

Prof. Azmi Ali ALTINTAŞ



Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: F-1595-2014

ScopusID: 14029658800

Yoksis Researcher ID: TBTK-0010-5822



Education Information

Doctorate, Bogazici University, Institute Of Science, Turkey 2004 - 2009

Postgraduate, Bogazici University, Institute Of Science, Turkey 2000 - 2004

Undergraduate, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, Turkey 1996 - 2000

Foreign Languages

English, C1 Advanced

Research Areas

General Physics, Quantum Mechanics, Fields Theory and Relativity, Natural Sciences

Academic Titles / Tasks

Associate Professor, Istanbul University, Faculty of Science, Department of Physics, 2021 - Continues

Associate Professor, Istanbul Okan University, Faculty Of Engineering-Architecture, 2015 - 2021

Assistant Professor, Istanbul Okan University, Faculty Of Engineering-Architecture, 2013 - 2015

Assistant Professor, Istanbul Okan University, Faculty Of Engineering-Architecture, 2011 - 2013

Assistant Professor, Istanbul Okan University, Faculty Of Engineering-Architecture, 2009 - 2011

Academic and Administrative Experience

Fakülte Kurulu Üyesi, Istanbul Okan University, Faculty Of Engineering-Architecture, 2016 - 2021

Fakülte Yönetim Kurulu Üyesi, Istanbul Okan University, Faculty Of Engineering-Architecture, 2015 - 2021

Courses

Modern Physics, Undergraduate, 2022 - 2023, 2021 - 2022
Calculus 2, Undergraduate, 2022 - 2023, 2021 - 2022
Calculus 1, Undergraduate, 2022 - 2023, 2021 - 2022
Advanced Classical Mechanics, Postgraduate, 2022 - 2023
Electromagnetic Theory, Undergraduate, 2022 - 2023
Physics 1, Undergraduate, 2020 - 2021
Calculus 3, Undergraduate, 2021 - 2022
Physics 2, Undergraduate, 2020 - 2021
Physics Around Us, Undergraduate, 2021 - 2022
Digital Electronic Circuit, Undergraduate, 2020 - 2021
Digital Circuit Design , Undergraduate, 2020 - 2021

Jury Memberships

Post Graduate, Post Graduate, Tekirdağ Namık Kemal Üniversitesi, June, 2022
Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, İstanbul Okan Üniversitesi, January, 2020
Post Graduate, Post Graduate, Trakya Üniversitesi, October, 2017
Doctorate, Doctorate, Eskişehir Osmangazi Üniversitesi, December, 2016
Doctoral Examination, Doctoral Examination, İstanbul Üniversitesi, December, 2016
Post Graduate, Post Graduate, Trakya Üniversitesi, September, 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **One-dimensional Infinite Square Well Problem via Two Parameter Deformed Algebra**
Arikan A. S., ALTINTAŞ A. A., Yilmaz Y.
International Journal of Theoretical Physics, vol.63, no.3, 2024 (SCI-Expanded)
- II. **The Predictability of the 30 October 2020 İzmir-Samos Tsunami Hydrodynamics and Enhancement of Its Early Warning Time by LSTM Deep Learning Network**
Alan A. R., Bayındır C., Ozaydin F., ALTINTAŞ A. A.
Water (Switzerland), vol.15, no.23, 2023 (SCI-Expanded)
- III. **Superactivating Bound Entanglement in Quantum Networks via Quantum Zeno Dynamics and a Novel Algorithm for Optimized Zeno Evolution**
Ozaydin F., Bayrakci V., ALTINTAŞ A. A., Bayındır C.
Applied Sciences (Switzerland), vol.13, no.2, 2023 (SCI-Expanded)
- IV. **Petviashvili Method for the Fractional Schrödinger Equation**
Bayındır C., Farazande S., ALTINTAŞ A. A., Ozaydin F.
Fractal and Fractional, vol.7, no.1, 2023 (SCI-Expanded)
- V. **Prisoners' Dilemma in a Spatially Separated System Based on Spin-Photon Interactions**
Altintas A. A., Ozaydin F., Bayindir C., Bayrakci V.
PHOTONICS, vol.9, no.9, 2022 (SCI-Expanded)
- VI. **Nonlocal activation of bound entanglement via local quantum Zeno dynamics**
Ozaydin F., Bayındır C., ALTINTAŞ A. A., Yesilyurt C.
PHYSICAL REVIEW A, vol.105, no.2, 2022 (SCI-Expanded)
- VII. **Self-localized solitons of a q-deformed quantum system**
Bayındır C., Altintas A. A., Ozaydin F.
COMMUNICATIONS IN NONLINEAR SCIENCE AND NUMERICAL SIMULATION, vol.92, 2021 (SCI-Expanded)
- VIII. **q-Deformed three-level quantum logic**
Altintas A. A., Ozaydin F., Bayındır C.

QUANTUM INFORMATION PROCESSING, vol.19, no.8, 2020 (SCI-Expanded)

- IX. **Parameter estimation with Dzyaloshinskii-Moriya interaction under external magnetic fields**
Ozaydin F., Altintas A. A.
OPTICAL AND QUANTUM ELECTRONICS, vol.52, no.2, 2020 (SCI-Expanded)
- X. **Deterministic local doubling of W states**
Yeşilyurt C., Buğu S., Özaydın F., Altıntaş A. A., Tame M., Yang L., Özdemir Ş. K.
OPTICA, vol.33, pp.2313-2319, 2016 (SCI-Expanded)
- XI. **A novel approach to the systematization of alpha-decaying nuclei, based on shell structures**
Yarman T., Zaim N., Susam L., Kholmetskii A., Altıntaş A. A., Arik M., Özaydın F.
European Physical Journal A, vol.52, pp.1-16, 2016 (SCI-Expanded)
- XII. **Quantum Fisher information of an open and noisy system in the steady state**
Altintas A. A.
ANNALS OF PHYSICS, vol.367, pp.192-198, 2016 (SCI-Expanded)
- XIII. **Quantum Metrology: Surpassing the shot-noise limit with Dzyaloshinskii-Moriya interaction**
Ozaydin F., Altintas A. A.
SCIENTIFIC REPORTS, vol.5, 2015 (SCI-Expanded)
- XIV. **An Optical Setup for Deterministic Creation of Four Partite W state**
Yesilyurt C., Bugu S., Diker F., Altintas A. A., Ozaydin F.
ACTA PHYSICA POLONICA A, vol.127, no.4, pp.1230-1232, 2015 (SCI-Expanded)
- XV. **Quantum Fisher Information of Bipartitions of W States**
Ozaydin F., Altintas A. A., Yesilyurt C., Bugu S., Erol V.
ACTA PHYSICA POLONICA A, vol.127, no.4, pp.1233-1235, 2015 (SCI-Expanded)
- XVI. **Quantum Fisher Information of Several Qubits in the Superposition of A GHZ and two W States with Arbitrary Relative Phase**
Özaydın F., Altıntaş A. A., Buğu S., Yeşilyurt C., Arik M.
International Journal Of Theoretical Physics, vol.53, pp.3219-3225, 2014 (SCI-Expanded)
- XVII. **Analysis of Entanglement Measures and LOCC Maximized Quantum Fisher Information of General Two Qubit Systems**
Erol V., Ozaydin F., Altintas A. A.
SCIENTIFIC REPORTS, vol.4, 2014 (SCI-Expanded)
- XVIII. **Constructing quantum logic gates using q-deformed harmonic oscillator algebras**
Altıntaş A. A., Özaydın F., Yeşilyurt C., Buğu S., Arik M.
Quantum Information Processing, vol.13, pp.1035-1044, 2014 (SCI-Expanded)
- XIX. **Fusing multiple W states simultaneously with a Fredkin gate**
Özaydın F., Bugu S., Yeşilyurt C., Altıntaş A. A., Tame M., Özdemir Ş. K.
PHYSICAL REVIEW A, vol.89, pp.1-7, 2014 (SCI-Expanded)
- XX. **Behavior of Quantum Fisher Information of Bell Pairs under Decoherence Channels**
Ozaydin F., Altintas A. A., Bugu S., Yesilyurt C.
ACTA PHYSICA POLONICA A, vol.125, no.2, pp.606-607, 2014 (SCI-Expanded)
- XXI. **Alpha Head on Collision with a Fixed Gold Nucleus, Taking into Account the Relativistic Rest Mass Variation as Implied by Mass-Energy Equivalence**
Yarman T., Arik M., Kholmetskii A., Altintas A. A., Ozaydin F.
ACTA PHYSICA POLONICA A, vol.125, no.2, pp.618-619, 2014 (SCI-Expanded)
- XXII. **Quantum Fisher Information of N Particles in the Superposition of W and GHZ States**
Ozaydin F., Altintas A. A., Bugu S., Yesilyurt C.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.52, no.9, pp.2977-2980, 2013 (SCI-Expanded)
- XXIII. **Inhomogeneous Quantum Invariance Group of Multi-Dimensional Multi-parameter Deformed Boson Algebra**
Altintas A. A., Arik M., Arikan A. S., Dil E.
CHINESE PHYSICS LETTERS, vol.29, no.1, 2012 (SCI-Expanded)
- XXIV. **THE INHOMOGENEOUS INVARIANCE QUANTUM GROUP OF Q-DEFORMED BOSON ALGEBRA WITH**

CONTINUOUS PARAMETERS

- Altintas A. A., Arik M., Arikan A. S.
JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS, vol.18, no.1, pp.121-125, 2011 (SCI-Expanded)
- XXV. **The multi-dimensional q-deformed bosonic Newton oscillator and its inhomogeneous quantum invariance group**
Altintas A. A., Arik M., Arikan A. S.
CENTRAL EUROPEAN JOURNAL OF PHYSICS, vol.8, no.5, pp.819-824, 2010 (SCI-Expanded)
- XXVI. **Development of large size Micromegas detector for the upgrade of the ATLAS Muon system**
Alexopoulos T., Altintas A. A., Alviggi M., Arik M., Cetin S. A., Chernyatine V., Cheu E., Della Volpe D., Dris M., Fassouliotis D., et al.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.617, no.1-3, pp.161-165, 2010 (SCI-Expanded)
- XXVII. **The Inhomogeneous Quantum Invariance Group of The Two Parameter Deformed Boson Algebra**
Alim H., Altintas A. A., Arik M., Arikan A. S.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.49, no.3, pp.633-643, 2010 (SCI-Expanded)
- XXVIII. **The inhomogeneous quantum invariance group of the multi-dimensional q-deformed boson algebra**
Altintas A. A., Arik M., Arikan A. S.
CENTRAL EUROPEAN JOURNAL OF PHYSICS, vol.8, no.1, pp.131-134, 2010 (SCI-Expanded)
- XXIX. **The ATLAS muon Micromegas R&D project: towards large-size chambers for the s-LHC**
Alexopoulos T., Altintas A. A., Alviggi M., Arik M., Cetin S. A., Chernyatine V., Cheu E., Della Volpe D., Dris M., Fassouliotis D., et al.
JOURNAL OF INSTRUMENTATION, vol.4, 2009 (SCI-Expanded)
- XXX. **THE INHOMOGENEOUS QUANTUM INVARIANCE GROUP OF q-DEFORMED BOSON ALGEBRA**
Altintas A. A., Arik M., Arikan A. S.
MODERN PHYSICS LETTERS A, vol.24, no.38, pp.3137-3142, 2009 (SCI-Expanded)
- XXXI. **The Inhomogeneous Invariance Quantum Group of Particle Algebras with Continuous Parameters**
Altintas A. A., Arik M.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.48, no.5, pp.1534-1538, 2009 (SCI-Expanded)
- XXXII. **The inhomogeneous invariance quantum supergroup of supersymmetry algebra**
Altintas A. A., Arik M.
PHYSICS LETTERS A, vol.372, no.38, pp.5955-5958, 2008 (SCI-Expanded)
- XXXIII. **In homogeneous quantum group generalization of $IO(2n, c)$ and $ISp(2n, c)$**
Altintas A. A., Arik M.
MODERN PHYSICS LETTERS A, vol.23, no.8, pp.617-622, 2008 (SCI-Expanded)
- XXXIV. **The inhomogeneous quantum invariance group of commuting fermions**
Altintas A. A., Arik M.
CENTRAL EUROPEAN JOURNAL OF PHYSICS, vol.5, no.1, pp.70-82, 2007 (SCI-Expanded)
- XXXV. **Quantum groups of fermionic algebras**
Altintas A. A.
CZECHOSLOVAK JOURNAL OF PHYSICS, vol.56, no.10-11, pp.1069-1074, 2006 (SCI-Expanded)
- XXXVI. **On unitary transformations of orthofermion algebra that form a quantum group**
Altintas A. A., Arik M., Atakishiyev N. M.
MODERN PHYSICS LETTERS A, vol.21, no.18, pp.1463-1466, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. **Engineering Four-Qubit Fuel States for Protecting Quantum Thermalization Machine from Decoherence**
Ozaydin F., Sarkar R., Bayrakci V., Bayındır C., ALTINTAŞ A. A., Müstecaplıoğlu Ö. E.
Information (Switzerland), vol.15, no.1, 2024 (ESCI)

II. GENERALIZED LORENTZ GROUP OF SPACE-TIME TRANSFORMATIONS

Yarman T., Altıntaş A. A., Kholmetskii A., Arik M., B. Marchal C., Yarman O. U., Özaydin F.

TWMS JOURNAL OF APPLIED AND ENGINEERING MATHEMATICS, vol.10, no.4, pp.987-1008, 2020 (Peer-Reviewed Journal)

Books & Book Chapters

I. Mühendislik Fiziği-2

YARMAN N. T., ARIK M., ALTINTAŞ A. A., YARMAN B. S. B., ZAİM N., GOLDENBERG E.

İstanbul Okan Üniversitesi, 2018

II. MUHENDISLIK FIZIGI 1

YARMAN N. T., ARIK M., ALTINTAŞ A. A., YARMAN B. S. B., ZAİM N., KAVUK M., GOLDENBERG E.

İstanbul Okan Üniversitesi, 2018

III. Electromagnetic Waves

Altıntaş A. A., Yılmaz A., Bölükbaşı Yalçinkaya O., Ünsalan O., Tavukoğlu Şahin Z., Olgun A. T., Kartal S. (Editor)
in: Physics 2 for Universities, Sehban Kartal, Editor, Nobel Yayın Dağıtım, İstanbul, pp.240-260, 2016

IV. Inductance and circuit oscillations-Alternating Current

Bölükbaşı Yalçinkaya O., Altıntaş A. A., Ünsalan O., Olgun A. T., Tavukoğlu Şahin Z., Kartal S. (Editor)
in: Physics 2 for Universities, Sehban Kartal, Editor, Nobel Yayınevi, İstanbul, pp.208-239, 2016

Refereed Congress / Symposium Publications in Proceedings

I. The Energy probability distribution of quantum levels of a particle imprisoned in a three dimensional box

Yarman T., AKKUŞ B., Arik M., Marchal C., Cokcoskun S., Kholmetskii A., YARMAN O. U., ZAİM N., ALTINTAŞ A. A., Özaydin F.

12th International Symposium on the Vigier Centenary 3rd Regime Natural Science Toward a Physics of the Observer: Honouring Noted Mathematical Physicist Jean-Pierre Vigier, Vigier 2021, Utah, United States Of America, 20 - 23 September 2021, vol.2197

II. Quantum Fisher Information of an Open and Noisy System in the Steady State

Altintas A. A.

International Conference on Quantum Science and Applications (ICQSA), Eskişehir, Turkey, 25 - 27 May 2016, vol.766

III. Analysis of Negativity and Relative Entropy of Entanglement Measures for Qubit-Qutrit Quantum Communication Systems

Erol V., Ozaydin F., Altintas A. A.

23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.116-119

IV. Bosonic Algebras and Their Inhomogeneous Invariance Quantum Groups

Altintas A. A.

7th International Conference on Quantum Theory and Symmetries (QTS), Prague, Czech Republic, 7 - 13 August 2011, vol.343

Scientific Refereeing

SYMMETRY, Journal Indexed in SCI-E, April 2023

SENSORS, Journal Indexed in SCI-E, March 2023

Axioms, Journal Indexed in SCI-E, February 2023

SENSORS, Journal Indexed in SCI-E, December 2022
SENSORS, Journal Indexed in SCI-E, December 2022
ENTROPY, Journal Indexed in SCI-E, November 2022
ENTROPY, Journal Indexed in SCI-E, October 2022
Axioms, Journal Indexed in SCI-E, September 2022
ENTROPY, Journal Indexed in SCI-E, July 2022
SYMMETRY, Journal Indexed in SCI-E, July 2022
SYMMETRY, Journal Indexed in SCI-E, June 2022
ELECTRONICS (Basel), Journal Indexed in SCI-E, June 2022
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, Journal Indexed in SCI-E, May 2022
INFORMATION SCIENCES, Journal Indexed in SCI-E, May 2022
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, Journal Indexed in SCI-E, March 2022
INFORMATION SCIENCES, Journal Indexed in SCI-E, March 2022
INFORMATION SCIENCES, Journal Indexed in SCI-E, March 2022
OPEN PHYSICS, Journal Indexed in SCI-E, March 2022
INFORMATION SCIENCES, Journal Indexed in SCI-E, March 2022
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, Journal Indexed in SCI-E, February 2022
INFORMATION SCIENCES, Journal Indexed in SCI-E, February 2022
QUANTUM INFORMATION PROCESSING, Journal Indexed in SCI-E, February 2022
INFORMATION SCIENCES, Journal Indexed in SCI-E, January 2022
INFORMATION SCIENCES, Journal Indexed in SCI-E, January 2022
QUANTUM INFORMATION PROCESSING, Journal Indexed in SCI-E, January 2022
QUANTUM INFORMATION PROCESSING, SCI Journal, October 2021
QUANTUM INFORMATION PROCESSING, SCI Journal, August 2021
QUANTUM INFORMATION PROCESSING, SCI Journal, July 2021
QUANTUM INFORMATION PROCESSING, SCI Journal, July 2021
QUANTUM INFORMATION PROCESSING, SCI Journal, June 2021
INFORMATION SCIENCES, SCI Journal, April 2021
QUANTUM INFORMATION PROCESSING, SCI Journal, April 2021
QUANTUM INFORMATION PROCESSING, SCI Journal, April 2021
OPEN PHYSICS, Journal Indexed in SCI-E, April 2021
QUANTUM INFORMATION PROCESSING, SCI Journal, March 2021
OPEN PHYSICS, Journal Indexed in SCI-E, March 2021
QUANTUM INFORMATION PROCESSING, SCI Journal, February 2021
INFORMATION SCIENCES, SCI Journal, February 2021
QUANTUM INFORMATION PROCESSING, SCI Journal, January 2021
QUANTUM INFORMATION PROCESSING, SCI Journal, October 2020
INFORMATION SCIENCES, SCI Journal, September 2020
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, SCI Journal, August 2020
MODERN PHYSICS LETTERS B, SCI Journal, July 2020
MODERN PHYSICS LETTERS B, SCI Journal, July 2020
INFORMATION SCIENCES, SCI Journal, June 2020
INFORMATION SCIENCES, SCI Journal, June 2020
PHYSICAL REVIEW A, SCI Journal, June 2020
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION, Journal Indexed in SCI-E, April 2020
INFORMATION SCIENCES, SCI Journal, February 2020
MODERN PHYSICS LETTERS B, SCI Journal, February 2020
MODERN PHYSICS LETTERS B, SCI Journal, February 2020
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, SCI Journal, February 2020
OPEN PHYSICS, Journal Indexed in SCI-E, November 2019
MODERN PHYSICS LETTERS A, SCI Journal, November 2019

INTERNATIONAL JOURNAL OF MODERN PHYSICS B, SCI Journal, August 2019
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, SCI Journal, July 2019
MODERN PHYSICS LETTERS A, SCI Journal, May 2019
MODERN PHYSICS LETTERS A, SCI Journal, March 2019
CANADIAN JOURNAL OF PHYSICS, Journal Indexed in SCI-E, June 2018
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, SCI Journal, May 2018
INFORMATION SCIENCES, SCI Journal, April 2018
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, SCI Journal, March 2018
CANADIAN JOURNAL OF PHYSICS, Journal Indexed in SCI-E, November 2017
QUANTUM INFORMATION PROCESSING, SCI Journal, June 2017
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, SCI Journal, February 2017
QUANTUM INFORMATION PROCESSING, SCI Journal, January 2016
QUANTUM INFORMATION PROCESSING, SCI Journal, August 2015
QUANTUM INFORMATION PROCESSING, SCI Journal, May 2015
QUANTUM INFORMATION PROCESSING, SCI Journal, April 2015

Tasks In Event Organizations

Altıntaş A. A., International Conference on Quantum Science and Applications, Scientific Congress, Turkey, Mayıs 2016

Metrics

Publication: 46
Citation (WoS): 278
Citation (Scopus): 287
H-Index (WoS): 12
H-Index (Scopus): 9

Invited Talks

KOBIT-1, Conference, İzmir Yüksek Teknoloji Enstitüsü, Turkey, February 2017