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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 Dzyaloshinskii-Moriya interaction effects in antiferromagnetic Heisenberg model

ALBAYRAK E.

International Journal of Modern Physics B, cilt.38, sa.6, 2024 (SCI-Expanded)

- II. **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)
- III. **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)
- IV. **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)
- V. **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)
- VI. **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)
- VII. **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)
- VIII. **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)
- IX. **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)
- X. **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)
- XI. **Mixed-spin 1/2 and 3/2 core-shell structured triangular Ising nanowire on the Bethe lattice**
ALBAYRAK E.
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- XII. **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)
- XIII. **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)
- XIV. **The spin-1 XYZ model with Dzyaloshinskii-Moriya interaction**
Albayrak E.
PHYSICA B-CONDENSED MATTER, cilt.642, 2022 (SCI-Expanded)
- XV. **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)
- XVI. **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)
- XVII. **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)
- XVIII. **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)
- XIX. **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)
- XX. **Antiferromagnetic spin-1 XYZ model with the Dzyaloshinskii-Moriya interaction**
Albayrak E.
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- XXI. **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)
- XXII. **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)
- XXIII. **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)
- XXIV. **Ferromagnetic Heisenberg model with the Dzyaloshinskii-Moriya interaction**
ALBAYRAK E.
CONDENSED MATTER PHYSICS, cilt.25, sa.3, 2022 (SCI-Expanded)
- XXV. **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)
- XXVI. **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)
- XXVII. **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)
- XXVIII. **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)
- XXIX. **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)
- XXX. **$\pm J$ 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)

- XXXI. **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)
- XXXII. **Trimodal-random field Blume-Capel model**
ALBAYRAK E.
MODERN PHYSICS LETTERS B, cilt.35, sa.16, 2021 (SCI-Expanded)
- XXXIII. **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)
- XXXIV. **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)
- XXXV. **The random field Blume-Capel model on the Bethe lattice**
Albayrak E.
Chinese Journal of Physics, cilt.68, ss.100-105, 2020 (SCI-Expanded)
- XXXVI. **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)
- XXXVII. **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)
- XXXVIII. **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)
- XXXIX. **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)
- XL. **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)
- XLI. **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)
- XLII. **Triple mixed-spin Ising model**
ALBAYRAK E.
International Journal of Modern Physics B, cilt.34, sa.13, 2020 (SCI-Expanded)
- XLIII. **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)
- XLIV. **Isothermal Entropy Change for the Spin-1 Blume-Capel Model on the Bethe Lattice**
Albayrak E.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, 2019 (SCI-Expanded)
- XLV. **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)
- XLVI. **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)

- XLVII. The ferri-ferro-ferrimagnetic quaternary alloy**
 Albayrak E.
 PHYSICA B-CONDENSED MATTER, cilt.552, ss.71-77, 2019 (SCI-Expanded)
- XLVIII. 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)
- XLIX. 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)
- L. 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)
- LI. 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)
- LII. The quaternary alloy on the Bethe lattice**
 ALBAYRAK E.
 INTERNATIONAL JOURNAL OF MODERN PHYSICS B, cilt.32, sa.21, 2018 (SCI-Expanded)
- LIII. The magnetic phase diagrams of the ternary alloy AB(p)C(1-p) on the Bethe lattice**
 ALBAYRAK E.
 MODERN PHYSICS LETTERS B, cilt.32, sa.16, 2018 (SCI-Expanded)
- LIV. 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)
- LV. Spin-1/2 Ising model on a AFM/FM two-layer Bethe lattice in a staggered magnetic field**
 KPİLE J., MASSOU S., HONTINFINDE F., ALBAYRAK E.
 CHINESE JOURNAL OF PHYSICS, cilt.56, sa.3, ss.1252-1261, 2018 (SCI-Expanded)
- LVI. 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)
- LVII. 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)
- LVIII. 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)
- LIX. 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)
- LX. 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)
- LXI. 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)
- LXII. 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)
- LXIII. **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)
- LXIV. **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)
- LXV. **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)
- LXVI. **Mixed Spin-2 and Spin-1/2 Anisotropic Heisenberg Model in the Oguchi Approximation**
ALBAYRAK E.
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- LXVII. **The +/- J model for the mixed-spin 1/2 and 5/2 system**
ALBAYRAK E., KARIMOU M.
CHINESE JOURNAL OF PHYSICS, cilt.55, sa.4, ss.1361-1368, 2017 (SCI-Expanded)
- LXVIII. **Square Ising Nanowire on the Bethe Lattice**
ALBAYRAK E.
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- LXIX. **Magnetic phase diagrams of Fe-Mn-Al alloy on the Bethe lattice**
ALBAYRAK E.
CHINESE PHYSICS B, cilt.26, sa.2, 2017 (SCI-Expanded)
- LXX. **+/- 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)
- LXXI. **The Random J-Model with Biquadratic Interaction**
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- LXXII. **The +/- J model for the mixed-spin 1/2 and 3/2 Blume-Capel model**
ALBAYRAK E.
PHYSICA B-CONDENSED MATTER, cilt.494, ss.91-95, 2016 (SCI-Expanded)
- LXXIII. **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)
- LXXIV. **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)
- LXXV. **Random Blume-Emery-Griffiths model on the Bethe lattice**
Albayrak E.
PHYSICA B-CONDENSED MATTER, cilt.479, ss.107-111, 2015 (SCI-Expanded)
- LXXVI. **The phase diagrams of the +/- K model on the Bethe lattice**
Albayrak E.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, cilt.386, ss.20-24, 2015 (SCI-Expanded)
- LXXVII. **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)
- LXXVIII. **+/- J model on the Bethe lattice with crystal field interaction**
Albayrak E.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, cilt.355, ss.18-21, 2014 (SCI-Expanded)

- LXXIX. **Phase diagrams of the spin-3/2 random transverse crystal field model**
Albayrak E.
PHYSICA SCRIPTA, cilt.89, sa.1, 2014 (SCI-Expanded)
- LXXX. **Phase diagrams of spin-3/2 Ising model in the presence of random crystal field within the effective field theory based on two approximations**
Yigit A., ALBAYRAK E.
CHINESE PHYSICS B, cilt.22, sa.10, 2013 (SCI-Expanded)
- LXXXI. **Mixed spin-1/2 and spin-3/2 Ising model with random crystal field distribution**
Yigit A., ALBAYRAK E.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, cilt.392, sa.19, ss.4216-4221, 2013 (SCI-Expanded)
- LXXXII. **Spin-1 Blume-Capel model with longitudinal random crystal and transverse magnetic fields: A mean-field approach**
Albayrak E.
CHINESE PHYSICS B, cilt.22, sa.7, 2013 (SCI-Expanded)
- LXXXIII. **THE QUANTUM REFRIGERATOR IN A TWO-QUBIT XXZ HEISENBERG MODEL**
Albayrak E.
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- LXXXIV. **The mixed spin-1/2 and spin-1 Blume-Capel model with random crystal field on the Bethe lattice: Two approaches**
Albayrak E.
SOLID STATE COMMUNICATIONS, cilt.159, ss.76-78, 2013 (SCI-Expanded)
- LXXXV. **Bimodal random crystal field distribution effects on the ferrimagnetic mixed spin-1/2 and spin-3/2 Blume-Capel model**
Yigit A., ALBAYRAK E.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, cilt.329, ss.125-128, 2013 (SCI-Expanded)
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