

# **Prof. HAKAN ÇİFTÇİ**

## **Personal Information**

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## **International Researcher IDs**

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## **Education Information**

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 1995 - 2000

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 1993 - 1995

Undergraduate, Gazi University, Gazi Eğitim Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, Turkey 1989 - 1993

## **Dissertations**

Postgraduate, Baryon Özelliklerinin Relativistik ve Bağımsız Kuark Modeli Çerçeveşibde İncelenmesi, Gazi University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2020

Doctorate, Bağımsız kuark modelinde nezon bozunumları, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2000

## **Research Areas**

Natural Sciences

## **Academic Titles / Tasks**

Professor, Gazi University, Fen Fakültesi, Fizik Bölümü, 2012 - Continues

## **Advising Theses**

ÇİFTÇİ H., TIX (X= Br, I, N, Sb, Se) bileşiklerinin yapısal, elastik, elektronik, termodinamik ve optik özelliklerinin ab initio yöntemle incelenmesi, Postgraduate, N.KAHVECİ(Student), 2011

ÇİFTÇİ H., Special type second degree of differential equation polynomial solutions, Postgraduate, E.DOĞU(Student), 2011

ÇİFTÇİ H., Special type second degree of differential equation polynomial solutions, Postgraduate, E.Doğu(Student), 2011  
ÇİFTÇİ H., The investigation the structural, elastic, electronic, thermodynamic and optic properties of TIX (X= Br, I, N, Sb, Se) compounds by ab initio method, Postgraduate, N.Kahveci(Student), 2011

ÇİFTÇİ H., Kuantum mekaniğinde cebirsel yöntemler, Postgraduate, S.AYDIN(Student), 2009

ÇİFTÇİ H., ALGEBRAIC METHODS IN QUANTUM MECHANICS, Postgraduate, S.AYDIN(Student), 2009

ÇİFTÇİ H., Asimptotik iterasyon metodu ile perturbasyon hesaplamaları, Postgraduate, Z.BUHUR(Student), 2008

ÇİFTÇİ H., SOLUTION TO SCHRÖDINGER EQUATION FOR PARTICULAR POTENTIAL CLASS BY THE ASYMPTOTIC ITERATION METHOD, Postgraduate, H.USLU(Student), 2008

ÇİFTÇİ H., PERTURBATION CALCULATIONS BY THE ASYMPTOTIC ITERATION METHOD, Postgraduate, Z.BUHUR(Student), 2008

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

- I. A new family of two-variable polynomials based on hermite polynomials  
Erkus-Duman E., ÇİFTÇİ H.  
MATHEMATICA SLOVACA, vol.72, no.4, pp.885-898, 2022 (SCI-Expanded)
- II. The confined random walks in two-dimensional bounded domain  
Ciftci H., ÇAKMAK M.  
EPL, vol.87, no.6, 2009 (SCI-Expanded)
- III. Anharmonic oscillator energies by the asymptotic iteration method  
Ciftci H.  
MODERN PHYSICS LETTERS A, vol.23, no.4, pp.261-267, 2008 (SCI-Expanded)
- IV. Study of a bounded oscillator problem in one dimension  
Ciftci H., Ateser E.  
PHYSICA SCRIPTA, vol.76, no.5, pp.517-520, 2007 (SCI-Expanded)
- V. Solutions for certain classes of the Riccati differential equation  
Saad N., Hall R. L., Ciftci H.  
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, vol.40, no.35, pp.10903-10914, 2007 (SCI-Expanded)
- VI. A study of the Schrodinger equation with the linear potential by the asymptotic iteration method in 3D  
Ateser E., Ciftci H., Ugurlu M.  
CHINESE JOURNAL OF PHYSICS, vol.45, no.3, pp.346-351, 2007 (SCI-Expanded)
- VII. Exact analytical solutions to the Kratzer potential by the asymptotic iteration method  
Bayrak O., Boztosun I., Ciftci H.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.107, no.3, pp.540-544, 2007 (SCI-Expanded)
- VIII. Alternative perturbation expansions for partially solvable quantum-mechanical models  
Fernandez F. M., Ciftci H.  
PHYSICS LETTERS A, vol.359, no.4, pp.272-274, 2006 (SCI-Expanded)
- IX. Criterion for polynomial solutions to a class of linear differential equations of second order  
Saad N., Hall R. L., Ciftci H.  
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.39, no.43, pp.13445-13454, 2006 (SCI-Expanded)
- X. Sextic anharmonic oscillators and orthogonal polynomials  
Saad N., Hall R. L., Ciftci H.  
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.39, no.26, pp.8477-8486, 2006 (SCI-Expanded)
- XI. Study of a class of non-polynomial oscillator potentials  
Saad N., Hall R., Ciftci H.  
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.39, no.24, pp.7745-7756, 2006 (SCI-Expanded)
- XII. Iterative solutions to the Dirac equation  
Ciftci H., Hall R., Saad N.  
PHYSICAL REVIEW A, vol.72, no.2, 2005 (SCI-Expanded)
- XIII. Perturbation theory in a framework of iteration methods  
Ciftci H., Hall R., Saad N.  
PHYSICS LETTERS A, vol.340, pp.388-396, 2005 (SCI-Expanded)
- XIV. Construction of exact solutions to eigenvalue problems by the asymptotic iteration method  
Ciftci H., Hall R., Saad N.

- JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.38, no.5, pp.1147-1155, 2005 (SCI-Expanded)
- XV. **Asymptotic iteration method for eigenvalue problems**  
Ciftci H., Hall R., Saad N.  
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.36, no.47, pp.11807-11816, 2003 (SCI-Expanded)
- XVI. **Coulomb plus power-law potentials in quantum mechanics**  
Ciftci H., Hall R., Kataleh Q.  
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.36, no.25, pp.7001-7007, 2003 (SCI-Expanded)
- XVII. **The power law and the logarithmic potentials**  
Ciftci H., Ateser E., Koru H.  
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.36, no.13, pp.3821-3828, 2003 (SCI-Expanded)
- XVIII. **New hadrons formed by the fourth SM family and iso-singlet quarks**  
Ciftci H., Sultansoy S.  
MODERN PHYSICS LETTERS A, vol.18, no.12, pp.859-865, 2003 (SCI-Expanded)
- XIX. **Radiative decay of light and heavy mesons in an independent quark model**  
Ciftci H., Koru H.  
MODERN PHYSICS LETTERS A, vol.16, no.27, pp.1785-1794, 2001 (SCI-Expanded)
- XX. **Meson decay in an independent quark model**  
Ciftci H., Koru H.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS E-NUCLEAR PHYSICS, vol.9, no.5, pp.407-415, 2000 (SCI-Expanded)
- XXI. **Large-N expansion approach to a relativistic potential model of quarkonia**  
Akcay H., Ciftci H.  
JOURNAL OF PHYSICS G-NUCLEAR AND PARTICLE PHYSICS, vol.22, no.4, pp.455-460, 1996 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Fibonacci and Lucas Differential Equations**  
Erkuş-Duman E., Çiftci H.  
Application and applied mathematics, vol.13, no.2, pp.756-763, 2018 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **TORSIONAL ANALYSIS OF BIPYRIMIDINE MOLECULES**  
ÇİFTÇİ H., BAHAT M., ÖZBAY A.  
INTERNATIONAL CONFERENCEON ENGINEERING TECHNOLOGIES, 7 - 09 August 2017
- II. **Simple analytical formula for schrodinger equation with linear potential in 3D**  
Ugurlu M., Ateser E., ÇİFTÇİ H.  
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.707

## Supported Projects

- ÇİFTÇİ H., Project Supported by Higher Education Institutions, Kuarkonium İçin Uygun Bir Potansiyelin Belirlenmesi ve Parçacık Fiziğine Uygulanması, 2008 - 2010
- ÇİFTÇİ H., Project Supported by Higher Education Institutions, Schrödinger Denkleminin Bazı Potansiyel Sınıfları İçin Asimptotik İterasyon Metodu ile Çözümü, 2007 - 2010

## Metrics

Publication: 36  
Citation (WoS): 1300  
Citation (Scopus): 1338  
H-Index (WoS): 14  
H-Index (Scopus): 14

### **Non Academic Experience**

Gazi Üniversitesi