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Kişisel Bilgiler

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Publons / Web Of Science ResearcherID: D-4750-2015

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Yoksis Araştırmacı ID: 21016

Eğitim Bilgileri

Doktora, İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Mühendisliği Bölümü, Türkiye 2002 - 2008

Yüksek Lisans, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (YL) (Tezli), Türkiye 1999 - 2002

Lisans, İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Mühendisliği Bölümü, Türkiye 1994 - 1999

Yaptığı Tezler

Doktora, A study of wave equations in five dimensional spacetimes with computational methods, İstanbul Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Mühendisliği Bölümü, 2008

Yüksek Lisans, Üç boyutlu anti-de sitter uzayında Einstein denklemlerinin skaler alan varlığında çözümleri, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (YL) (Tezli), 2002

Araştırma Alanları

Temel Bilimler, Fizik, Genel Fizik, Fizigin Matematiksel Yöntemleri, Temel Parçacıklar ve Alanlar , Genel alan ve parçacık teorisi

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Solutions of a charged scalar field in five-dimensional helicoid solution with electromagnetic field**
Birkandan T.
General Relativity and Gravitation, cilt.55, sa.8, 2023 (SCI-Expanded)
- II. **A massless scalar particle coupled to the Wahlquist metric**
Birkandan T., Hortaçsu M.
European Physical Journal C, cilt.81, sa.5, 2021 (SCI-Expanded)
- III. **Three-dimensional DKP oscillator in a curved Snyder space**
Hamil B., Merad M., Birkandan T.
International Journal of Modern Physics A, cilt.36, 2021 (SCI-Expanded)

- IV. **Particle creation in the context of the emergent universe**
 Hamil B., Merad M., Birkandan T.
 REVISTA MEXICANA DE FISICA, cilt.67, sa.2, ss.219-225, 2021 (SCI-Expanded)
- V. **Effects of extended uncertainty principle on the relativistic Coulomb potential**
 Hamil B., Merad M., Birkandan T.
 INTERNATIONAL JOURNAL OF MODERN PHYSICS A, cilt.36, sa.3, 2021 (SCI-Expanded)
- VI. **Bound-state solutions of the two-dimensional Dirac equation with Aharonov-Bohm-Coulomb interaction in the presence of extended uncertainty principle**
 Hamil B., Merad M., Birkandan T.
 PHYSICA SCRIPTA, cilt.95, 2020 (SCI-Expanded)
- VII. **The Duffin-Kemmer-Petiau oscillator in the presence of minimal uncertainty in momentum**
 Hamil B., Merad M., Birkandan T.
 PHYSICA SCRIPTA, cilt.95, 2020 (SCI-Expanded)
- VIII. **The Effects of the Modified (Anti-)Snyder Model on the Thermodynamic Properties of an Ideal Gas**
 Hamil B., Merad M., Birkandan T.
 INTERNATIONAL JOURNAL OF THERMOPHYSICS, cilt.41, 2020 (SCI-Expanded)
- IX. **Pair creation in curved Snyder space**
 Hamil B., Merad M., Birkandan T.
 INTERNATIONAL JOURNAL OF MODERN PHYSICS A, cilt.35, 2020 (SCI-Expanded)
- X. **Relativistic oscillators in new type of the extended uncertainty principle**
 Merad A., Aouachria M., Merad M., Birkandan T.
 INTERNATIONAL JOURNAL OF MODERN PHYSICS A, cilt.34, sa.32, 2019 (SCI-Expanded)
- XI. **Applications of the extended uncertainty principle in AdS and dS spaces**
 Hamil B., Merad M., Birkandan T.
 European Physical Journal Plus, cilt.134, sa.6, 2019 (SCI-Expanded)
- XII. **Symbolic and numerical analysis in general relativity with open source computer algebra systems**
 Birkandan T., GÜZELGÜN C., ŞIRİN E., USLU M. C.
 GENERAL RELATIVITY AND GRAVITATION, cilt.51, sa.1, 2019 (SCI-Expanded)
- XIII. **The zero mass limit of Kerr and Kerr-(anti)-de-Sitter space-times: exact solutions and wormholes**
 Birkandan T., Hortacsu M.
 GENERAL RELATIVITY AND GRAVITATION, cilt.50, sa.3, 2018 (SCI-Expanded)
- XIV. **Singular inverse square potential in coordinate space with a minimal length**
 BOUAZIZ D., Birkandan T.
 ANNALS OF PHYSICS, cilt.387, ss.62-74, 2017 (SCI-Expanded)
- XV. **Heun-type solutions for Schwarzschild metric with electromagnetic fields**
 Birkandan T., Hortacsu M.
 EPL, cilt.119, sa.2, 2017 (SCI-Expanded)
- XVI. **Energy-dependent harmonic oscillator in noncommutative space**
 BENCHIKHA A., MERAD M., Birkandan T.
 MODERN PHYSICS LETTERS A, cilt.32, sa.20, 2017 (SCI-Expanded)
- XVII. **Duffin-Kemmer-Petiau oscillator with Snyder-de Sitter algebra**
 FALEK M., MERAD M., Birkandan T.
 JOURNAL OF MATHEMATICAL PHYSICS, cilt.58, sa.2, 2017 (SCI-Expanded)
- XVIII. **Quantum field theory applications of heun type functions**
 Birkandan T., Hortaş M.
 Reports on Mathematical Physics, cilt.79, sa.1, ss.81-87, 2017 (SCI-Expanded)
- XIX. **An analysis of the wave equation for the U(1)(2) gauged supergravity black hole**
 Birkandan T., CVETIC M.
 CLASSICAL AND QUANTUM GRAVITY, cilt.32, sa.8, 2015 (SCI-Expanded)
- XX. **Wave equation for the Wu black hole**
 Birkandan T., CVETIC M.

- JOURNAL OF HIGH ENERGY PHYSICS, sa.9, 2014 (SCI-Expanded)
- XXI. **Addendum to: Conformal invariance and near-extreme rotating AdS black holes**
Birkandan T., Cvetic M.
PHYSICAL REVIEW D, cilt.90, sa.6, 2014 (SCI-Expanded)
- XXII. **Conformal invariance and near-extreme rotating AdS black holes**
Birkandan T., Cvetic M.
PHYSICAL REVIEW D, cilt.84, sa.4, 2011 (SCI-Expanded)
- XXIII. **A Newman-Penrose calculator for instanton metrics**
Birkandan T.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, cilt.19, sa.8, ss.1277-1290, 2008 (SCI-Expanded)
- XXIV. **Comment on "Dirac equation in the background of the Nutku helicoid metric" [J. Math. Phys. 48, 092301 (2007)]**
Birkandan T., Hortacsu M.
JOURNAL OF MATHEMATICAL PHYSICS, cilt.49, sa.5, 2008 (SCI-Expanded)
- XXV. **Dirac equation in the background of the Nutku helicoid metric**
Birkandan T., HORTACSU M.
JOURNAL OF MATHEMATICAL PHYSICS, cilt.48, sa.9, 2007 (SCI-Expanded)
- XXVI. **Examples of Heun and Mathieu functions as solutions of wave equations in curved spaces**
Birkandan T., HORTACSU M.
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, cilt.40, sa.5, ss.1105-1116, 2007 (SCI-Expanded)
- XXVII. **Three dimensional gravity in the presence of scalar fields**
Birkandan T., HORTACSU M.
GENERAL RELATIVITY AND GRAVITATION, cilt.35, sa.3, ss.457-466, 2003 (SCI-Expanded)

Düger Dergilerde Yayınlanan Makaleler

- I. **Symbolic Analysis of Second-order Ordinary Differential Equations with Polynomial Coefficients**
BİRKANDAN T.
Turkish Journal of Mathematics and Computer Science, cilt.14, sa.2, ss.281-291, 2022 (Hakemli Dergi)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Computations of general Heun functions from their integral series representations**
Birkandan T., Giscard P. L., Tamar A.
Days on Diffraction 2021, Sankt-Peterburg, Rusya, 31 Mayıs - 04 Haziran 2021, ss.12-18
- II. **Specific form of the wave equation for nonextremal black holes**
BİRKANDAN T., CVETIC M.
The Fourteenth Marcel Grossmann Meeting, University of Rome "La Sapienza", Italy, İtalya, 12 - 18 Temmuz 2015
- III. **Physical problems admitting Heun-to-hypergeometric reduction**
AYDINER P., Birkandan T.
International Conference Days on Diffraction, St Petersburg, Rusya, 25 - 29 Mayıs 2015, ss.27-32
- IV. **EXAMPLES OF HEUN AND MATHIEU FUNCTIONS AS SOLUTIONS OF WAVE EQUATIONS IN CURVED SPACES**
Birkandan T., Hortacsu M.
30th Spanish Relativity Conference, Tenerife, İspanya, 10 - 14 Eylül 2007, cilt.30, ss.265-268

Desteklenen Projeler

Birkandan T., Yükseköğretim Kurumları Destekli Proje, EKSTREMAL OLMAYAN KARA DELİKLERDE DENKLEMİNİN ÖZEL DURUMU, 2015 - 2018

Birkandan T., Yükseköğretim Kurumları Destekli Proje, Heun'dan Hipergeometriğe İndirgenme Durumlarını İçeren Fiziksel Problemler, 2015 - 2018

Birkandan T., Yükseköğretim Kurumları Destekli Proje, Hesaplama Yöntemlerle genel Görellilik ve Kuantum Alan Kuramı Uygulamaları, 2013 - 2015

Bilimsel Hakemlikler

Open Physics, SCI Kapsamındaki Dergi, Ağustos 2017

Open Physics, SCI Kapsamındaki Dergi, Eylül 2016

Dokuz Eylül Üniversitesi Fen ve Mühendislik Dergisi, Hakemli Bilimsel Dergi, Ağustos 2016

Open Physics, SCI Kapsamındaki Dergi, Kasım 2015

Advances in Mathematics, SCI Kapsamındaki Dergi, Haziran 2013

Central European Journal of Physics, SCI Kapsamındaki Dergi, Ocak 2012

Europhysics Letters (EPL), SCI Kapsamındaki Dergi, Kasım 2011

Journal of Mathematical Physics, SCI Kapsamındaki Dergi, Mart 2008

Metrikler

Yayın: 32

Atıf (WoS): 127

Atıf (Scopus): 130

H-İndeks (WoS): 7

H-İndeks (Scopus): 7