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Kişisel Bilgiler

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Eğitim Bilgileri

Doktora, University of Massachusetts Lowell, Science Faculty, Physics/ General Physics, Amerika Birleşik Devletleri 1993 - 1997

Yüksek Lisans, University of Missouri-Columbia, Science Faculty, Physics/ General Physics, Amerika Birleşik Devletleri 1991 - 1993

Lisans, Erciyes Üniversitesi, Fen-Edebiyat Fakültesi, Fizik, Türkiye 1986 - 1990

Yabancı Diller

İngilizce, C1 İleri

Sertifika, Kurs ve Eğitimler

Eğitim Yönetimi ve Planlama, Eğitim Formasyonu, Erciyes Üniversitesi, 1990

Yaptığı Tezler

Doktora, Computer Modeling For the Two- and Three-Dimensional Avalanche Photodiode, University Of Massachusetts Lowell, Science Faculty, Physics/ General Physics, 1997

Yüksek Lisans, Absorption and Scattering from the Spherical Particles, University Of Missouri-Columbia, Science Faculty, Physics/ General Physics, 1993

Araştırma Alanları

Fizik, Genel Fizik, Fiziğin Matematiksel Yöntemleri, Yoğun Madde 1:Yapısal, Mekanik ve Termal Özellikler , Durum yoğunluğu, faz dengesi ve faz geçişleri, Yoğun Madde 2:Elektronik Yapı, Elektrik, Manyetik ve Optik Özellikler, Manyetik özellikler ve malzemeler, Temel Bilimler

Akademik Unvanlar / Görevler

Prof. Dr., Erciyes Üniversitesi, Fen Fakültesi, Fizik, 2009 - Devam Ediyor

Doç. Dr., Erciyes Üniversitesi, Fen Fakültesi, Fizik, 2003 - 2009

Yrd. Doç. Dr., Erciyes Üniversitesi, Fen Fakültesi, Fizik, 1998 - 2003

Öğretim Görevlisi Dr., Erciyes Üniversitesi, Fen Fakültesi, Fizik, 1997 - 1998

Araştırma Görevlisi, University of Massachusetts Lowell, Science Faculty, Physics, 1996 - 1997

Araştırma Görevlisi, University of Missouri-Columbia, Science Faculty, Physics, 1992 - 1993

Akademik İdari Deneyim

Erciyes Üniversitesi, 2011 - 2013

Erciyes Üniversitesi, 2009 - 2013

Erciyes Üniversitesi, 2009 - 2012

Erciyes Üniversitesi, 2009 - 2012

Verdiği Dersler

Dalgalar ve Titreşimler, Lisans, 2011 - 2012

Kuantum Mekaniği I, Yüksek Lisans, 2008 - 2009

Yönetilen Tezler

ALBAYRAK E., The Obtaining of the Phase Diagrams for AFM/AFM and FM/AFM Cases of Spin-1 Ising Model on a Two-Layer Bethe Lattice, Doktora, Ş.Akkaya(Öğrenci), 2011

ALBAYRAK E., The Phase Diagrams of spin-1/2 Ising AFM/AFM ve FM/AFM Models on the Two-Layer Bethe Lattice with External Magnetic Field, Yüksek Lisans, T.Cengiz(Öğrenci), 2010

ALBAYRAK E., The Phase Diagrams of the Spin-(1/2,1,1/2) ve Spin-(1,1/2,1) Ising Models on the Bethe Lattice, Yüksek Lisans, A.Aker(Öğrenci), 2010

ALBAYRAK E., The Phase Diagrams of Spin-3/2 Ising Models for the AFM/AFM ve FM/AFM Cases on Two-layer Bethe Lattices, Doktora, A.Yiğit(Öğrenci), 2010

ALBAYRAK E., The Phase Diagrams for the Spin-(S=1/2, ?=1), Spin-(S=1, ?=3/2) and Spin-(S=3/2, ?=1/2) Ising Models on a Two-Layer Bethe Lattice, Yüksek Lisans, T.Bulut(Öğrenci), 2008

ALBAYRAK E., The Exact Phase Diagrams of the Spin-2 Ising model on a Two-Layer Bethe Lattice with and without Crystal Fields, Yüksek Lisans, Ş.Akkaya(Öğrenci), 2007

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ALBAYRAK E., The Critical Behaviors of the mixed spin-1 and spin-2 Blume-Capel Ising Ferromagnetic System, Yüksek Lisans, A.Yiğit(Öğrenci), 2006

ALBAYRAK E., The Analysis of mixed-spin spin-1/2 and spin-3/2 Ising System on the Bethe Lattice with Recursion Relations, Yüksek Lisans, A.Alçı(Öğrenci), 2004

ALBAYRAK E., The Analysis of Spin-1 Blume-Emery-Griffiths Model by Using the Recursion Relations on the Bethe Lattice, Yüksek Lisans, Ö.Özkan(Öğrenci), 2002

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

I. The Ising Model on the Bethe Lattice with Two Atoms Per Site

ALBAYRAK E.

SPIN, 2024 (SCI-Expanded)

- II. **Magnetic behaviors of diatomic molecules with mixed spin-1 and spin-1/2 on the Bethe lattice**
ALBAYRAK E.
Chinese Journal of Physics, cilt.89, ss.1545-1554, 2024 (SCI-Expanded)
- III. **Hexagonal core-shell structure nanowire with high spins of spin-3/2 and spin-5/2**
Karimou M., Yessoufou R. A., Albayrak E.
CONDENSED MATTER PHYSICS, cilt.27, sa.2, ss.1-11, 2024 (SCI-Expanded)
- IV. **Monte Carlo and mean-field studies on the magnetic properties of a hexagonal Ising nanowire with core-shell structure in the Blume–Emery–Griffiths model**
Aziza Goguin G., Yessoufou R., Oke T., ALBAYRAK E.
Journal of Magnetism and Magnetic Materials, cilt.598, 2024 (SCI-Expanded)
- V. **The Dzyaloshinskii-Moriya interaction effects in antiferromagnetic Heisenberg model**
ALBAYRAK E.
International Journal of Modern Physics B, cilt.38, sa.6, 2024 (SCI-Expanded)
- VI. **The XZ Model in the Mean-Field Approximation with Exponential Pauli Spin Matrices**
ALBAYRAK E.
SPIN, cilt.14, sa.1, 2024 (SCI-Expanded)
- VII. **THE XYZ MODEL IN THE MEAN-FIELD APPROXIMATION IN TERMS OF PAULI SPIN MATRICES**
ALBAYRAK E.
LITHUANIAN JOURNAL OF PHYSICS, cilt.64, sa.1, ss.1-10, 2024 (SCI-Expanded)
- VIII. **Magnetic behavior of a diatomic molecule with spin-1 on the Bethe lattice**
ALBAYRAK E.
European Physical Journal Plus, cilt.139, sa.1, 2024 (SCI-Expanded)
- IX. **SPIN-1 ANTIFERROMAGNETIC HEISENBERG MODEL INCLUDING DZYALOSHINSKII-MORIYA INTERACTION**
ALBAYRAK E.
ROMANIAN JOURNAL OF PHYSICS, cilt.69, sa.3-4, ss.9-17, 2024 (SCI-Expanded)
- X. **Antiferromagnetic spin-3/2 Heisenberg model with the effects of Dzyaloshinskii-Moriya interaction**
ALBAYRAK E.
Modern Physics Letters B, cilt.37, sa.35, 2023 (SCI-Expanded)
- XI. **Critical and hysteresis behaviors for a hexagonal core-shell structure nanowire in the Blume–Emery–Griffiths model**
Goguin G. A., Oke T., Yessoufou R., ALBAYRAK E.
Physica A: Statistical Mechanics and its Applications, cilt.624, 2023 (SCI-Expanded)
- XII. **Effective field theory study of bond dilution effects on transverse Ising antiferromagnet in a random longitudinal magnetic field**
Kple J., Hontinfinde F., ALBAYRAK E.
Chinese Journal of Physics, cilt.83, ss.467-479, 2023 (SCI-Expanded)
- XIII. **Phase diagrams of spin-1 Blume-Capel model with bimodal random crystal and trimodal random magnetic fields**
Yessoufou R. A. A., Seto G., Kpadonou A., ALBAYRAK E.
INDIAN JOURNAL OF PHYSICS, cilt.97, sa.5, ss.1445-1454, 2023 (SCI-Expanded)
- XIV. **The XYZ model by the series expansion of exponentials for spin matrices in the mean-field approximation**
ALBAYRAK E.
European Physical Journal Plus, cilt.138, sa.3, 2023 (SCI-Expanded)
- XV. **THE +/- J DISTRIBUTION IN THE MIXED SPIN-1/2 AND 5/2 BLUME-CAPEL MODEL**
Albayrak E., Ozcan F. S.
THEORETICAL AND MATHEMATICAL PHYSICS, cilt.214, sa.3, ss.421-431, 2023 (SCI-Expanded)
- XVI. **Magnetic properties of the quaternary alloy with the mixtures of integer and half-integer spins**
Kpadonou A., Yessoufou R., Houenou R., ALBAYRAK E.
Phase Transitions, cilt.96, sa.1, ss.43-57, 2023 (SCI-Expanded)

- XVII. Mixed-spin 1/2 and 3/2 core-shell structured triangular Ising nanowire on the Bethe lattice**
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- XVIII. Critical behaviors of transverse Ising ferromagnet with random bond and random longitudinal magnetic field**
Kple J., Albayrak E., Oke T. D., Hontinfinde F.
EUROPEAN PHYSICAL JOURNAL PLUS, cilt.137, ss.1-11, 2022 (SCI-Expanded)
- XIX. Critical and hysteresis phenomena in the mixed spin-(3/2,1/2) anisotropic two-dimensional Heisenberg model: A Monte Carlo study**
Seto G., Yessoufou R. A. A., Kpadonou A., ALBAYRAK E.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, cilt.604, 2022 (SCI-Expanded)
- XX. The spin-1 XYZ model with Dzyaloshinskii-Moriya interaction**
Albayrak E.
PHYSICA B-CONDENSED MATTER, cilt.642, 2022 (SCI-Expanded)
- XXI. The numerical investigation of ferro-ferrimagnetic half-integer mixed spin ternary alloy: Monte-Carlo approach**
Houenou R., Yessoufou R., Kpadonou A., Albayrak E.
JOURNAL OF THE KOREAN PHYSICAL SOCIETY, cilt.81, sa.3, ss.247-257, 2022 (SCI-Expanded)
- XXII. The Critical Properties of the Quaternary Alloy with Mixed Spin-(1,1/2,3/2,5/2): Mean Field Calculations**
Yessoufou R., Kpadonou A., Houenou R., ALBAYRAK E.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, cilt.35, sa.7, ss.2047-2056, 2022 (SCI-Expanded)
- XXIII. Random Crystal and Magnetic Field Effects on Hysteresis Loops and Phase Transition of Blume-Capel Model in Cluster Variation Method**
Yessoufou R. A. A., Kpadonou A., Seto G., Albayrak E.
ACTA PHYSICA POLONICA A, cilt.141, sa.6, ss.634-641, 2022 (SCI-Expanded)
- XXIV. The magnetic properties of mixed spin-[Formula presented] anisotropic Heisenberg model in the Oguchi approximation**
Seto G., Kpadonou A., Yessoufou R., Albayrak E.
Physica B: Condensed Matter, cilt.634, 2022 (SCI-Expanded)
- XXV. Bimodal-random field Blume-Capel model in the cluster variation method**
Yessoufou R. A. A., Albayrak E., Seto G.
CHINESE JOURNAL OF PHYSICS, cilt.77, ss.2713-2723, 2022 (SCI-Expanded)
- XXVI. Antiferromagnetic spin-1 XYZ model with the Dzyaloshinskii-Moriya interaction**
Albayrak E.
European Physical Journal Plus, cilt.137, sa.5, 2022 (SCI-Expanded)
- XXVII. Random Crystal Field Effect on the Critical Properties of the Mixed Spin-(5/2,1/2) Anisotropic Heisenberg Model in the Oguchi Approximation**
Seto G., Yessoufou R. A. A., Kpadonou A., Albayrak E.
SPIN, cilt.12, 2022 (SCI-Expanded)
- XXVIII. Random transverse single-ion anisotropies in the mixed spin-1 and spin-1/2 Blume-Capel quantum model: Mean-field theory calculations**
Seto G., Yessoufou R., Kpadonou A., ALBAYRAK E.
Pramana - Journal of Physics, cilt.96, sa.1, 2022 (SCI-Expanded)
- XXIX. Critical properties of the spin-1 Blume-Capel model with a random transverse crystal field**
Kple J., Hontinfinde F., ALBAYRAK E.
Physica B: Condensed Matter, cilt.626, 2022 (SCI-Expanded)
- XXX. Ferromagnetic Heisenberg model with the Dzyaloshinskii-Moriya interaction**
ALBAYRAK E.
CONDENSED MATTER PHYSICS, cilt.25, sa.3, 2022 (SCI-Expanded)
- XXXI. Effects of the random single-ion anisotropy on the spin-1 Blume-Emery-Griffiths model**

- Kple J., Hontinfinde F., ALBAYRAK E.
Journal of Magnetism and Magnetic Materials, cilt.537, 2021 (SCI-Expanded)
- XXXII. **Magnetic properties and phase diagrams of the mixed spin-(1/2,3/2) Ising-Heisenberg model in the mean field approximation**
Seto G., Yessoufou R. A. A., Kpadonou A., ALBAYRAK E., Hontinfinde F.
MODERN PHYSICS LETTERS B, cilt.35, sa.32, 2021 (SCI-Expanded)
- XXXIII. **The critical behaviors of a ferromagnetic-ferrimagnetic Ising ternary alloy with mixed spin-(1/2,3/2,5/2)**
Houenou R., Yessoufou R., Kpadonou A., ALBAYRAK E.
EUROPEAN PHYSICAL JOURNAL PLUS, cilt.136, sa.10, 2021 (SCI-Expanded)
- XXXIV. **Random transverse crystal-field effects on the magnetic properties of the spin-3/2 Blume-Capel model**
Kple J., Hontinfinde F., ALBAYRAK E.
PHYSICA B-CONDENSED MATTER, cilt.619, 2021 (SCI-Expanded)
- XXXV. **Exact Recursion Relation Approach to Spin-1 Two-Leg Ladder**
Albayrak E.
ACTA PHYSICA POLONICA A, cilt.140, sa.3, ss.273-280, 2021 (SCI-Expanded)
- XXXVI. **$\pm J$ Blume-Capel Model with external magnetic field in the cluster variation method**
ALBAYRAK E.
Physica A: Statistical Mechanics and its Applications, cilt.575, 2021 (SCI-Expanded)
- XXXVII. **Random crystal field effects on antiferromagnetic spin-1 Blume-Capel model**
Albayrak E.
Modern Physics Letters B, cilt.35, sa.2150286, ss.2150286, 2021 (SCI-Expanded)
- XXXVIII. **Trimodal-random field Blume-Capel model**
ALBAYRAK E.
MODERN PHYSICS LETTERS B, cilt.35, sa.16, 2021 (SCI-Expanded)
- XXXIX. **The thermal properties of the mixed spin-1/2, 1, 3/2 Ising model on the Bethe lattice**
Kple J., Albayrak E., Hontinfinde F.
MODERN PHYSICS LETTERS B, cilt.35, sa.4, 2021 (SCI-Expanded)
- XL. **Anisotropic Heisenberg model for the mixed spin-3/2 and spin-1/2 under random crystal field**
Takou D. S., Karimou M., Hontinfinde F., Albayrak E.
CONDENSED MATTER PHYSICS, cilt.24, sa.1, 2021 (SCI-Expanded)
- XLI. **The random field Blume-Capel model on the Bethe lattice**
Albayrak E.
Chinese Journal of Physics, cilt.68, ss.100-105, 2020 (SCI-Expanded)
- XLII. **Staggered Quadrupolar Phase in the Bond-Diluted Spin-1 Blume-Emery-Griffiths Model**
Kple J., Hontinfinde F., Albayrak E.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, cilt.59, sa.12, ss.3915-3935, 2020 (SCI-Expanded)
- XLIII. **The study of mixed spin-1 and spin-1/2: Entropy and isothermal entropy change**
ALBAYRAK E.
Physica A: Statistical Mechanics and its Applications, cilt.559, 2020 (SCI-Expanded)
- XLIV. **The critical behaviors of the mixed spin-1/2 and spin-2 model in a random crystal field**
Barut O., Yigit A., Albayrak E.
Journal of Magnetism and Magnetic Materials, cilt.513, 2020 (SCI-Expanded)
- XLV. **Spin-1 Ising model with nearest and next-nearest bilinear and biquadratic interactions on the Bethe lattice**
ALBAYRAK E.
Physica B: Condensed Matter, cilt.594, 2020 (SCI-Expanded)
- XLVI. **Mixed Spin-1/2 and 5/2 Blume-Capel Model on the Bethe Lattice in the $\pm J$ Distribution with an Adjusting Parameter**
ALBAYRAK E., Ozcan F. S.

- Journal of Superconductivity and Novel Magnetism, cilt.33, sa.7, ss.2179-2188, 2020 (SCI-Expanded)
- XLVII. **Antiferromagnetic Spin-3/2 Ising Model Under the Influence of Random Crystal Field**
Kaman R., Yigit A., ALBAYRAK E.
BRAZILIAN JOURNAL OF PHYSICS, cilt.50, sa.3, ss.245-253, 2020 (SCI-Expanded)
- XLVIII. **Triple mixed-spin Ising model**
ALBAYRAK E.
International Journal of Modern Physics B, cilt.34, sa.13, 2020 (SCI-Expanded)
- XLIX. **The Ising model with nearest- and next-nearest-neighbor interactions on the Bethe lattice: The exact recursion relations**
ALBAYRAK E.
MODERN PHYSICS LETTERS B, cilt.34, sa.10, 2020 (SCI-Expanded)
- L. **Isothermal Entropy Change for the Spin-1 Blume-Capel Model on the Bethe Lattice**
Albayrak E.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 2019 (SCI-Expanded)
- LI. **The mixed spin-1/2 and spin-1 model with alternating coordination number**
ALBAYRAK E.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, cilt.33, sa.11, 2019 (SCI-Expanded)
- LII. **Phase diagrams and critical behaviours of the mixed spin-5/2 and spin-7/2 Ising system**
Karimou M., Yessoufou R. A., Ngantso G. D., Hontinfinde F., ALBAYRAK E.
CONDENSED MATTER PHYSICS, cilt.22, sa.3, 2019 (SCI-Expanded)
- LIII. **The ferri-ferro-ferrimagnetic quaternary alloy**
Albayrak E.
PHYSICA B-CONDENSED MATTER, cilt.552, ss.71-77, 2019 (SCI-Expanded)
- LIV. **The Amorphous Spin-1 Ising Model on the Bethe Lattice**
ALBAYRAK E.
ACTA PHYSICA POLONICA A, cilt.134, sa.6, ss.1176-1179, 2018 (SCI-Expanded)
- LV. **The Random Change of Coordination Number in the Blume-Capel Model**
ALBAYRAK E.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, cilt.31, sa.11, ss.3595-3599, 2018 (SCI-Expanded)
- LVI. **The random distribution of the coordination numbers in the mixed spin-1/2 and spin-2 Blume-Capel model**
ALBAYRAK E.
CHINESE JOURNAL OF PHYSICS, cilt.56, sa.5, ss.2291-2296, 2018 (SCI-Expanded)
- LVII. **Phase diagrams of the random nearest-neighbor mixed spin-1/2 and spin-3/2 Blume-Capel model**
ALBAYRAK E.
MODERN PHYSICS LETTERS B, cilt.32, sa.27, 2018 (SCI-Expanded)
- LVIII. **The quaternary alloy on the Bethe lattice**
ALBAYRAK E.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, cilt.32, sa.21, 2018 (SCI-Expanded)
- LIX. **The magnetic phase diagrams of the ternary alloy AB(p)C(1-p) on the Bethe lattice**
ALBAYRAK E.
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- LX. **The crystal-field dependency of sound attenuation in the spin-3/2 ising model**
Cengiz T., ALBAYRAK E.
CHINESE JOURNAL OF PHYSICS, cilt.56, sa.3, ss.844-852, 2018 (SCI-Expanded)
- LXI. **Spin-1/2 Ising model on a AFM/FM two-layer Bethe lattice in a staggered magnetic field**
KPPE J., MASSOU S., HONTINFINDE F., ALBAYRAK E.
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- LXII. **Random crystal field effects on the integer and half-integer mixed-spin system**
Yigit A., ALBAYRAK E.
Superlattices and Microstructures, cilt.117, ss.65-71, 2018 (SCI-Expanded)

- LXIII. **The single-ion anisotropy effects in the mixed-spin ternary-alloy**
ALBAYRAK E.
Physics Letters, Section A: General, Atomic and Solid State Physics, cilt.382, sa.13, ss.880-886, 2018 (SCI-Expanded)
- LXIV. **The spin-1 Blume–Capel model on the Bethe lattice in $\pm J$ distribution with an adjustable parameter between FM and AFM phases**
ALBAYRAK E.
Chinese Journal of Physics, cilt.56, sa.2, ss.622-629, 2018 (SCI-Expanded)
- LXV. **Random Crystal Field Effects on the Mixed-Spin 1/2 and 5/2 Blume-Capel Model**
ALBAYRAK E., KARIMOU M.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, cilt.57, sa.3, ss.715-725, 2018 (SCI-Expanded)
- LXVI. **The Mixed Spin-1/2 and Spin-1 Ising-Heisenberg Model in the Mean-Field Approximation: a New Approach**
ALBAYRAK E.
CHINESE PHYSICS LETTERS, cilt.35, sa.3, 2018 (SCI-Expanded)
- LXVII. **The phase diagrams of the mixed-spin ternary-alloy consisting of half-integer spins: Standard-random approach**
ALBAYRAK E.
Physica B: Condensed Matter, cilt.531, ss.70-74, 2018 (SCI-Expanded)
- LXVIII. **The bimodal random crystal field and biquadratic exchange interaction effects for the spin-3/2 Ising model on the Bethe lattice**
KARIMOU M., ALBAYRAK E., TESSILIMY A., HONTINFINDE F., YESSOUFOU R.
CHINESE JOURNAL OF PHYSICS, cilt.55, sa.6, ss.2371-2383, 2017 (SCI-Expanded)
- LXIX. **Anisotropic Heisenberg model for the mixed spin-2 and spin-1/2 in the Oguchi approximation on the simple cubic lattice**
ALBAYRAK E.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, cilt.486, ss.161-167, 2017 (SCI-Expanded)
- LXX. **Equal Random Crystal Field of Mixed Spin-1 and Spin-3/2 System**
Yigit A., ALBAYRAK E.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, cilt.30, sa.11, ss.3103-3108, 2017 (SCI-Expanded)
- LXXI. **Bond Dilution Effects on Bethe Lattice the Spin-1 Blume-Capel Model**
Albayrak E.
COMMUNICATIONS IN THEORETICAL PHYSICS, cilt.68, sa.3, ss.361-365, 2017 (SCI-Expanded)
- LXXII. **Mixed Spin-2 and Spin-1/2 Anisotropic Heisenberg Model in the Oguchi Approximation**
ALBAYRAK E.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, cilt.30, sa.9, ss.2555-2561, 2017 (SCI-Expanded)
- LXXIII. **The +/- J model for the mixed-spin 1/2 and 5/2 system**
ALBAYRAK E., KARIMOU M.
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- LXXIV. **Square Ising Nanowire on the Bethe Lattice**
ALBAYRAK E.
ACTA PHYSICA POLONICA A, cilt.131, sa.6, ss.1470-1473, 2017 (SCI-Expanded)
- LXXV. **Magnetic phase diagrams of Fe-Mn-Al alloy on the Bethe lattice**
ALBAYRAK E.
CHINESE PHYSICS B, cilt.26, sa.2, 2017 (SCI-Expanded)
- LXXVI. **+/- J Blume-Capel model in the cluster variation method**
ALBAYRAK E.
CHINESE JOURNAL OF PHYSICS, cilt.54, sa.6, ss.978-982, 2016 (SCI-Expanded)
- LXXVII. **The Random J-Model with Biquadratic Interaction**
Yigit A., ALBAYRAK E.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, cilt.29, sa.10, ss.2535-2541, 2016 (SCI-Expanded)
- LXXVIII. **The +/- J model for the mixed-spin 1/2 and 3/2 Blume-Capel model**

- ALBAYRAK E.
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- LXXIX. **Core-shell structured square mixed-spin 1 and 1/2 Ising nanowire on the Bethe lattice**
ALBAYRAK E.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, cilt.401, ss.532-538, 2016 (SCI-Expanded)
- LXXX. **Core-shell structured triangular Ising nanowire on the Bethe lattice**
ALBAYRAK E.
PHYSICS LETTERS A, cilt.380, sa.3, ss.458-464, 2016 (SCI-Expanded)
- LXXXI. **Random Blume-Emery-Griffiths model on the Bethe lattice**
Albayrak E.
PHYSICA B-CONDENSED MATTER, cilt.479, ss.107-111, 2015 (SCI-Expanded)
- LXXXII. **The phase diagrams of the +/- K model on the Bethe lattice**
Albayrak E.
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- LXXXIII. **The Effects of the Random Transverse Crystal Field on the Spin-1 Model**
Albayrak E.
ACTA PHYSICA POLONICA A, cilt.127, sa.3, ss.818-822, 2015 (SCI-Expanded)
- LXXXIV. **+/- J model on the Bethe lattice with crystal field interaction**
Albayrak E.
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- LXXXV. **Phase diagrams of the spin-3/2 random transverse crystal field model**
Albayrak E.
PHYSICA SCRIPTA, cilt.89, sa.1, 2014 (SCI-Expanded)
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