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Kişisel Bilgiler

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Bütünleşik Doktora, University of Warwick, Fizik, İngiltere 1988 - 1993
Lisans, Ondokuz Mayıs Üniversitesi, Eğitim Fakültesi, Matematik ve Fen Bilimleri Eğitimi Bölümü, Türkiye 1982 - 1986

Yabancı Diller

İngilizce, B2 Orta Üstü

Araştırma Alanları

Temel Bilimler

Akademik Unvanlar / Görevler

Prof. Dr., Ondokuz Mayıs Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2008 - Devam Ediyor
Doç. Dr., Ondokuz Mayıs Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, 1998 - 2008
Ondokuz Mayıs Üniversitesi, Eğitim Fakültesi, Matematik ve Fen Bilimleri Eğitimi Bölümü, 1993 - 1998
Araştırma Görevlisi, Ondokuz Mayıs Üniversitesi, Eğitim Fakültesi, Matematik ve Fen Bilimleri Eğitimi Bölümü, 1987 - 1993

Akademik İdari Deneyim

Ondokuz Mayıs Üniversitesi, 2008 - 2009

Verdiği Dersler

ATOM VE MOLEKÜL FİZİĞİ I, Lisans, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
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KUANTUM BİLGİ TEORİSİ, Yüksek Lisans, 2014 - 2015, 2012 - 2013, 2011 - 2012, 2009 - 2010
SAĞLIK FİZİĞİ, Lisans, 2014 - 2015, 2013 - 2014, 2012 - 2013
Biyifizik, Lisans, 2011 - 2012
Modern Fizik, Lisans, 2010 - 2011, 2009 - 2010
Genel Fizik, Lisans, 2009 - 2010

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

I. **Quantum coherence resourced by the strong nuclear quadrupolar interaction**
Cakmak S., Gençten A., ALTINTAŞ F.
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II. **Algorithmic quantum heat engines**
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III. **Construction of Two-Ququart Quantum Entanglement by Using Magnetic Resonance Selective Pulse Sequences**
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IV. **Irreversible work and internal friction in a quantum Otto cycle of a single arbitrary spin**
Cakmak S., Altintas F., Gençten A., Mustecaplioglu O. E.
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V. **Construction of four-qubit quantum entanglement for SI (S=3/2, I=3/2) spin system**
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VII. **CONSTRUCTION AND APPLICATION OF FOUR-QUBIT SWAP LOGIC GATE IN NMR QUANTUM COMPUTING**
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VIII. **Spectral editing with 2D E-HMQC NMR spectroscopy for CDn groups: A theoretical study**
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IX. **A Complete Product Operator Theory for IS (I=1, S=1) Spin System and Application to 3D HMQC-COSY NMR Experiment**
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X. **A theoretical investigation of 2D MAXY-JRES NMR spectroscopy of CDnCDm groups**
Saka I., Gençten A.

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XI. **A theoretical application of MAXY NMR for CDn groups**
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XII. **Product operator theory of 2D MAXY-HMQC NMR spectroscopy for CDn groups**
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XIII. **A complete product operator theory for IS (I = (1)/(2), S=1) spin system and application to DEPT-HMQC NMR experiment**
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XIV. **Product operator descriptions of INEPT and RINEPT NMR spectroscopies for ISn (I=1/2, S=3/2) spin systems**
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XV. **A theoretical investigation of distortionless enhancement by polarization transfer and subspectral editing with a multiple quantum trap NMR spectroscopy for CXn groups**
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Köksal F., Kartal I., Gençten A.
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Diğer Dergilerde Yayınlanan Makaleler

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Şahin Ö., GENÇTEN A.
Journal of Applied Mathematics and Physics, cilt.5, sa.12, ss.2320-2325, 2017 (Hakemli Dergi)

II. **Quantum Superdense Coding for Three and Four Qubit Entangled States**
GÜN A., GENÇTEN A.
ADVANCED SCIENCE, ENGINEERING AND MEDICINE, cilt.5, sa.11, ss.1209-1215, 2013 (Hakemli Dergi)

III. **Quantum Simulation of 2p Electronic Hamiltonian in Molecular Ethylene by Using an NMR Quantum Computer**
TÜRKPENÇE D., GENÇTEN A.
Journal of Quantum Information Science, cilt.3, sa.02, ss.78-84, 2013 (Hakemli Dergi)

IV. **2D J INEPT NMR Spectroscopy for CDn Groups A Theoretical Study**
GENÇTEN A., ŞAKA İ.
Journal of Modern Physics, cilt.2, sa.07, ss.719-723, 2011 (Hakemli Dergi)

V. **INEPT NMR Spectroscopy of (NDn)-N-14 groups: product operator theory and simulation**
Türkpençe D., Sekka I., Gençten A.
TURKISH JOURNAL OF PHYSICS, cilt.34, sa.3, ss.139-148, 2010 (ESCI)

VI. **2D MAXY-JRES NMR Spectroscopy of CHnCHm (CA(n)CX(m)) Groups: Product Operator Theory and Simulation**
Saka I., Gumus S., Gençten A.
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VII. **A THEORETICAL INVESTIGATION OF PENDANT 13C NMRSPECTROSCOPY FOR CDn GROUPS**
GENÇTEN A., ŞAKA İ., GÜMÜŞ S.
SDÜ FEN EDEBİYAT FAKÜLTESİ FEN DERGİSİ (E-DERGİ), cilt.1, sa.1-2, ss.42-49, 2006 (Hakemli Dergi)

VIII. **PENDANT C-13 NMR Spectroscopy Applied to CHn Groups**
Gençten A., Saka I., Gumus S.
TURKISH JOURNAL OF PHYSICS, cilt.30, sa.3, ss.149-155, 2006 (ESCI)

IX. **A product operator formalism of 3D J-resolved NMR spectroscopy for ISnKm(I = 1/2, S = 1/2, K = 1/2) spin system**
Tezel Ö., Gençten A.
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X. **An examination of one component model in Zn and Ni doped YBa2Cu3O7-δ**
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XI. **Magic-angle spinning NMR: An experimental approach**
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XII. **NMR evidence for the OT structural transition in YBa2(Cu1-xMx)3O7-δ (M = Co, Al and Ga**
Gencten A., Dupree R., Paul D.
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XIII. **Absence of magnetic pair breaking in Zn-doped YBa2Cu3O7**
Walstedt R., Bell R., Schneemeyer L., Waszczak J., Warren Jr. W., Dupree R., Gencten A.
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Dupree R., Gencten A., Paul D.
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Han Z., Dupree R., Gencten A., Liu R., Edwards P.
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Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

I. **A Comparison Between Two Qubit and Two Ququart Quantum Phase Estimation**
HAMZAÇEBİ M., KURT M., GENÇTEN A.
Turkish Physical Society 39th International Physics Congress, Bodrum, 31 Ağustos - 04 Eylül 2023, cilt.5, ss.31-36

II. **The Constructions of Up and Down Quantum Counter Circuits for Qudit Systems**
KURT M., KALTEHEI A., ÇAKMAK S., GENÇTEN A.
Turkish Physical Society 39th International Physics Congress, Bodrum, Türkiye, 31 Ağustos - 04 Eylül 2023, cilt.5, ss.37-41

III. **CONSTRUCTION OF THE NAND GATE IN QUANTUM COMPUTING SYSTEMS USING QUANTUM FOURIER TRANSFORM**
KURT M., KALTEHEI A., ÇAKMAK S., GENÇTEN A.
3RD INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS, Samsun, Türkiye, 23 - 24 Mart 2023

IV. **A Generalized Quantum Addition Circuit Based on Quantum Fourier Transform**
KURT M., GENÇTEN A.
TURKISH PHYSICAL SOCIETY 37TH INTERNATIONAL PHYSICS CONGRESS, Bodrum/MUĞLA, Türkiye, 01 Eylül 2021, cilt.3, ss.13-17

V. **An Investigation of Quantum Error Correction for Nine Qutrit**
SAID H., GENÇTEN A.
4th International Conference on Physical Chemistry and Functional Materials, Elazığ, Türkiye, 08 Nisan 2021, ss.84-90

VI. **A Simulation of Quantum Fourier Transform for Qudit Systems**
KURT M., GENÇTEN A.
4th International Conference on Physical Chemistry and Functional Materials, Elazığ, Türkiye, 08 Nisan 2021, ss.63-66

VII. **An Investigation of SI (S=5/2, 1=5/2) Spin System as Two Qudit Quantum States**
Turkyolu M., Gençten A.
35th International Physics Congress of the Turkish-Physical-Society (TPS), Bodrum, Türkiye, 4 - 08 Eylül 2019, cilt.2178

VIII. **Development of Some Two and Three Qutrit Quantum Logic Gates**
Terzi S., Gençten A.
35th International Physics Congress of the Turkish-Physical-Society (TPS), Bodrum, Türkiye, 4 - 08 Eylül 2019, cilt.2178

IX. **Multivalued Quantum Logic Circuits: Some New Suggestions and Applications**
KARAKAŞ M. D., GENÇTEN A.
1. INTERNATIONAL TECHNOLOGICAL SCIENCES AND DESIGN SYMPOSIUM, Giresun, Türkiye, 27 - 29 Haziran 2018,

ss.445-452

X. **Construction of Quantum Teleportation Circuit for Qudits**
KARAKAŞ M. D., GENÇTEN A.
1. INTERNATIONAL TECHNOLOGICAL SCIENCES AND DESIGN SYMPOSIUM, Giresun, Türkiye, 27 - 29 Haziran 2018

XI. **Implementations of Some Quantum Logic Gates by Using Magnetic Resonance Selective Pulse Sequences**
GENÇTEN A., KARAKAŞ M. D.
International Conference on Physical Chemistry and Functional Materials(PCFM'18), Elazığ, Türkiye, 19 - 21 Haziran 2018

XII. **Construction and Application of SWAP Logic Gate for Two Ququart States**
GENÇTEN A., KARAKAŞ M. D.
International Conference on Physical Chemistry and Functional Materials(PCFM'18), Elazığ, Türkiye, 19 - 21 Haziran 2018

XIII. **A Single Arbitrary Driven Spin as a Quantum Otto Engine: The Role Of Internal Friction**
ÇAKMAK S., ALTINTAŞ F., MÜSTECAPLIOĞLU Ö. E., GENÇTEN A.
Kuantum Optiği ve Bilişim Toplantısı, İstanbul, Türkiye, 1 - 02 Şubat 2018

XIV. **A Generalization of Superdense Coding for Two Qudit States**
KARAKAŞ M. D., GENÇTEN A.
Turkish Physical Society 33rd International Physics Congress, Bodrum/ MUĞLA, Türkiye, 6 - 10 Eylül 2017, ss.216

XV. **Redefinition of Some Quantum Logic Gates by Using the Direct Sum Algebra**
Çorbacı S., KARAKAŞ M. D., GENÇTEN A.
Turkish Physical Society 33rd International Physics Congress, Bodrum/ MUĞLA, Türkiye, 6 - 10 Eylül 2017, ss.260

XVI. **The Analysis of Quantum Qutrit Entanglements in a Qutrit Based Hyper-Sphere in Terms of Gluing and Combining Products**
Duran V., Gençten A.
9th International Physics Conference of the Balkan-Physical-Union (BPU), İstanbul, Türkiye, 24 - 27 Ağustos 2015, cilt.1722

XVII. **An investigation for quantum qutrit entanglements through colour wheel compass**
Duran V., Gençten A.
International Conference on Quantum Science and Applications (ICQSA), Eskişehir, Türkiye, 25 - 27 Mayıs 2016, cilt.766

XVIII. **Construction of two qutrit entanglement by using magnetic resonance selective pulse sequences**
Corbaci S., Karakas M. D., Gençten A.
International Conference on Quantum Science and Applications (ICQSA), Eskişehir, Türkiye, 25 - 27 Mayıs 2016, cilt.766