

Curriculum Vitae



Personal information

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Nationality Turk

Date of Birth Born March 1st 1965 in Acipayam, Denizli, Turkey.

Degrees

1997	Docent	in Condensed Matter Physics, Ankara University
1993	Ph.D.	Department of Physics, Ankara University Thesis Title: Electron-phonon Interactions and Polarons
1988	Master	Department of Physics, Ankara University Thesis Title: Light Scattering Near the Phase Transitions
1986	B.Sc.	Department of Physics, Ankara University

Work experience

2003 -	Professor at the Department of Physics, Ankara University
1997-2003	Associate Professor at the Department of Physics, Ankara University
1993-1997	Assistant Professor at the Department of Physics, Ankara University
1987-1993	Research Assistant at the Department of Physics, Ankara University

Languages	Speaks Turkish and English
Computer knowledge	Computer languages : Fortran 77 Software packages : Mathematica, Matlab, Maple Text formatting language : LaTeX
Teaching	Taught Mathematical Physics, Theoretical Mechanics, Statistical Physics, Quantum Mechanics and Electrodynamics for both undergraduate and graduate students at the Ankara University
Publications	<p>B. S. Kandemir and N. Gokcek Velocity renormalization in graphene: The role of trigonal warping and electron-phonon coupling effects <i>The International Journal of Modern Physics B</i> 31 ,1750235 (2017)</p> <p>B. S. Kandemir and Umit Ertem Quasinormal modes of BTZ black hole and Hawking-like radiation in graphene <i>Annalen der Physik</i> 529,1600330 (2017)</p> <p>B. S. Kandemir Possible formation of chiral polarons in graphene (vol 25, 025302, 2013) <i>J. Phys.: Condens. Matter</i> 29, 089501 (2017)</p> <p>B. S. Kandemir and D. Akay The effect of electron-A(1g) phonon coupling in spin-orbit-coupled graphene <i>The Philosophical Magazine</i> 97, 2225 (2017)</p> <p>A . Mogulkoc, M. Modarresi B. S. Kandemir et al. Magnetotransport properties of corrugated stanene in the presence of electric modulation and tilted magnetic field <i>Physica Status Solidi (b) – Basic Solid State Physics</i> 253, 300 (2016)</p> <p>B. S. Kandemir and A. Mogulkoc Chiral symmetry breaking by a magnetic field in graphene <i>Physics Letters A</i> 379, 2120 (2015)</p> <p>B. S. Kandemir and D. Akay Tuning the pseudo-Zeeman splitting in graphene cones by magnetic field <i>The Journal of Magnetism and Magnetic Materials</i> 384, 101 (2015)</p> <p>B.S. Kandemir and Emine Aydin Phonon Dispersions of Graphene from Unzipping Carbon Nanotubes <i>J Low Temp Phys</i> 179, 320 (2015)</p> <p>A . Mogulkoc, M. Modarresi and B. S. Kandemir Spin-dependent polaron formation in pristine graphene <i>The European Physical Journal B</i> 88, 49 (2015)</p> <p>M. Modarresi , B.S. Kandemir, M. R. Roknabadi et al. Spin dependent transport through triangular graphene quantum dot in the presence of Rashba type spin-orbit coupling <i>The Journal of Magnetism and Magnetic Materials</i> 367,81 (2014)</p>

- A. Mogulkoc, M. Modarresi, **B. S. Kandemir**, et al.
The role of electron-phonon interaction on the transport properties of graphene based nano-devices
Physica B Condens Matter 446, 85 (2014)
- B. S. Kandemir** and A. Mogulkoc
Zone-boundary phonon induced mini band gap formation in graphene
Solid State Commun. 177, 80 (2014)
- B. S. Kandemir**
Pseudo-Spin-Orbit Coupling in Graphene within Hydrogenic Impurity Context
Journal of the Physical Society of Japan 82, 094706 (2013)
- B. S. Kandemir** and G. Omer
Variational calculations on the energy levels of graphene quantum antidots
Eur. Phys. J. B 86, 299 (2013)
- B. S. Kandemir**
Possible formation of chiral polarons in grapheme
J. Phys.: Condens. Matter 25, 025302 (2013)
- B. S. Kandemir**
Corrugated graphene: effects of in-plane and tilted out-of-plane magnetic fields
Eur. Phys. J. B 78, 393 (2010)
- B. S. Kandemir** and A. Mogulkoc
Variational approach for the effects of periodic modulations on the spectrum of massless Dirac fermion
Eur. Phys. J. B 74, 391 (2010)
- B. S. Kandemir** and A. Mogulkoc
Boundaries of subcritical Coulomb impurity region in gapped graphene
Eur. Phys. J. B 74, 535 (2010)
- B. S. Kandemir**
PHONONS AND ELECTRON-PHONON INTERACTIONS IN SINGLE-WALLED ACHIRAL CARBON NANOTUBES Conference: NATO Advanced Research Workshop on Recent Advances in Nonlinear Dynamics and Complex System Physics Source: COMPLEX PHENOMENA IN NANOSCALE SYSTEMS Book Series: NATO Science for Peace and Security Series B - Physics and Biophysics Pages: 177(2009)
- B. S. Kandemir**
Polaronic effects in one-dimensional quantum antidot arrays
Eur. Phys. J. B 66, 51 (2008)
- B. S. Kandemir** and M. Keskin
Analytical approach to phonons and electron-phonon interactions in single-walled zigzag carbon nanotubes
J. Phys.: Condens. Matter 20, 325222 (2008)
- B. S. Kandemir** and T. Altanhan
Analytical approach to phonons and electron-phonon interactions in single-walled armchair carbon nanotubes
Phys.Rev. B 77, 045426 (2008)

A.Tegmen, T. Altanhan and **B.S. Kandemir**
Two-particle Wigner functions in a one-dimensional Calogero-Sutherland potential
Eur. Phys. J. D 41, 397 (2007)

B.S. Kandemir
Anyon pairing via phonon-mediated interaction
Phys.Rev. B 74 , 075330 (2006)

B.S. Kandemir
Polaronic effects on the energy spectrum of two anyons in a parabolic quantum dot
Phys.Rev. B 73 , 115301 (2006)

B.S. Kandemir
Variational study of two-electron quantum dots
Phys.Rev. B 72 , 165350 (2005)

B. S. Kandemir
Two interacting electrons in a uniform magnetic field and a parabolic potential: The general closed-form solution
J. Math. Phys. 46, 032110 (2005)

B. S. Kandemir and A. Çetin
Impurity magnetopolaron in a parabolic quantum dot:the squeezed-state variational approach
J. Phys.: Condens. Matter 17, 667 (2005)

B. S. Kandemir
The stability of two-dimensional magnetobipolarons in parabolic quantum dots
Eur. Phys. J. B 37, 527 (2004)

B. S. Kandemir and T. Altanhan
The ground- and first-excited states of magnetopolarons in two-dimensional quantum dots for all coupling strengths
Eur. Phys. J. B 33, 227 (2003)

B. S. Kandemir and T. Altanhan
The stability of magnetobipolarons in low-dimensional systems
Eur. Phys. J. B 27, 517 (2002)

B. S. Kandemir and A. Çetin,
Ground- and first-excited state energies of impurity magnetopolaron in an anisotropic quantum dot
Phys.Rev. B 65 , 054303 (2002)

B. S. Kandemir and T. Altanhan
Cyclotron mass of a polaron in a quantum dot
Phys. Lett. A 287, 403 (2001)

B. S. Kandemir and T. Altanhan
Polaron effects on an anisotropic quantum dot in a magnetic field
Phys.Rev. B 60 , 4834 (1999)

B. S. Kandemir and T. Altanhan
The First Relaxed Excited States of Two-Dimensional Polarons in Magnetic Field
Il Nuovo Cim. 20, 1557 (1998)

B. S. Kandemir

Wigner Functions of an Electron Moving in a One- Dimensional Periodic Potential
Phys. Lett. A 245, 209 (1998)

B. S. Kandemir and T. Altanhan

Two-Dimensional Magnetopolarons with Squeezed Landau States
J. Phys.: Condens. Matter 9, 427 (1997)

B. S. Kandemir and T. Altanhan

Some Properties of Large Polarons with Squeezed States
J. Phys.: Condens. Matter 6, 4505 (1994)

T. Altanhan and **B. S. Kandemir**

A Squeezed State Approach for Large Polarons
J. Phys.: Condens. Matter 5, 6729 (1993)

Sports

Active sportsman

Mountain marathon runner, and has been a member of athletes team of the **Ankyra**

SK. For more details about marathon results: <http://ankyra.sk/>

and <https://www.strava.com/athletes/4382164>