCI Ü., YÜKSEL Y., POLAT H.
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field interaction on a honeycomb lattice
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XXIV. **An introduced effective-field theory study of spin-1 transverse Ising model with crystal field anisotropy in a longitudinal magnetic field**
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XXV. **Dependence on dilution of critical and compensation temperatures of a two-dimensional mixed spin-1/2 and spin-1 system**
AYDINER E., YÜKSEL Y., KIS ÇAM E., POLAT H.
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XXVI. **An introduced effective-field approximation and Monte Carlo study of a spin-1 Blume-Capel model on a square lattice**
YÜKSEL Y., AKINCI Ü., POLAT H.
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XXVII. **The magnetic properties of spin-1/2 and spin-1 Ising models in an applied magnetic field by introducing the effective-field approximation**
Canpolat Y., Torguersuel A., POLAT H.
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XXVIII. **Electron-fluid model for DC size effect under a magnetic field**
POLAT H., Kosker D., Tomak M.
PHYSICA STATUS SOLIDI A-APPLIED RESEARCH, cilt.158, sa.1, ss.161-168, 1996 (SCI-Expanded)

Hakemli Bilimsel Toplantılarda Yayımlanmış Bildiriler

I. **Hysteretic features of the dynamical Ising type thin films**
AKINCI Ü., POLAT H.
20. İstatistik Fizik Günleri, Türkiye, 27 - 29 Haziran 2013

II. **Magnetic and Thermodynamic Properties of the Spin 1 Ising Ferromagnetic Systems**
POLAT H., AKINCI Ü., SÖKMEN İ.
10.İstatistik Fizik Günleri, Türkiye, 3 - 04 Temmuz 2003

III. **Phase Diagrams Of Spin S S Ising Systems**
POLAT H., AKINCI Ü., SÖKMEN İ.
Türk Fizik Derneği 21. Fizik kongresi (TFD-21), Türkiye, 11 - 14 Eylül 2002

IV. **SPIN CORRELATION FUNCTIONS AND PHASE DIAGRAMS OF THE SPIN 1/2 ISING SYSTEMS**
POLAT H., AKINCI Ü., ERZİN S., SOKMEN I.
9. İstatik Fizik Günleri, İstanbul, Türkiye, 8 - 12 Temmuz 2002

V. **Spin Correlation Functions and Phase Diagrams of the Spin Ising Systems**
POLAT H., AKINCI Ü., SÖKMEN İ.
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VI. **Determination Phase Diagrams of the Two Dimensional Ising Lattices in a Magnetic Field Using by Differential Operator Technique**
AKINCI Ü., POLAT H.
8.İstatistik Fizik Günleri, Türkiye, 5 - 06 Temmuz 2001

Desteklenen Projeler

POLAT H., Yükseköğretim Kurumları Destekli Proje, Ising-Tipi Nanomanyetik Malzemelerin Histeretik Yanıt Karakteristikleri, 2013 - 2013

POLAT H., Yükseköğretim Kurumları Destekli Proje, Saf ve Karma Spin Sistemlerinin Termal ve Manyetik Özelliklerinin Monte Carlo Simülasyon Tekniği, Geliştirilmiş Etkin Alan Teorisi ve Genetik Algoritmaları ile Karşılaştırmalı Analizi, 2009 - 2011

Metrikler

Yayın: 34
Atıf (WoS): 625
Atıf (Scopus): 639
H-İndeks (WoS): 16
H-İndeks (Scopus): 16