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Employment

| | |
|---------------------------|--|
| Oct 2011 – to date | Professor İzmir Institute of Technology, Department of Physics |
| Jan 2009 – Oct 2011 | Associate Professor İzmir Institute of Technology, Department of Physics |
| Sep 2004 – Jan 2009 | Assistant Professor Bilkent University, Department of Physics |
| Sep 2003 – Jun 2004 | Senior Researcher TÜBİTAK – Ulusal Elektronik ve Kriptoloji Araştırma Enstitüsü |
| Sep 2001 – Jul 2003 | Postdoctoral Fellow Emory University, Physics Department, Atlanta, GA, USA |
| Sep 2000 – Aug 2001 | Instructor Bilkent University, Department of Physics |
| Oct 1994 – Sep 2000 | Teaching and Research Assistant Bilkent University, Department of Physics |
| Feb 2000 – Jun 2000 | Part-time Instructor Bilkent University, Department of Physics |

Administrative Appointments

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|---|---|
| Acting Director Dec 2012 – Jan 2018 | ICTP – Eurasian Centre for Advanced Research An international research centre, partner with ICTP , hosted by İzmir Institute of Technology , Turkey |
| Member Nov 2013 – Jul 2019 | Faculty Board, Faculty of Science, İZTECH |
| Chairperson Apr 2016 – Jul 2019 | Department of Physics, İZTECH |
| Dean Oct 2011 – Dec 2014 | Graduate School, İZTECH |
| Member Oct 2011 – Dec 2014 May 2016 – Jul 2019 | İZTECH Senate |

Education and Academic Degrees

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|----------------------|---|
| Docent Degree | Condensed Matter Physics, April 2005 |
| Ph.D. | Physics, September 2000 (High Honors) Bilkent University, Ankara Thesis: Phonon Mediated Electron-Electron Interaction in Confined Media: Low-Dimensional Bipolarons Advisor: Prof. Atilla Erçelebi |
| M.Sc. | Physics, July 1996 (High Honors) Bilkent University, Ankara Thesis: Approximation Methods in the Polaron Theory: Applications to Low Dimensional Polarons Advisor: Prof. Atilla Erçelebi |
| B.Sc. | Physics, June 1994 (High Honors) Bilkent University, Ankara |

Awards and Honors

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|----------------------------|---|
| Aug 2019 – Aug 2020 | Visiting Professor at UC Davis, Fulbright Visiting Scholar |
| 2018 – present | Member, Science Academy Turkey |
| Jun 2014 – Jun 2016 | Member, Graphene Research Advisory Board, TÜBİTAK |
| 2010 | Research Incentive Award ODTÜ Parlar Foundation |
| 2009 | Young Scientist Award FABED – (Feyzi Akkaya Foundation) |
| 2006 | TÜBA-GEBİP Young Investigator Award (given by Turkish Academy of Sciences) |
| Mar. – Jun. 1999 | TÜBİTAK Research Scholarship at U. California-Davis, USA |
| 1997 – 2000 | TÜBİTAK - Münir Bırsel Foundation Graduate Scholarship |
| 1994 – 2000 | Bilkent University Graduate Fellowship |
| 1992 – 1994 | TÜBİTAK – Science Scholarship Programme Fellow |
| 1990 – 1992 | Hacı Ömer Sabancı Foundation (VAKSA) Scholar |
| 1989 – 1994 | Bilkent University Undergraduate Fellowship |
| 1989 | Ranked 12 th nationwide in university entrance exam |

Research Interests

First-principles modelling of materials; graphene and other 2D materials; thermoelectricity; quantum transport; spintronics

Using density-functional-theory-based methods, published 50+ papers on electronic, magnetic, mechanical, transport and optical properties of various low dimensional systems including carbon nanotubes, graphene, transition-metal-chalcogenides.

Recent Research Projects:

- *Enhancement of thermoelectric efficiency in novel two-dimensional materials through nanostructuring*
(2017-2021) TÜBİTAK 117F131, Principle Investigator
- *Ultrathin Transition-Metal-Dichalcogenides, III-V Compounds, and their Heterostructures*
(2015 – 2017) TÜBİTAK 114F397, Principle Investigator
- *Design and Electronic Properties of Graphene-based Nanostructures*
(2011 – 2014) TÜBİTAK 111T318, Principle Investigator
- *Spin Conductance and Magnetic Properties of Nanowires and Molecular Structures*
(2007 – 2010) TÜBİTAK 106T597, Principle Investigator

Electron-phonon interactions, theory of polarons, bipolarons, excitons

Published 20+ papers on Fröhlich polarons and bipolarons in low dimensional systems, exciton properties and photoluminescence in semiconductors.

Teaching

Taught courses at Bilkent University and İzmir Institute of Technology (both in English)

Undergraduate level: General Physics, Classical Mechanics, Quantum Mechanics, Statistical Mechanics, Numerical Methods in Physics, Physics for Poets

Graduate level: Statistical Mechanics, Mathematical Methods of Physics, Condensed Matter Physics

Personal Information

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| Citizenship | Turkish |
| Place – Date of Birth | Akhisar, Manisa, Turkey – 07 May 1971 |
| Marital status | Married, with one child |

Languages

| | |
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| Turkish | Native speaker |
| English | Advanced, TOEFL iBT: 108/120 (September 2015) |

Publication Record

Citations Received : **2968** h-index: **25** (Web of Science)

Personal Profiles at Databases:

[Publons](#)

[ResearchGate](#)

[Google Scholar](#)

List of Publications

(click on the [pdf](#) or [link](#) to access the article)

A) In Refereed Journals (SCI):

2021

77. Enhancement of thermoelectric efficiency of T-HfSe₂ via nanostructuring
([link](#)) E. Ünsal, **R. T. Senger**, H. Sevinçli
Physical Review B **103**, 014104 (2021)

2020

76. Temperature and Gate Dependence of Carrier Diffusion in Single Crystal Methylammonium Lead Iodide Perovskite Microstructures
([link](#)) L. McClintock, R. Xiao, Y. Hou, C. Gibson, H. C. Travaglini, D. Abramovitch, L. Z. Tan, **R. T. Senger**, Y. Fu, S. Jin, D. Yu
Journal of Physical Chemistry Letters **11**, 1000 (2020)

2019

75. Stacking-dependent excitonic properties of bilayer blue phosphorene
([link](#)) F. Iyikanat, E. Torun, **R. T. Senger**, H. Sahin
Physical Review B **100**, 125423 (2019)
74. Ballistic thermoelectric properties of monolayer semiconducting transition metal dichalcogenides and oxides
([link](#)) G. Özbal, **R. T. Senger**, C. Sevik, H. Sevinçli
Physical Review B **100**, 085415 (2019)
73. Monitoring the Characteristic Properties of Ga-doped ZnO by Raman Spectroscopy and Atomic Scale Calculations
([link](#)) S. Horzum, F. Iyikanat, **R. T. Senger**, C. Celebi, M. Sbeta, A. Yildiz, T. Serin.
Journal of Molecular Structure **1180**, 505 (2019)

2018

72. Hydrogenated Derivatives of Hexacoordinated Metallic Cu₂Si Monolayer
([link](#)) E. Unsal, F. Iyikanat, H. Sahin, **R. T. Senger**.
RSC Advances **8**, 39976 (2018)
71. Directed growth of hydrogen lines on graphene: High-throughput simulations powered by evolutionary algorithm
([link](#)) G. Özbal, J. T. Falkenberg, M. Brandbyge, **R. T. Senger**, H. Sevinçli.
Physical Review Materials **2**, 073406 (2018)
70. Strain mapping in single-layer two-dimensional crystals via Raman activity
([link](#)) M. Yagmurcukardes, C. Bacaksiz, E. Unsal, B. Akbali, **R. T. Senger**, H. Sahin.
Physical Review B **97**, 115427 (2018)
69. Tuning Electronic and Magnetic Properties of Monolayer α -RuCl₃ by In-plane Strain
([link](#)) F. Iyikanat, M. Yagmurcukardes, **R. T. Senger**, H. Sahin.
Journal of Materials Chemistry C **6**, 2019 (2018)
68. Experimental and computational investigation of graphene/SAMs/n-Si Schottky diodes
([link](#)) H. Aydin, C. Bacaksiz, N. Yagmurcukardes, C. Karakaya, O. Mermer, M. Can, **R. T. Senger**, H. Sahin, Y. Selamet.
Applied Surface Science **428**, 1010 (2018)

2017

67. Stable Monolayer α -Phase of CdTe: Strain-Dependent Properties.
([link](#)) E. Unsal, **R. T. Senger**, H. Sahin.
Journal of Materials Chemistry C **5**, 12249 (2017)
66. Hydrogenation-driven phase transition in single-layer TiSe₂.
([link](#)) F. İyikanat, A. Kandemir, H. D. Ozaydin, **R. T. Senger**, H. Sahin.
Nanotechnology **28**, 495709 (2017)
65. Stable Ultra-thin CdTe Crystal: A Robust Direct Gap Semiconductor.
([link](#)) F. İyikanat, B. Akbali, J. Kang, **R. T. Senger**, Y. Selamet, H. Sahin.
Journal of Physics: Condensed Matter **29**, 485302 (2017)
64. Hydrogen-Induced Structural Transition in Single Layer ReS₂.
([link](#)) M. Yagmurcukardes, C. Bacaksiz, **R. T. Senger**, H. Sahin.
2D Materials **4**, 035013 (2017)
63. Nitrogen doping for facile and effective modification of graphene surfaces.
([link](#)) A. Yanilmaz, A. Tomak, B. Akbali, C. Bacaksiz, E. Ozceri, O. Ari, **R. T. Senger**, Y. Selamet, H. M. Zareie.
RSC Advances **7**, 28383 (2017)
62. Ultra-Thin ZnSe: Anisotropic and Flexible Crystal Structure.
([link](#)) C. Bacaksiz, **R. T. Senger**, H. Sahin.
Applied Surface Science **409**, 426 (2017)
61. h-AlN-Mg(OH)₂ van der Waals bilayer heterostructure: Tuning the excitonic characteristics.
([link](#)) C. Bacaksiz, A. Dominguez, A. Rubio, **R. T. Senger**, H. Sahin.
Physical Review B **95**, 075423 (2017)
60. Atomic-scale understanding of dichlorobenzene-assisted poly 3-hexylthiophene-2,5-diyl nanowire formation mechanism.
([link](#)) M. Yagmurcukardes, D. Kiyamaz, C. Zafer, **R. T. Senger**, H. Sahin.
Journal of Molecular Structure **1134**, 681 (2017)

2016

59. Mechanical properties of monolayer GaS and GaSe crystals.
([link](#)) M. Yagmurcukardes, **R. T. Senger**, F. M. Peeters, H. Sahin.
Physical Review B **94**, 245407 (2016)
58. Nanoribbons: from Fundamentals to State-of-the-art Applications.
([link](#)) M. Yagmurcukardes, F. M. Peeters, **R. T. Senger**, H. Sahin.
Applied Physics Reviews **3**, 041302 (2016)
57. Mg(OH)₂-WS₂ van der Waals heterobilayer: Electric field tunable band-gap crossover.
([link](#)) M. Yagmurcukardes, E. Torun, **R. T. Senger**, F. M. Peeters, H. Sahin.
Physical Review B **94**, 195403 (2016)
56. Quantum Transport Characteristics of Lateral pn-Junction of Single Layer TiS₃.
([link](#)) F. İyikanat, **R. T. Senger**, F. M. Peeters, H. Sahin.
ChemPhysChem **17**, 3985 (2016)
55. Controlled growth mechanism of poly (3-hexylthiophene) nanowires.
([link](#)) D. Kiyamaz, M. Yagmurcukardes, A. Tomak, H. Sahin, **R. T. Senger**, F. M. Peeters, H. M. Zareie, C. Zafer.
Nanotechnology **27**, 455604 (2016)
54. Structural Changes in Schiff Base Molecular Assembly Initiated by Scanning Tunneling Microscopy Tip.
([link](#)) A. Tomak, C. Bacaksiz, G. Mendirek, H Sahin, D. Hur, K. Gorgun, **R. T. Senger**, O. Birer, F. M. Peeters, H. Zareie.
Nanotechnology **27**, 335601 (2016)
53. Bilayer SnS₂: Easy-tunable stacking sequence by charging and loading pressure.
([link](#)) C. Bacaksiz, S. Cahangirov, A. Rubio, **R. T. Senger**, F. M. Peeters, H. Sahin.
Physical Review B **93**, 125403 (2016)
52. Computing Optical Properties of Ultra-thin Crystals.
([link](#)) H. Sahin, E. Torun, C. Bacaksiz, S. Horzum, J. Kang, **R. T. Senger**, F. M. Peeters.
WIREs Computational Molecular Science **6**, 351 (2016)
51. Nitrogenated, Phosphorated and Arsenicated Monolayer Holey Graphenes.
([link](#)) M. Yagmurcukardes, S. Horzum, E. Torun, F. M. Peeters, **R. T. Senger**.
Physical Chemistry Chemical Physics **18**, 3144 (2016)

2015

50. Electronic and Magnetic Properties of 1T-TiSe₂ Nanoribbons.
([link](#)) H. D. Ozaydin, H. Sahin, J. Kang, F. M. Peeters, **R. T. Senger**.
2D Materials **2**, 044002 (2015)
49. Layer and strain-dependent optoelectronic properties of hexagonal AlN.
([link](#)) D. Kecik, C. Bacaksiz, **R. T. Senger**, E. Durgun.
Physical Review B **92**, 165408 (2015)
48. Tuning the magnetic anisotropy in single layer crystal structures.
([link](#)) E. Torun, H. Sahin, C. Bacaksiz, **R. T. Senger**, F. M. Peeters.
Physical Review B **92**, 104407 (2015)
47. Pentagonal monolayer crystals of carbon, boron nitride, and silver azide.
([link](#)) M. Yagmurcukardes, H. Sahin, J. Kang, E. Torun, F. M. Peeters, **R. T. Senger**.
Journal of Applied Physics **118**, 104303 (2015)
46. TiS₃ nanoribbons: Width-independent band gap and strain-tunable electronic properties.
([link](#)) J. Kang, H. Sahin, H. D. Ozaydin, **R. T. Senger**, F. M. Peeters.
Physical Review B **92**, 075413 (2015)
45. Portlandite crystal: Bulk, bilayer, and monolayer structures.
([link](#)) Y. Aierken, H. Sahin, F. Iyikanat, S. Horzum, A. Suslu, B. Chen, **R. T. Senger**, S. Tongay, F. M. Peeters.
Physical Review B **91**, 245413 (2015)
44. Vacancy Formation and Oxidation Characteristics of Single Layer TiS₃.
([link](#)) F. Iyikanat, H. Sahin, **R. T. Senger**, F. M. Peeters.
Journal of Physical Chemistry C **119**, 10709 (2015)
43. Hexagonal AlN: Dimensional-crossover-driven band-gap transition.
([link](#)) C. Bacaksiz, H. Sahin, H. D. Ozaydin, S. Horzum, **R. T. Senger**, F. M. Peeters.
Physical Review B **91**, 085430 (2015)

2014

42. Ag and Au atoms intercalated in bilayer heterostructures of transition metal dichalcogenides and graphene.
([link](#)) F. Iyikanat, H. Sahin, **R. T. Senger**, F. M. Peeters.
APL Materials **2**, 092801 (2014)
41. Formation and diffusion characteristics of Pt clusters on Graphene, 1H-MoS₂ and 1T-TaS₂.
([link](#)) H. D. Ozaydin, H. Sahin, **R. T. Senger**, F. M. Peeters.
Annalen der Physik **526**, 423 (2014)

2008 - 2013

40. Cleavage induced rows of missing atoms on ZnTe (110) surface.
([pdf](#)) C. Çelebi, O. Arı, **R. T. Senger**.
Physical Review B **87**, 085308 (2013)
39. Hartree-Fock approximation of bipolaron state in quantum dots and wires.
([pdf](#)) **R. T. Senger**, B. Kozal, A. Chatterjee, A. Erçelesi.
European Physical Journal B **78**, 525 (2010)
38. Spintronic properties of zigzag-edged triangular graphene flakes.
([pdf](#)) H. Şahin, **R. T. Senger**, S. Ciraci.
Journal of Applied Physics **108**, 074301 (2010)
37. Monolayer honeycomb structures of group-IV elements and III-V binary compounds: First-principles calculations.
([pdf](#)) H. Şahin, S. Cahangirov, M. Topsakal, E. Bekaroglu, E. Akturk, **R. T. Senger**, S. Ciraci.
Physical Review B **80**, 155453 (2009)
36. First principles calculations of spin-dependent conductance of graphene flakes.
([pdf](#)) H. Şahin, **R. T. Senger**.
Physical Review B **78**, 205423 (2008)

2007

35. Dynamics of Phononic Dissipation at the Atomic Scale: Dependence on Internal Degrees of Freedom.
(pdf) H. Sevinçli, S. Mukhopadhyay, **R. T. Senger**, S. Ciraci.
Physical Review B **76**, 205430 (2007)
34. Nitrogen incorporation and optical studies of GaAsSbN/GaAs single quantum well heterostructures.
(pdf) K. Nunna, S. Iyer, L. Wu, J. Li, S. Bharatan, X. Wei, **R.T. Senger**, K.K. Bajaj.
Journal of Applied Physics **102**, 053106 (2007)
33. Optical Studies of MBE Grown GaAsSbN/GaAs Single Quantum Well Structures.
(pdf) K. Nunna, S. Iyer, L. Wu, S. Bharatan, J. Li, K.K. Bajaj, X. Wei, **R.T. Senger**.
Journal of Vacuum Science and Technology B **25**, 1113 (2007)
32. Oscillatory Exchange Coupling in Linear Magnetic Molecules.
(pdf) H. Sevinçli, **R. T. Senger**, E. Durgun, S. Ciraci.
Journal of Physics: Condensed Matter **19**, 216205 (2007)

2006

31. Spintronic properties of carbon-based one-dimensional molecular structures.
(pdf) E. Durgun, **R. T. Senger**, H. Sevinçli, H. Mehrez, S. Ciraci.
Physical Review B **74**, 235413 (2006)
30. Size-dependent alternation of magnetoresistive properties in atomic chains.
(pdf) E. Durgun, **R. T. Senger**, H. Mehrez, H. Sevinçli, S. Ciraci.
Journal of Chemical Physics **125**, 121102 (2006)
29. Monte-Carlo simulation of localization dynamics of excitons in ZnO and CdZnO quantum well structures.
(pdf) T. Makino, K. Saito, A. Ohtomo, M. Kawasaki, **R. T. Senger**, K. K. Bajaj.
Journal of Applied Physics **99**, 066108 (2006)
28. Nanospintronic Properties of Carbon-Cobalt Atomic Chains.
(pdf) E. Durgun, **R. T. Senger**, H. Mehrez, S. Dag, S. Ciraci.
Europhysics Letters **73**, 642 (2006)
27. Determination of energy band offsets between GaN and AlN using excitonic luminescence transition in AlGaIn alloys.
(pdf) A.N. Westmeyer, S. Mahajan, K.K. Bajaj, J.Y. Lin, H.X. Jiang, D.D. Koleske, **R.T. Senger**.
Journal of Applied Physics **99**, 013705 (2006)

2005

26. Half-metallic properties of atomic chains of carbon-transition metal compounds.
(pdf) S. Dag, S. Tongay, T. Yildirim, E. Durgun, **R. T. Senger**, C. Y. Fong, S. Ciraci.
Physical Review B **72**, 155444 (2005)
25. Atomic chains of group-IV elements and III-V and II-VI binary compounds studied by a first-principles pseudopotential method.
(pdf) **R. T. Senger**, S. Tongay, E. Durgun, S. Ciraci.
Physical Review B **72**, 075419 (2005)
24. Atomic and electronic structure of carbon strings.
(pdf) S. Tongay, S. Dag, E. Durgun, **R. T. Senger**, S. Ciraci.
Journal of Physics: Condensed Matter **17**, 3823 (2005)
23. Carbon string structures: First-principles calculations of quantum conductance.
(pdf) **R. T. Senger**, S. Tongay, S. Dag, E. Durgun, S. Ciraci.
Physical Review B **71**, 235406 (2005)

2004

22. Theoretical study of crossed and parallel carbon nanotube junctions and three-dimensional grid structures.
(pdf) S. Dag, **R. T. Senger**, S. Ciraci.
Physical Review B **70**, 205407 (2004)
21. Chiral single-wall gold nanotubes.
(pdf) **R. T. Senger**, S. Dag, S. Ciraci.
Physical Review Letters **93**, 196707 (2004)

20. *Ab-initio* electron transport calculations of carbon based string structures.
[\(pdf\)](#) S. Tongay, **R. T. Senger**, S. Dag, S. Ciraci.
 Physical Review Letters **93**, 136404 (2004)
19. Functionalized carbon nanotubes and device applications.
[\(pdf\)](#) S. Ciraci, S. Dag, T. Yildirim, O. Gulseren, **R. T. Senger**.
 Journal of Physics: Condensed Matter **16**, R901 (2004)
18. Binding energies of excitons in II-VI compound-semiconductor-based quantum well structures.
[\(pdf\)](#) **R. T. Senger**, K.K. Bajaj.
 physica status solidi (b) **241**, 1986 (2004)

2003

17. Magnetoluminescence properties of GaAsSbN/GaAs quantum well structures.
[\(pdf\)](#) **R. T. Senger**, K. K. Bajaj, E. D. Jones, N. A. Modine, K. E. Waldrip, F. Jalali, J. F. Klem, G. M. Peake, X. Wei, S. W. Tozer.
 Applied Physics Letters **83**, 5425 (2003)
16. Photoluminescence excitonic linewidth in GaAsN alloys.
[\(pdf\)](#) **R. T. Senger**, K. K. Bajaj.
 Journal of Applied Physics **94**, 7505 (2003)
15. Binding energies of excitons in polar quantum well heterostructures.
[\(pdf\)](#) **R. T. Senger**, K. K. Bajaj.
 Physical Review B **68**, 205314 (2003)
14. Magneto - optical properties of GaAsSb/GaAs quantum wells.
[\(pdf\)](#) **R. T. Senger**, K. K. Bajaj, E. D. Jones, N. A. Modine, K. E. Waldrip, F. Jalali, J. F. Klem, G. M. Peake, X. Wei, S. W. Tozer.
 Applied Physics Letters **83**, 2614 (2003)
13. Optical properties of confined polaronic excitons in spherical ionic quantum dots.
[\(pdf\)](#) **R. T. Senger**, K. K. Bajaj.
 Physical Review B **68**, 045313 (2003)
12. Polaronic exciton in a parabolic quantum dot.
[\(pdf\)](#) **R. T. Senger**, K. K. Bajaj.
 physica status solidi (b) **236**, 82 (2003)

2002

11. Strong-coupling theory of two dimensional large bipolarons in elliptical quantum dots.
[\(pdf\)](#) **R. T. Senger**, A. Erçelebi.
 European Physical Journal B **26**, 253 (2002)
10. On the stability of Fröhlich bipolarons in spherical quantum dots.
[\(pdf\)](#) **R. T. Senger**, A. Erçelebi.
 Journal of Physics: Condensed Matter **14**, 5549 (2002)
9. Energy-transfer rate in a double-quantum-well system due to Coulomb coupling.
[\(pdf\)](#) **R. T. Senger**, B. Tanatar.
 Solid State Communications **121**, 61 (2002)

1994 - 2000

8. Stability of low-dimensionally-confined bipolarons.
[\(pdf\)](#) **R. T. Senger**, A. Erçelebi.
 European Physical Journal B **16**, 439 (2000)
7. Path-integral approximation on the stability of large bipolarons in quasi-one-dimensional confinement.
[\(pdf\)](#) **R. T. Senger**, A. Erçelebi.
 Physical Review B **61**, 6063 (2000)
6. Quasi-two-dimensional Feynman bipolarons.
[\(pdf\)](#) **R. T. Senger**, A. Erçelebi.
 Physical Review B **60**, 10070 (1999)
5. Path Integral Description of Low Dimensional Polarons in Parabolic Confinement Potentials.
[\(pdf\)](#) **R. T. Senger**, A. Erçelebi.
 Journal of Physics: Condensed Matter **9**, 5067 (1997)

4. Strong Coupling Characterisation of Quasi-1D Polarons in Cylindrical QW-Wires.
(pdf) A. Erçelebi, **R. T. Senger**.
Solid State Communications **97**, 509 (1996)
3. Ground State Description of Quasi-1D Polarons with Arbitrary Electron-Phonon Coupling Strength.
(pdf) A. Erçelebi, **R. T. Senger**.
Physical Review B **53**, 11008 (1996)
2. A Variational Study of the Ground Landau Level of the 2D-Fröhlich Polaron in a Magnetic Field.
(pdf) A. Erçelebi, **R. T. Senger**.
Journal of Physics: Condensed Matter **7**, 9989 (1995)
1. Energy and Mass of 3D and 2D Polarons in the Overall Range of the Electron-Phonon Coupling Strength.
(pdf) A. Erçelebi, **R. T. Senger**.
Journal of Physics: Condensed Matter **6**, 5455 (1994)

B) Book Chapters:

1. Derivatives of Silicene: Electronic and Mechanical Properties,
(link) M. Yagmurcukardes, C. Bacaksiz, F. Iyikanat, E. Torun, **R. T. Senger**, F. M. Peeters, H. Sahin,
Chapter 6, pp. 181-207, in *Advances in Materials Science Research, Volume 26* edited by Maryann C. Wythers (Springer - Nova Science Publishers, New York, ISBN 978-1-53610-073-0, **2016**)

C) In National Journals (refereed):

5. Magic Gold Nanotubes.
(pdf) **R. T. Senger**, S. Dag, S. Ciraci.
Turkish Journal of Physics **29**, 269 (2005)
4. Confined bipolarons in the strong coupling limit.
(pdf) **R. T. Senger**, A. Erçelebi.
Turkish Journal of Physics **23**, 1021 (1999)
3. Stability of quasi-two-dimensional bipolarons.
(pdf) **R. T. Senger**, A. Erçelebi.
Turkish Journal of Physics **23**, 725 (1999)
2. Q1D-polarons in rigid boundary cylindrical wires: Mixed-coupling approximation.
(pdf) **R. T. Senger**, A. Erçelebi.
Turkish Journal of Physics **22**, 169 (1998)
1. Magnetic Field Effects on an Electron near an Impenetrable Dielectric Surface.
(pdf) B. Saqqa, **R. T. Senger**, A. Erçelebi.
Turkish Journal of Physics **20**, 1062 (1996)