

Prof. SADİ TURGUT

Personal Information

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Education Information

Doctorate, University Of California, Berkeley, Graduate School, Physics, United States Of America 1989 - 1995

Undergraduate, Middle East Technical University, Fen Edebiyat, Fizik, Turkey 1985 - 1989

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Impurity effects in charge-density-wave systems, University Of California, Berkeley, Graduate School, Physics, 1995

Research Areas

Physics, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electronic transport in condensed matter, Natural Sciences

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, 2014 - Continues

Associate Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2011 - 2014

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2004 - 2011

Lecturer, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 1996 - 2004

Academic and Administrative Experience

Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, 2012 - 2016

Advising Theses

TURGUT S., Bell-like inequalities in quantum information theory, Postgraduate, Z.CAN(Student), 2015

TURGUT S., Discrimination of quantum states under local operations and classical communication, Postgraduate,

Ö.GÜNGÖR(Student), 2015

TURGUT S., Weight discrimination of boolean functions with quantum computation, Doctorate, K.UYANIK(Student), 2014
 TURGUT S., Transformations of entangled mixed states of two qubits, Postgraduate, Ü.ALKUŞ(Student), 2013
 TURGUT S., Landauer erasure for quantum systems, Postgraduate, Ç.AKSAK(Student), 2009
 TURGUT S., Entanglement transformations, Postgraduate, S.KINTAŞ(Student), 2009
 TURGUT S., Quantum decoherence and quantum state diffusion formalism, Postgraduate, C.KADRİ(Student), 2007
 TURGUT S., A continuum model for decoherence in 1D transport, Postgraduate, S.ŞENOZAN(Student), 2005
 TURGUT S., Ratchet effect in mesoscopic systems, Postgraduate, U.YİĞİT(Student), 2005
 TURGUT S., Thermoelectric effects in mesoscopic physics, Doctorate, M.Ali(Student), 2004
 TURGUT S., Thermoelectric effects in mesoscopic physics, Doctorate, M.ALİ(Student), 2004

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Entanglement-assisted state discrimination and entanglement preservation**
 Gungor O., TURGUT S.
 PHYSICAL REVIEW A, vol.94, no.3, 2016 (Journal Indexed in SCI)
- II. **An elementary derivation of the quantum virial theorem from Hellmann-Feynman theorem**
 İPEKOĞLU Y., TURGUT S.
 EUROPEAN JOURNAL OF PHYSICS, vol.37, no.4, 2016 (Journal Indexed in SCI)
- III. **Spin-orbit effects on the nonlinear optical properties of a quantum dot in simultaneous electric and magnetic fields**
 AYTEKİN Ö., TURGUT S., TOMAK M.
 PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.64, pp.29-32, 2014 (Journal Indexed in SCI)
- IV. **Nonlinear optical properties of a Woods-Saxon quantum dot under an electric field**
 AYTEKİN Ö., TURGUT S., Unal V. U. , Aksahin E., TOMAK M.
 PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.54, pp.257-261, 2013 (Journal Indexed in SCI)
- V. **A new sure-success generalization of Grover iteration and its application to weight decision problem of Boolean functions**
 Uyanik K., TURGUT S.
 QUANTUM INFORMATION PROCESSING, vol.12, no.11, pp.3395-3409, 2013 (Journal Indexed in SCI)
- VI. **Nonlinear optical properties of a Poschl-Teller quantum well under electric and magnetic fields**
 AYTEKİN Ö., TURGUT S., Tomak M.
 PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.44, pp.1612-1616, 2012 (Journal Indexed in SCI)
- VII. **Gauge covariance and spin-current conservation in the gauge-field formulation of systems with spin-orbit coupling**
 SHIKAKHWA M., TURGUT S., PAK N. K.
 JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, vol.45, no.10, 2012 (Journal Indexed in SCI)
- VIII. **Environmental effects on the geometric phase**
 GÜNHAN A. C. , TURGUT S., PAK N. K.
 EUROPEAN PHYSICAL JOURNAL D, vol.64, no.1, pp.155-162, 2011 (Journal Indexed in SCI)
- IX. **A continuum model for dephasing in mesoscopic systems**
 Şenozan S., TURGUT S., Tomak M.
 PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.43, no.10, pp.1845-1852, 2011 (Journal Indexed in SCI)
- X. **Heat transfer operators associated with quantum operations**
 AKSAK Ç., TURGUT S.
 JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, vol.44, no.27, 2011 (Journal Indexed in SCI)
- XI. **Derivation of the magnetization current from the non relativistic Pauli equation A comment on The quantum mechanical current of the Pauli equation by Marek Nowakowski Am J Phys 67 10 916 1999**
 SHIKAKHWA M., TURGUT S., PAK N. K.

- American Journal Of Physics, vol.79, pp.1177, 2011 (Journal Indexed in SCI Expanded)
- XII. **Transformations of W-type entangled states**
Kintas S., Turgut S.
JOURNAL OF MATHEMATICAL PHYSICS, vol.51, no.9, 2010 (Journal Indexed in SCI)
- XIII. **Geometric measures of entanglement**
UYANIK K., TURGUT S.
PHYSICAL REVIEW A, vol.81, no.3, 2010 (Journal Indexed in SCI)
- XIV. **Deterministic transformations of multipartite entangled states with tensor rank 2**
TURGUT S., GÜL Y., PAK N. K.
PHYSICAL REVIEW A, vol.81, no.1, 2010 (Journal Indexed in SCI)
- XV. **Relations between entropies produced in nondeterministic thermodynamic processes**
TURGUT S.
PHYSICAL REVIEW E, vol.79, no.4, 2009 (Journal Indexed in SCI)
- XVI. **FIGURE OF MERIT OF ONE DIMENSIONAL RESONANT TRANSMISSION SYSTEMS IN THE QUANTUM REGIME**
ÇİPİLOĞLU M. A. , TURGUT S.
Mathematical Applications, vol.14, pp.13-19, 2009 (Journal Indexed in SCI Expanded)
- XVII. **Catalytic transformations for bipartite pure states**
TURGUT S.
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, vol.40, no.40, pp.12185-12212, 2007 (Journal Indexed in SCI)
- XVIII. **Nonlinear Seebeck and Peltier effects in quantum point contacts**
Çipiloğlu M. A. , TURGUT S., Tomak M.
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.241, no.11, pp.2575-2585, 2004 (Journal Indexed in SCI)
- XIX. **Half plateaus in the linear thermal conductance of quantum point contacts**
ÇİPİLOĞLU M. A. , TURGUT S.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.16, no.21, pp.3671-3679, 2004 (Journal Indexed in SCI)
- XX. **PHENOMENOLOGICAL GINZBURG-LANDAU THEORY OF CHARGE-DENSITY-WAVE SPECTRA**
TURGUT S., Falicov L. M.
PHYSICAL REVIEW B, vol.50, no.12, pp.8221-8229, 1994 (Journal Indexed in SCI)
- XXI. **Theory of impurity induced lattice distortions in the normal phase of charge density wave systems**
TURGUT S., Falicov L. M.
PHYSICAL REVIEW B, vol.49, pp.14043-14046, 1994 (Journal Indexed in SCI Expanded)

Citations

Total Citations (WOS):239

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