

# ÜMİT AKINCI

## ASSOC. PROF.

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: F-7944-2013

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Yoksis Researcher ID: 143714

### Learning Knowledge

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Associate Degree 2018 - 2020	Anadolu University, Open Education Faculty, Department Of Finance, Banking And Insurance, Turkey
Undergraduate 2012 - 2018	Anadolu University, Faculty Of Economics, Department Of Economics, Turkey
Doctorate 2003 - 2010	Dokuz Eylul University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey
Postgraduate 1999 - 2002	Dokuz Eylul University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey
Undergraduate 1994 - 1999	Ege University, Faculty Of Science, Fizik Bölümü, Turkey

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### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Katıların kuantum Monte Carlo simülasyonları, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2009

Postgraduate, Phase diagrams of the spin-1/2 ising system on two dimensional lattices, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2002

### Academic Titles / Tasks

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Associate Professor 2014 - Continues	Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü
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## Supported Projects

1. Akinci Ü., Aktürk E., Yüksel Y., Vatanserver E., TUBITAK Project, İki Boyutlu MX<sub>3</sub> (M=Fe, Ru, Rh, X=Cl, Br, I) Tabakaların Manyetik Özelliklerinin Yoğunluk Fonksiyoneli Teorisi ve Monte Carlo Yöntemleri Kullanarak Belirlenmesi, 2017 - 2020
2. YÜKSEL Y., AKINCI Ü., TUBITAK Project, Manyetik Nanoparçacıklar Ve İnce Filmlerde Değiş-Tokuş Anizotropisinin Ve Süperparamanyetizmanın Dinamik Manyetik Alanlar Varlığındaki Davranışının Teknolojik Ve Biyomedikal Uygulamalardaki Potansiyeli, 2016 - 2017

## Designed Lessons

- Akinci Ü., Yapay Sinir Ağları ve Fizik Uygulamaları, Postgraduate, 2021 - 2022  
Akinci Ü., Hesaplamalı Mikromanyetizma, Doctorate, 2021 - 2022  
Akinci Ü., Manyetizmanın Temelleri, Doctorate, 2021 - 2022  
Akinci Ü., Hesaplamalı Nanobilim - I, Doctorate, 2020 - 2021  
Akinci Ü., Hesaplamalı Nanobilim - II, Doctorate, 2020 - 2021

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

1. **Effect of the dipolar interaction on the dynamic hysteresis of properties of 2D-nanodisks: In-plane driving field case**  
Çam N., AKINCI Ü.  
Physica B: Condensed Matter, vol.690, 2024 (SCI-Expanded)
2. **Micromagnetic investigation of dynamic hysteresis and dynamic phase transition properties in Co, Fe and Ni nanodisks**  
Çam N., AKINCI Ü.  
Physics Letters, Section A: General, Atomic and Solid State Physics, vol.500, 2024 (SCI-Expanded)
3. **Ground State Dynamic Hysteresis Properties of Permalloy Nanodisk with Varying Shapes**  
Çam N., AKINCI Ü.  
Journal of Superconductivity and Novel Magnetism, vol.37, no.1, pp.129-138, 2024 (SCI-Expanded)
4. **Effect of the dipolar interaction on the dynamic hysteresis properties of 2D-nanodisks: out of plane driving field case**  
Çam N., Akinci Ü.  
PHYSICA SCRIPTA, vol.98, no.12, pp.125976, 2023 (SCI-Expanded)
5. **Metamagnetic anomalies in the kinetic Blume-Capel model with arbitrary spin**  
YÜKSEL Y., AKINCI Ü., VATANSEVER E.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.603, 2022 (SCI-Expanded)
6. **First-principles and Monte Carlo investigation of magnetic properties of two-dimensional transition metal alloyed boron-carbide CrFeBC sheet**  
Abdullahi Y. Z., DEMİR VATANSEVER Z., AKTÜRK E., AKINCI Ü., AKTÜRK O. Ü.  
COMPUTATIONAL MATERIALS SCIENCE, vol.202, 2022 (SCI-Expanded)
7. **Magnetization of silicene via coverage with gadolinium: Effects of thickness, symmetry, strain, and coverage**  
DEMİRCİ S., Gorkan T., Callioğlu S., YÜKSEL Y., AKINCI Ü., AKTÜRK E., ÇIRACI S.

PHYSICAL REVIEW B, vol.104, no.22, 2021 (SCI-Expanded)

8. **Novel two-dimensional CrXB<sub>2</sub> (X=Cr, Ru) metal for high Neel temperature antiferromagnetic spintronics**  
Abdullahi Y. Z., DEMİR VATANSEVER Z., AKTÜRK E., AKINCI Ü., AKTÜRK O. Ü.  
JOURNAL OF SOLID STATE CHEMISTRY, vol.302, 2021 (SCI-Expanded)
9. **Effect of the Gaussian random field distribution on the hysteresis and thermodynamic properties of the binary alloy**  
Karakoyun G., AKINCI Ü.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.569, 2021 (SCI-Expanded)
10. **Columnar antiferromagnetic order of a MBene monolayer**  
Ozdemir I., KADIOĞLU Y., YÜKSEL Y., AKINCI Ü., AKTÜRK O. Ü., AKTÜRK E., ÇIRACI S.  
PHYSICAL REVIEW B, vol.103, no.14, 2021 (SCI-Expanded)
11. **Magnetocaloric properties of the binary Ising model with arbitrary spin**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.523, 2021 (SCI-Expanded)
12. **Doping-Driven Antiferromagnetic to Ferromagnetic Phase Transition in Tetragonal Cr<sub>2</sub>B<sub>2</sub> Monolayer**  
Abdullahi Y. Z., DEMİR VATANSEVER Z., AKTÜRK E., AKINCI Ü., AKTÜRK O. Ü.  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.258, no.4, 2021 (SCI-Expanded)
13. **Ferromagnetic TM<sub>2</sub>BC (TM = Cr, Mn) monolayers for spintronic devices with high Curie temperature**  
Abdullahi Y. Z., DEMİR VATANSEVER Z., ERSAN F., AKINCI Ü., AKTÜRK O. Ü., AKTÜRK E.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.23, no.10, pp.6107-6115, 2021 (SCI-Expanded)
14. **Magnetocaloric properties of the spin-S (S ≥ 1) Ising model driven by a time dependent oscillating magnetic field**  
YÜKSEL Y., VATANSEVER E., AKINCI Ü.  
PHYSICS LETTERS A, vol.388, 2021 (SCI-Expanded)
15. **Above Room Temperature Ferromagnetism in Gd<sub>2</sub>B<sub>2</sub> Monolayer with High Magnetic Anisotropy**  
Gorkan T., VATANSEVER E., AKINCI Ü., Gokoglu G., AKTÜRK E., ÇIRACI S.  
JOURNAL OF PHYSICAL CHEMISTRY C, vol.124, no.23, pp.12816-12823, 2020 (SCI-Expanded)
16. **A tetragonal phase Mn<sub>2</sub>B<sub>2</sub> sheet: a stable room temperature ferromagnet with sizable magnetic anisotropy**  
Abdullahi Y. Z., DEMİR VATANSEVER Z., AKTÜRK E., AKINCI Ü., AKTÜRK O. Ü.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.22, no.19, pp.10893-10899, 2020 (SCI-Expanded)
17. **New cluster approximation for Ising systems**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.499, 2020 (SCI-Expanded)
18. **Tuning the electronic structure of RhX<sub>3</sub> (X = Cl, Br, I) nonmagnetic monolayers: effects of charge-injection and external strain**  
KADIOĞLU Y., Ozdemir I., AKTÜRK O. Ü., Gokoglu G., AKINCI Ü., AKTÜRK E.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.22, no.8, pp.4561-4573, 2020 (SCI-Expanded)
19. **Effects of the double Gaussian random field distribution on the phase diagrams and hysteresis characteristics of the magnetic binary alloys**  
Karakoyun G., AKINCI Ü.  
PHYSICA B-CONDENSED MATTER, vol.578, 2020 (SCI-Expanded)
20. **A new single-layer structure of MBene family: Ti<sub>2</sub>B**  
Ozdemir I., Kadioglu Y., AKTÜRK O. Ü., Yuksel Y., Akinci Ü., Akturk E.  
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.31, no.50, 2019 (SCI-Expanded)
21. **On the spin - S random field Ising model**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.488, 2019 (SCI-Expanded)

22. **Dynamical response of the Ising model to an amplitude modulated time dependent magnetic field**  
AKINCI Ü.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.527, 2019 (SCI-Expanded)
23. **Exploring the electronic and magnetic properties of new metal halides from bulk to two-dimensional monolayer: RuX<sub>3</sub> (X = Br, I)**  
ERSAN F., VATANSEVER E., Sarikurt S., YÜKSEL Y., KADIOĞLU Y., Ozaydin H. D., AKTÜRK O. Ü., AKINCI Ü., AKTÜRK E.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.476, pp.111-119, 2019 (SCI-Expanded)
24. **Strain effects on electronic and magnetic properties of the monolayer alpha-RuCl<sub>3</sub>: A first-principles and Monte Carlo study**  
VATANSEVER E., Sarikurt S., ERSAN F., KADIOĞLU Y., AKTÜRK O. Ü., YÜKSEL Y., Ataca C., AKTÜRK E., AKINCI Ü.  
JOURNAL OF APPLIED PHYSICS, vol.125, no.8, 2019 (SCI-Expanded)
25. **Isotropic and anisotropic quantum Heisenberg models under bond randomness: An effective-field theory study**  
Vatansever E., AKINCI Ü.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.512, pp.818-823, 2018 (SCI-Expanded)
26. **Binary alloy in random field: Phase diagrams**  
Karakoyun G., AKINCI Ü.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.510, pp.407-414, 2018 (SCI-Expanded)
27. **Multiple hysteresis behaviors in spin models: Effect of anisotropy in the exchange interaction**  
AKINCI Ü., YÜKSEL Y.  
PHYSICA B-CONDENSED MATTER, vol.549, pp.1-5, 2018 (SCI-Expanded)
28. **Magnetocaloric properties of the spin-S (S ≥ 1) Ising model on a honeycomb lattice**  
AKINCI Ü., YÜKSEL Y., VATANSEVER E.  
PHYSICS LETTERS A, vol.382, no.45, pp.3238-3243, 2018 (SCI-Expanded)
29. **Monte Carlo simulation of exchange bias in spin valve systems**  
YÜKSEL Y., AKINCI Ü.  
PHYSICA B-CONDENSED MATTER, vol.549, pp.24-30, 2018 (SCI-Expanded)
30. **Dynamical response of the Ising model to the time dependent magnetic field with white noise**  
AKINCI Ü.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.494, pp.242-250, 2018 (SCI-Expanded)
31. **Dynamical phase transition characteristics of FeC<sub>2</sub> monolayer**  
DEMİR VATANSEVER Z., AKINCI Ü.  
MATERIALS RESEARCH EXPRESS, vol.5, no.2, 2018 (SCI-Expanded)
32. **Influence of modified surface effects on the magnetocaloric properties of ferromagnetic thin films**  
YÜKSEL Y., AKINCI Ü., VATANSEVER E.  
THIN SOLID FILMS, vol.646, pp.67-74, 2018 (SCI-Expanded)
33. **A comparative study of critical phenomena and magnetocaloric properties of ferromagnetic ternary alloys**  
YÜKSEL Y., AKINCI Ü.  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.112, pp.143-152, 2018 (SCI-Expanded)
34. **Electronic and magnetic properties of monolayer alpha-RuCl<sub>3</sub>: a first-principles and Monte Carlo study**  
Sarikurt S., Kadioglu Y., Ersan F., VATANSEVER E., AKTÜRK O. Ü., YÜKSEL Y., AKINCI Ü., Akturk E.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.20, no.2, pp.997-1004, 2018 (SCI-Expanded)
35. **Hysteresis behaviors of the crystal field diluted general spin-S Ising model**  
AKINCI Ü.  
PHYSICS LETTERS A, vol.381, no.38, pp.3258-3265, 2017 (SCI-Expanded)
36. **On the hysteresis behaviors of the higher spin Ising model**  
AKINCI Ü.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.483, pp.130-138, 2017 (SCI-Expanded)
37. **Hysteresis behavior of the binary Ising model**

- AKINCI Ü., Karakoyun G.  
PHYSICA B-CONDENSED MATTER, vol.521, pp.365-370, 2017 (SCI-Expanded)
38. **Non equilibrium magnetocaloric properties of Ising model defined on regular lattices with arbitrary coordination number**  
VATANSEVER E., AKINCI Ü., YÜKSEL Y.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.479, pp.563-571, 2017 (SCI-Expanded)
39. **Nonequilibrium phase transitions in isotropic Ashkin-Teller model**  
AKINCI Ü.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.469, pp.740-749, 2017 (SCI-Expanded)
40. **Influence of time dependent longitudinal magnetic fields on the cooling process, exchange bias and magnetization reversal mechanism in FM core/AFM shell nanoparticles: a Monte Carlo study**  
YÜKSEL Y., AKINCI Ü.  
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.28, no.48, 2016 (SCI-Expanded)
41. **Crystal field dilution in S-1 Blume Capel model: Hysteresis behaviors**  
AKINCI Ü.  
PHYSICS LETTERS A, vol.380, pp.1352-1357, 2016 (SCI-Expanded)
42. **Hysteresis behaviors of a spin-1 anisotropic Heisenberg model**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.397, pp.247-254, 2016 (SCI-Expanded)
43. **Non-equilibrium phase transition properties of disordered binary ferromagnetic alloy**  
VATANSEVER E., AKINCI Ü., POLAT H.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.389, pp.40-47, 2015 (SCI-Expanded)
44. **Effective field theory in larger clusters - Ising model**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.386, pp.60-68, 2015 (SCI-Expanded)
45. **Thickness dependent Curie temperature and power-law behavior of layering transitions in ferromagnetic classical and quantum thin films described by Ising, XY and Heisenberg models**  
YÜKSEL Y., AKINCI Ü.  
Physica B: Condensed Matter, vol.462, pp.54-58, 2015 (SCI-Expanded)
46. **Convergence of monetary equivalent of labour times (MELTs) in two Marxian interpretations**  
AKINCI Ü., KARAHANOĞULLARI Y.  
Cambridge Journal of Economics, vol.39, no.3, pp.769-781, 2015 (SSCI)
47. **Random field distributed Heisenberg model on a thin film geometry**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.368, pp.36-43, 2014 (SCI-Expanded)
48. **Dynamic hysteretic features of Ising-type thin films**  
Aktas B. O., AKINCI Ü., POLAT H.  
PHYSICAL REVIEW E, vol.90, no.1, 2014 (SCI-Expanded)
49. **Critical phenomena in dynamical Ising-typed thin films by effective-field theory**  
Aktas B. O., AKINCI Ü., POLAT H.  
THIN SOLID FILMS, vol.562, pp.680-691, 2014 (SCI-Expanded)
50. **Critical and reentrant behavior of the spin quantum 1/2 anisotropic Heisenberg antiferromagnet model with Dzyaloshinskii-Moriya interaction in a longitudinal magnetic field**  
Parente W. E. F., Pacobahyba J. T. M., Araujo I. G., Neto M. A., de Sousa J. R., AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.355, pp.235-239, 2014 (SCI-Expanded)
51. **Anisotropic Heisenberg model in thin film geometry**  
AKINCI Ü.  
THIN SOLID FILMS, vol.550, pp.602-607, 2014 (SCI-Expanded)
52. **Universality aspects of layering transitions in ferromagnetic Blume-Capel thin films**  
YÜKSEL Y., AKINCI Ü.  
PHYSICA B-CONDENSED MATTER, vol.433, pp.96-101, 2014 (SCI-Expanded)

53. **Hysteresis behavior of the anisotropic quantum Heisenberg model**  
AKINCI Ü.  
PHYSICS LETTERS A, vol.377, pp.1672-1676, 2013 (SCI-Expanded)
54. **Bond diluted anisotropic quantum Heisenberg model**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.343, pp.69-75, 2013 (SCI-Expanded)
55. **Time dependent magnetic field effects on the +/- J Ising model**  
VATANSEVER E., AKINCI Ü., POLAT H.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.344, pp.89-95, 2013 (SCI-Expanded)
56. **Random field effects on the anisotropic quantum Heisenberg model with Gaussian random magnetic field distribution**  
AKINCI Ü.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.392, no.19, pp.4380-4387, 2013 (SCI-Expanded)
57. **Critical behavior of the 3D anisotropic quantum Heisenberg model in a trimodal random field distribution**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.333, pp.156-161, 2013 (SCI-Expanded)
58. **Investigation of critical phenomena and magnetism in amorphous Ising nanowire in the presence of transverse fields**  
YÜKSEL Y., AKINCI Ü., POLAT H.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.392, no.10, pp.2347-2358, 2013 (SCI-Expanded)
59. **Effects of the randomly distributed magnetic field on the phase diagrams of the transverse Ising thin film**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.329, pp.178-187, 2013 (SCI-Expanded)
60. **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.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.329, pp.14-23, 2013 (SCI-Expanded)
61. **Investigation of bond dilution effects on the magnetic properties of a cylindrical Ising nanowire**  
YÜKSEL Y., AKINCI Ü., POLAT H.  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.250, no.1, pp.196-206, 2013 (SCI-Expanded)
62. **Hysteretic response characteristics and dynamic phase transition via site dilution in the kinetic Ising model**  
Aktas B. O., AKINCI Ü., Polat H.  
PHYSICA B-CONDENSED MATTER, vol.407, no.24, pp.4721-4730, 2012 (SCI-Expanded)
63. **Effects of the randomly distributed magnetic field on the phase diagrams of the Ising Nanowire II: Continuous distributions**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.324, no.24, pp.4237-4244, 2012 (SCI-Expanded)
64. **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.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.391, no.23, pp.5810-5817, 2012 (SCI-Expanded)
65. **Effects of the randomly distributed magnetic field on the phase diagrams of Ising nanowire I: Discrete distributions**  
AKINCI Ü.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.324, no.22, pp.3951-3960, 2012 (SCI-Expanded)

66. **Stationary State Solutions of a Bond Diluted Kinetic Ising Model: An Effective-Field Theory Analysis**  
Vatansever E., Aktas B. O., YÜKSEL Y., AKINCI Ü., Polat H.  
JOURNAL OF STATISTICAL PHYSICS, vol.147, no.6, pp.1068-1076, 2012 (SCI-Expanded)
67. **Nonequilibrium phase transitions and stationary-state solutions of a three-dimensional random-field Ising model under a time-dependent periodic external field**  
YÜKSEL Y., VATANSEVER E., AKINCI Ü., POLAT H.  
PHYSICAL REVIEW E, vol.85, no.5, 2012 (SCI-Expanded)
68. **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.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.391, no.9, pp.2819-2832, 2012 (SCI-Expanded)
69. **Random field effects on the phase diagrams of spin-1/2 Ising model on a honeycomb lattice**  
YÜKSEL Y., AKINCI Ü., POLAT H.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.391, no.3, pp.415-422, 2012 (SCI-Expanded)
70. **Effective-field-theory analysis of the three-dimensional random-field Ising model on isometric lattices**  
AKINCI Ü., YÜKSEL Y., POLAT H.  
PHYSICAL REVIEW E, vol.83, no.6, 2011 (SCI-Expanded)
71. **Effects of the bond dilution on the phase diagrams of a spin-1 transverse Ising model with crystal field interaction on a honeycomb lattice**  
AKINCI Ü., YÜKSEL Y., POLAT H.  
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.390, no.4, pp.541-552, 2011 (SCI-Expanded)
72. **Characterization of platinum nitride from first-principles calculations**  
Yildiz A., AKINCI Ü., Gulseren O., Sokmen I.  
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.21, no.48, 2009 (SCI-Expanded)
73. **On dynamic plane elasticity problems of 2D quasicrystals**  
Akmaz H. K., AKINCI Ü.  
PHYSICS LETTERS A, vol.373, no.22, pp.1901-1905, 2009 (SCI-Expanded)
74. **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.  
PHYSICA SCRIPTA, vol.79, no.4, 2009 (SCI-Expanded)
75. **A method for phase diagrams of spin-1 Ising ferromagnetic systems**  
Polat H., AKINCI Ü., Sokmen I.  
PHYSICA STATUS SOLIDI B-BASIC RESEARCH, vol.240, no.1, pp.189-200, 2003 (SCI-Expanded)
76. **The Welfare Party's municipal track record: Evaluating Islamist municipal activism in Turkey**  
AKINCI Ü.  
MIDDLE EAST JOURNAL, vol.53, no.1, pp.75-94, 1999 (SSCI)

#### Refereed Congress / Symposium Publications in Proceedings

1. **İki Boyutlu Malzemelerde Manyetik Skyrmion Fazları**  
Akıncı Ü.  
IX. YOĞUN MADDE FİZİĞİ İZMİR TOPLANTISI, İzmir, Turkey, 13 May 2022, pp.8
2. **Demir Nanoparçacıkların Dinamik Manyetik ve Histeresis Özellikleri**  
Akıncı Ü., Çam N.  
IX. YOĞUN MADDE FİZİĞİ İZMİR TOPLANTISI, İzmir, Turkey, 13 May 2022, pp.23
3. **POSSIBILITIES OF ENHANCING MAGNETOCALORIC EFFECT IN LOW DIMENSIONAL SYSTEMS**  
AKINCI Ü., YÜKSEL Y., VATANSEVER E., DEMİR VATANSEVER Z.  
FIRST INTERNATIONAL BILATERAL WORKSHOP ON SCIENCE BETWEEN DOKUZ EYLÜL UNIVERSITY AND

AZERBAIJAN NATIONAL ACADEMY OF SCIENCES, Turkey, 19 November 2021

4. **ENHANCING MAGNETOCALORIC EFFECT IN LOW DIMENSIONAL SYSTEMS**  
AKINCI Ü.  
4th Pak-Turk International Conference on Emerging Technologies in the field of Sciences and Engineering, Pakistan, 3 - 04 November 2021
5. **Magnetocaloric properties of the low dimensional magnetic systems**  
AKINCI Ü.  
TURKISH PHYSICAL SOCIETY 37 th INTERNATIONAL PHYSICS CONGRESS, Turkey, 1 - 05 September 2021
6. **The effects of the shape on skyrmion phases in magnetic nanodots**  
Karakoyun G., AKINCI Ü.  
TURKISH PHYSICAL SOCIETY 37 th INTERNATIONAL PHYSICS CONGRESS, Turkey, 1 - 05 September 2021
7. **Effect of Particle Size Geometry on Magnetocaloric and Magnetic Hyperthermia Properties in Magnetic Nanoparticles**  
Akyıldız A., AKINCI Ü.  
TURKISH PHYSICAL SOCIETY 37 th INTERNATIONAL PHYSICS CONGRESS, Turkey, 1 - 05 September 2021
8. **Determination of Magnetic Properties with Artificial Neural Networks**  
Saltık S., AKINCI Ü.  
TURKISH PHYSICAL SOCIETY 37 th INTERNATIONAL PHYSICS CONGRESS, Turkey, 1 - 05 September 2021
9. **Exploring the electronic and magnetic properties of new metal halides from bulk to two-dimensional monolayer: RuX<sub>3</sub> (X = Br, I)**  
ERSAN F., VATANSEVER E., SARIKURT S., YÜKSEL Y., KADIOĞLU Y., Ozaydın H. D., ÜZENGİ AKTÜRK O., AKINCI Ü., AKTÜRK E.  
International Materials Science and Nanotechnology for Next Generation Conference (MSNG2019), Niğde, Turkey, 16 - 18 October 2019
10. **Electronic and magnetic properties of monolayer a-RuCl<sub>3</sub> : a first-principles and Monte Carlo study**  
SARIKURT S., KADIOĞLU Y., ERSAN F., VATANSEVER E., ÜZENGİ AKTÜRK O., YÜKSEL Y., AKINCI Ü., AKTÜRK E.  
International Conference on Materials Science and Technology, Ankara, Turkey, 18 - 20 October 2019
11. **Magnetic Phase Transition by Strain Effect on Monolayer a-RuCl<sub>3</sub>**  
KADIOĞLU Y., VATANSEVER E., SARIKURT S., ERSAN F., ÜZENGİ AKTÜRK O., YÜKSEL Y., ATACA C., AKTÜRK E., AKINCI Ü.  
TFD 35. Uluslararası Fizik Kongresi, Turkey, 4 - 08 September 2019
12. **İkili Ferromanyetik Alaşım Sistemlerinin Dinamik Histerezis Karakteristiklerinin Belirlenmesi**  
Karakoyun G., AKINCI Ü.  
24. İstatistiksel Fizik Günleri, İzmir, Turkey, 29 June - 01 July 2017
13. **Manyetik malzemelerin zamana bağlı modüle edilmiş manyetik alan altındaki davranışı**  
AKINCI Ü.  
24. İstatistiksel Fizik Günleri, İzmir, Turkey, 29 June - 01 July 2017
14. **Monte Carlo simulation of exchange bias in bilayers and spherical particles: Dynamic phase transition properties**  
YÜKSEL Y., AKINCI Ü.  
11th International Symposium on Hysteresis Modeling and Micromagnetics (HMM 2017) Barcelona, İspanya, 29-31 Mayıs 2017, Barcelona, Spain, 29 - 31 May 2017
15. **Multiple hysteresis behaviors in spin models: effect of random field and crystal field distribution**  
AKINCI Ü., YÜKSEL Y.  
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16. **Multiple hysteresis behaviors in spin models: effect of anisotropy in the exchange interaction**  
YÜKSEL Y., AKINCI Ü.  
11th Symposium on Hysteresis Modeling and Micromagnetics, Barcelona, Spain, 29 - 31 May 2017
17. **Monte Carlo simulation of exchange bias in spin valve systems: Dynamic phase transition properties**  
AKINCI Ü., YÜKSEL Y.  
11th Symposium on Hysteresis Modeling and Micromagnetics, Barcelona, Spain, 29 - 31 May 2017



18. **Multiple hysteresis behaviors in spin models**  
AKINCI Ü.  
42 nd The Conferences of the Middle European Cooperation in Statistical Physics, Lyon, France, 8 - 10 February 2017
19. **Manyetik Nanoparçacıklarda Değiş Tokuş Anizotropisinin Dinamik Manyetik Alanlar Varlığındaki Davranışı**  
AKINCI Ü., YÜKSEL Y.  
23. İstatistik Fizik Günleri, Turkey, 23 - 24 June 2016
20. **İkili Alaşım Manyetik Malzemelerin Manyetik Histerezis Karakteristikleri**  
Karakoyun G., AKINCI Ü.  
23. İstatistik Fizik Günleri, Turkey, 23 - 24 June 2016
21. **Çok katmanlı nanotüplerin manyetik histerezis özellikleri**  
AKINCI Ü.  
23. İstatistik Fizik Günleri, Turkey, 23 - 24 June 2016
22. **Rastgele Ferromanyetik Antiferromanyet ik Bağ Dağılımlı İnce Film sistemlerin manyetik özellikleri**  
Athlan M., AKINCI Ü.  
23. İstatistik Fizik Günleri, Turkey, 23 - 24 June 2016
23. **Hysteretic features of the dynamical Ising type thin films**  
AKINCI Ü., POLAT H.  
20. İstatistik Fizik Günleri, Turkey, 27 - 29 June 2013
24. **Effective field approximation in larger clusters**  
AKINCI Ü.  
20. İstatistik Fizik Günleri, Turkey, 27 - 29 June 2013
25. **Effects of the randomly distributed magnetic field on the phase diagrams of the Ising Nanowire**  
AKINCI Ü.  
3.rd international workshop on statistical mechanics and dynamical systems, 27 August - 02 September 2012
26. **Effective Field Investigation of Dynamic Phase Transitions for Site Diluted Ising Ferromagnets Driven by a Periodically Oscillating Magnetic Field**  
AKINCI Ü.  
19.İstatistik Fizik Günler, Turkey, 28 - 30 June 2012
27. **The Effect of Random Magnetic Fields with One and Two Centered Gaussian Distributions on the Phase Diagrams of the Spin and Spin 1 Ising Model**  
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18.İstatistik Fizik Günler, Turkey, 30 June - 02 July 2011
28. **İlk prensip Hesaplardan Platinyum Nitrit in Özelliklerinin Karakterizasyonu**  
YILDIZ TUNALI A., AKINCI Ü., GÜLSEREN O., SÖKMEN İ.  
13. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 03 November 2006
29. **Magnetic and Thermodynamic Properties of the Spin 1 Ising Ferromagnetic Systems**  
POLAT H., AKINCI Ü., SÖKMEN İ.  
10.İstatistik Fizik Günleri, Turkey, 3 - 04 July 2003
30. **Phase Diagrams Of Spin S S Ising Systems**  
POLAT H., AKINCI Ü., SÖKMEN İ.  
Türk Fizik Derneği 21. Fizik kongresi (TFD-21), Turkey, 11 - 14 September 2002
31. **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, Turkey, 8 - 12 July 2002
32. **Spin Correlation Functions and Phase Diagrams of the Spin Ising Systems**  
POLAT H., AKINCI Ü., SÖKMEN İ.  
9.İstatistik Fizik Günleri, Turkey, 4 - 05 July 2002
33. **İstatistiksel Mekaniğe Geometrik Yaklaşımlar Üzerine**  
AKINCI Ü.

- XIV.Ulusal Matematik Sempozyumu, Turkey, 19 - 21 September 2001
34. **Sosyal Bilimler ve Psikolojide Topoloji**  
AKINCI Ü.  
XIV.Ulusal Matematik Sempozyumu, Turkey, 19 - 21 September 2001
35. **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, Turkey, 5 - 06 July 2001
36. **Hausdorff Uzaylarına Sonlu Yaklaşımlar ve Fizikteki Görünümleri**  
AKINCI Ü.  
Doç .Dr. Eyüp Sabri Türker anısına Matematik Sempozyumu, Adapazarı, Turkey, 19 - 20 October 2000

## Academic and Administrative Experience

2022 - Continues	<b>Head of Department</b>	Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü
2022 - Continues	<b>Fakülte Kurulu Üyesi</b>	Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü
2022 - Continues	<b>Head of Department</b>	Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü
2022 - 2022	<b>Fakülte Yönetim Kurulu Üyesi</b>	Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü
2021 - 2022	<b>Deputy Head of Department</b>	Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü
2019 - 2022	<b>Fakülte Kurulu Üyesi</b>	Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü
2019 - 2022	<b>Fakülte Yönetim Kurulu Üyesi</b>	Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü
2020 - 2020	<b>Deputy Head of Department</b>	Dokuz Eylul University, Fen Fakültesi, Fizik Bölümü

## Courses

Matematiksel Fizik-II , Doctorate, 2022 - 2023  
Fundamentals of the Magnetism , Doctorate, 2022 - 2023  
Fziik I, Undergraduate, 2022 - 2023  
Computational Nanoscience - I, Doctorate, 2020 - 2021  
PHYSICS I, Undergraduate, 2020 - 2021, 2019 - 2020  
İstatistik Fizik, Undergraduate, 2019 - 2020  
PHYSICS II, Undergraduate, 2019 - 2020  
Modern Fizik, Undergraduate, 2017 - 2018, 2016 - 2017  
Fizikte Matematiksel Yöntemler II, Postgraduate, 2017 - 2018  
Fizik I, Undergraduate, 2017 - 2018

## Advising Theses

Akinci Ü., Determination of the magnetic properties by artificial neural networks and deep learning , Postgraduate,

S.Saltık(Student), Continues

Akinci Ü., Magnetic properties of the nanoparticle arrays , Doctorate, N.Çam(Student), Continues

Akinci Ü., Skyrmion phases in two dimensional magnetic materials , Doctorate, A.Akyıldız(Student), Continues

Akinci Ü., Gürültünün manyetik fazlara etkisi , Doctorate, G.Bayrak(Student), Continues

Akinci Ü., Skyrmion Phases in Magnetic Nanosystems , Doctorate, F.Karakoyun(Student), Continues

AKINCI Ü., Effects of the particle size and shape of the magnetic nanoparticles on the magnetic hyperthermia and magnetocaloric properties, Postgraduate, A.AKYILDIZ(Student), 2021

AKINCI Ü., Determination of the hysteresis characteristics of the magnetic binary alloys, Postgraduate, G.KARAKOYUN(Student), 2017

AKINCI Ü., Determination of the hysteresis behaviors in magnetic thin films, Postgraduate, M.ATLIHAN(Student), 2016

## Scientific Refereeing

JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, Journal Indexed in SCI-E, August 2023

PHYSICA STATUS SOLIDI - RAPID RESEARCH LETETRS, Journal Indexed in SCI-E, August 2023

CHINESE JOURNAL OF PHYSICS, Journal Indexed in SCI-E, July 2023

JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, Journal Indexed in SCI-E, July 2023

PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS, Journal Indexed in SCI-E, June 2023

PHYSICA SCRIPTA, Journal Indexed in SCI-E, June 2023

Results in Physics, Journal Indexed in SCI-E, April 2023

PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS, Journal Indexed in SCI-E, February 2023

PHYSICS LETTERS A, Journal Indexed in SCI-E, February 2023

INTERNATIONAL JOURNAL OF MODERN PHYSICS B, Journal Indexed in SCI-E, January 2023

CHINESE JOURNAL OF PHYSICS, National Scientific Refreed Journal, December 2022

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JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, National Scientific Refreed Journal, November 2019

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PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS, Journal Indexed in SCI-E, June 2019

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PHASE TRANSITIONS, Journal Indexed in SCI-E, April 2019

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PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS, Journal Indexed in SCI-E, January 2019

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SÜLEYMAN DEMIREL ÜNİVERSİTESİ FEN EDEBİYAT FAKÜLTESİ FEN DERGİSİ = SÜLEYMAN DEMIREL UNIVERSITY  
FACULTY OF ARTS AND SCIENCE JOURNAL OF SCIENCE, National Scientific Refreed Journal, July 2017  
PHYSICA B: CONDENSED MATTER, Journal Indexed in SCI-E, June 2017  
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INTERNATIONAL JOURNAL OF MODERN PHYSICS B, Journal Indexed in SCI-E, March 2016  
PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS, Journal Indexed in SCI-E, November 2015  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, National Scientific Refreed Journal, October 2015  
SUPERLATTICES AND MICROSTRUCTURES, Journal Indexed in SCI-E, August 2015  
SURFACE SCIENCE, National Scientific Refreed Journal, June 2015  
CAMBRIDGE JOURNAL OF ECONOMICS, Journal Indexed in SSCI, June 2015  
PHYSICA A: STATISTICAL MECHANICS AND ITS APPLICATIONS, Journal Indexed in SCI-E, June 2015  
SUPERLATTICES AND MICROSTRUCTURES, Journal Indexed in SCI-E, March 2015  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, SCI Journal, January 2015  
PHYSICA E: LOW-DIMENSIONAL SYSTEMS AND NANOSTRUCTURES, Journal Indexed in SCI-E, December 2014  
PHYSICA B: CONDENSED MATTER, Journal Indexed in SCI-E, November 2014  
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JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, Journal Indexed in SCI-E, June 2014  
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INTERNATIONAL JOURNAL OF MODERN PHYSICS B, Journal Indexed in SCI-E, May 2014  
EUROPEAN JOURNAL OF PHYSICS, National Scientific Refreed Journal, March 2014  
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## Metrics

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## Research Areas

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## Non Academic Experience

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