CURRICULUM VITAE

(March 2013)

Şinasi S. Ellialtıoğlu

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PERSONAL DATA :

Date of Birth : November 4, 1950
Place of Birth : Ankara, Turkey

EDUCATION :

- B.S. 1971 Middle East Technical University, Ankara
- M.S. 1973 Middle East Technical University, Ankara
- Ph.D. 1977 University of Missouri, Columbia, MO
- Dozentship 1982 Middle East Technical University, Ankara

HONORS :

- Fellowship of Turkish Ministry of Education
  (Haydarpaşa Lisesi, İstanbul 1961–1964)
  (Science Lycée, Ankara 1964–1967)
- J. F. Kennedy Fellowship for Basic Sciences (1967–1971)
  Middle East Technical University, Ankara
- O. M. Stewart Fellowship (1975, 1976, 1977)
  University of Missouri–Columbia, MO
- Research Fellowship of Rockwell Int. Corp. (1976)
  University of Missouri–Columbia, MO
- Scholarship – Graduate School Dean (1977)
  University of Missouri–Columbia, MO
- Postdoctoral Fellow of National Science Foundation (1978–1979, 1980)
  University of Missouri–Columbia, MO
- Research Fellow of Alexander von Humboldt Stiftung (1984–1985, 1986)
  Institut für Festkörperforschung der Kernforschungsanlage (IFF–KFA), Jülich

- TÜBİTAK–Incentive Award in Science (1987)
  Scientific and Technical Research Council of Turkey
- NATO–B Scientific Research Fellow (1995)
  Georgia Institute of Technology, Atlanta, GA
- Fulbright Research Fellow (1995–1996)
  Georgia Institute of Technology, Atlanta, GA

WORK EXPERIENCE :

• Assistant	:	1971–1973	METU–Physics Department, Ankara
		1973–1974	Southern Illinois University–Carbondale, IL
		1974–1977	University of Missouri–Columbia, MO
• Instructor, Dr.	:	1978–1980	METU–Physics Department, Ankara
• Assist. Prof. Dr.	:	1980–1982	METU–Physics Department, Ankara
• Assoc. Prof. Dr.	:	1982–1988	METU–Physics Department, Ankara
• Professor Dr.	:	1988–2012	METU–Physics Department, Ankara
• Professor Dr.	:	2012–	TEDU–Basic Sciences Unit, Ankara

ADMINISTRATIVE EXPERIENCE :

- National Administrator of Turkey (1988–1989)
  NATO Science Fellowship Programme
- Member and the Chairman (1988–1989)
  Executive Committee of the Group for Raising Scientists
  Scientific and Technical Research Council of Turkey (TÜBİTAK)
- Chairman of the Physics Department (1988–1994)
  Middle East Technical University
- Member of the University Administration Board (1992–1994)
  Middle East Technical University
- Member of the University Academic Publishing Committee (1993–1994)
  Middle East Technical University
- Member of the Advisory Board
  to the Turkish Atomic Energy Authority (1993–1996)
- Member of the Advisory Board
  to the European High Pressure Research Group (1993–1996)
- Member of the Publication Evaluation Commission
  of the Turkish Universities (1993–2009)
- Member of the Advisory Committee
  to the Feza Gürsey Science Center (1993–1994)
- Director of Basic Sciences Unit
  TED University (2012–)

OTHER ACTIVITIES :

- Consultant to Amoco Research Center, Naperville, IL (1985)
- International Physics Olympiad (1986, 1987)
  Selection and Training of the Turkish National Team
- Organizer of the Spring School on "Surface Science and Technology"
  1988, Bilkent University, Ankara
- Organizer of the International Conference on "Beam–Solid Interactions"
  1989, METU, Ankara
- Organizer of the 2nd National Symposium on "Computer Simulations"
  1990, METU, Ankara
- Organizer of the Ankara Conferences on "Condensed Matter Physics" (YMF)
  YMF02 1992, Bilkent University, Ankara
  YMF03 1993, Ankara University, Ankara
  YMF05 1997, METU, Ankara (Principal Organizer)
  YMF06 1997, Gazi University, Ankara
  YMF07 1998, Bilkent University, Ankara
  YMF08 2001, Bilkent University, Ankara
  YMF09 2002, Bilkent University, Ankara
  YMF10 2003, Hacettepe University, Ankara
  YMF11 2004, Gazi University, Ankara
  YMF12 2005, Ankara University, Ankara
  YMF13 2006, METU, Ankara (Principal Organizer)
  YMF14 2007, Hacettepe Üniversitesi, Ankara
  YMF15 2008, Bilkent Üniversitesi, Ankara
  YMF16 2009, Gazi Üniversitesi, Ankara
  YMF17 2010, Ankara Üniversitesi, Ankara
  YMF18 2011, METU, Ankara (Principal Organizer)
- Organizer of the 1st Anatolian School on "Catalysis"
  2006, METU, Ankara

PROFESSIONAL AFFILIATIONS :

- Member of the Turkish Physical Society
- Member of the Materials Research Society
- Member of the Humboldtians' Association of Turkey
- Member of the Fulbright Fellows Association of Turkey
- Member of the METU Alumni Association
- Member of the Ankara Science Lycée Alumni Association

LIST OF PUBLICATIONS

BOOK :

- "Electronic and Optical Properties of d-Band Perovskites"
  T. Wolfram and Ş. Ellialtıoğlu
  (Cambridge University Press, Cambridge, 2006). pp.1–315. [7 in 2012]

- "Applications of Group Theory to Atoms, Molecules, and Solids"
  T. Wolfram and Ş. Ellialtıoğlu
  (Cambridge University Press, Cambridge), 533+ pages,
  accepted, in process of typesetting and production,
  expected physical stock date: October 2013.

EDITED VOLUME :

- "Proceedings of the International Conference on Beam–Solid Interactions"
  R. Ellialtıoğlu and Ş. Ellialtıoğlu (Guest Editors)
  Turkish J. of Phys., Supplement No.1, pp. 1–246, February 1990, Ankara

EDITED CHAPTER :

- "Concepts of Surface States and Chemisorption on d-Band Perovskites"
  T. Wolfram and Ş. Ellialtıoğlu
  Chapter 6 in "Theory of Chemisorption", ed. J. R. Smith
  Volume **19** of Topics in Current Physics, (Springer–Verlag, Heidelberg, 1980)
  pp. 149–181. [24]

ARTICLES in SCI :

1. "Surface Enhanced Covalency and its Effects on the Surface States
   of d-Band Metal Oxides"
   T. Wolfram and Ş. Ellialtıoğlu
   Appl. Phys. **13**, 21 (1977). [**Number of citations** = 30]

2. "Electronic Density of States for the Perovskites"
   Ş. Ellialtıoğlu and T. Wolfram
   Phys. Rev. B **15**, 5909 (1977). [25]

3. "Surface Electronic Properties of d–Band Perovskites: Study of π-Bands"
   Ş. Ellialtıoğlu and T. Wolfram
   Phys. Rev. B **18**, 4509 (1978). [34]

4. "Surface States on n-type $SrTiO_3$"
   Ş. Ellialtıoğlu, T. Wolfram, and Victor E. Henrich
   Solid State Commun. **27**, 321 (1978). [21]

5. "Model for the x-ray Photoelectron Distributions of d-Band Perovskites"
   T. Wolfram and Ş. Ellialtıoğlu
   Phys. Rev. B **19**, 43 (1979). [18]

6. "Matrix Element Effects in $\epsilon_2(\omega)$ of the Insulating Perovskites"
   T. Wolfram and Ş. Ellialtıoğlu
   Appl. Phys. **22**, 11 (1980). [1]

7. "Neutron Scattering by Magnons of an Antiferromagnet
with Modulated Spin Amplitudes"
T. Wolfram and Ş. Ellialtıoğlu
Phys. Rev. Lett. **44**, 1295 (1980). [13]

8. "Electronic Structure of SiO_2(111) Thin Film"
S. Çıracı and Ş. Ellialtıoğlu
Solid State Commun. **40**, 587 (1981). [12]

9. "An Investigation of the Interface Electronic Structure of Si–SiO_2 Junctions"
S. Çıracı, Ş. Ellialtıoğlu, and Ş. Erkoç
J. Vac. Sci. Technol. **21**, 402 (1982). [4]

10. "Density-of-States and Partial-Density-of-States Functions
for the Cubic d-Band Perovskites"
T. Wolfram and Ş. Ellialtıoğlu
Phys. Rev. B **25**, 2697 (1982). [33]

11. "Surface Electronic Structure of Silicon Dioxide"
S. Çıracı and Ş. Ellialtıoğlu
Phys. Rev. B **25**, 4019 (1982). [20]

12. "Interpretation of the Spectra Obtained from Oxygen Adsorbed
and Oxidized Silicon Surfaces"
S. Çıracı, Ş. Ellialtıoğlu, and Ş. Erkoç
Phys. Rev. B **26**, 5716 (1982). [70]

13. "Chemisorption of Atomic Oxygen on Silicon Surfaces"
Ş. Ellialtıoğlu and S. Çıracı
Solid State Commun. **42**, 879 (1982). [7]

14. "States of Water Molecule Adsorbed on Si(111) Surface"
S. Çıracı, Ş. Erkoç, and Ş. Ellialtıoğlu
Solid State Commun. **45**, 35 (1983).

15. "Binding Energy of Donor–Phonon System in Quantum Well Wires"
A. Erçelebi, U. Özdinçer and Ş. Ellialtıoğlu
J. Phys. C **19**, L67 (1986). [5]

16. "Magnetic 3d-impurities in Nb and Mo"
Ş. Ellialtıoğlu, R. Zeller, and P. H. Dederichs
J. Phys. F **17**, 409 (1987). [12]

17. "Electronic Structure of Strained Si_n/Ge_n(001) Superlattices"
S. Çıracı, O. Gülseren, and Ş. Ellialtıoğlu
Solid State Commun. **65**, 1285 (1988). [3]

18. "Calculations of STM Linescans – General Formalism"
Ş. Ellialtıoğlu, S. Çıracı, and Inder P. Batra
Solid State Commun. **66**, 1135 (1988). [4]

19. "A Computer Simulation of Amorphous Silicon"
G. Dereli, M. C. Yalabık, and Ş. Ellialtıoğlu
Physica Scripta **40**, 117 (1989). [2]

20. "Elastic Properties of $GaS_{1-x}Se_x$ Layer Mixed Crystals by Brillouin Scattering"
N. M. Gasanly, B. G. Akınoğlu, and Ş. Ellialtıoğlu
Phys. Stat. Sol. (b) **177**, K59 (1993). [1]

21. "Raman Scattering in Layer Indium Selenide under Pressure"
K. Allahverdi, S. Babaev, Ş. Ellialtıoğlu, and A. Ismailov
Solid State Commun. **87**, 675 (1993). [6]

22. "Low-Temperature Phase Transitions in $TlGaS_2$ Layer Crystals"
A. Aydınlı, R. Ellialtıoğlu, K. R. Allakhverdiev, Ş. Ellialtıoğlu, and N. M. Gasanly
Solid State Commun. **88**, 387 (1993). [13]

23. "Elastic Coefficients in $TlGa(S_{1-x}Se_x)_2$ and $TlIn_xGa_{1-x}S_2$ Layer Mixed Crystals by Brillouin Scattering"
N. M. Gasanly, B. G. Akınoğlu, Ş. Ellialtıoğlu, R. Laiho, and A. E. Bakhyshov
Physica B **192**, 371 (1993). [8]

24. "Lattice Parameters of $TlGa_{1-x}In_xS_2$ and $TlGa(S_{1-x}Se_x)_2$ Layer Mixed Crystals"
N. M. Gasanly, A. Çulfaz, H. Özkan, and Ş. Ellialtıoğlu
Cryst. Res. Technol. **29**, K51 (1994). [5]

25. "Chemisorption of a p-adsorbate on perovskites"
H. Kökten and Ş. Ellialtıoğlu
Physica B **193**, 39 (1994).

26. "Low-Temperature Second Harmonic Generation in Gallium Selenide under Resonant Excitation of the Direct Free Excitons"
K. Allakhverdiev, N. Akhmedov, Z. Ibragimov, Ş. Ellialtıoğlu, K. Lothar, and D. Haarer
Solid State Commun. **93**, 147 (1995). [5]

27. "Layered Semiconductor GeS as Birefringent Stratified Medium"
R. A. Süleymanov, Ş. Ellialtıoğlu, and B. G. Akınoğlu
Phys. Rev. B **52**, 7806 (1995). [3]

28. "Spatial Stabilization of Townsend and Glow Discharges with a Semiconducting Cathode"
B. G. Salamov, Ş. Ellialtıoğlu, B. G. Akınoğlu, N. N. Lebedeva, and L. G. Patriskii
J. Phys. D: Appl. Phys. **29**, 628 (1996). [32]

29. "Ab initio Study of Adsorption and Desorption of Se on the Si(001) Surface"
M. Çakmak, G. P. Srivastava, Ş. Ellialtıoğlu, and K. Çolakoğlu
Surf. Sci. **507–510**, 29 (2002). [3]

30. "Adsorption of Te on Ge(001) : Density-functional calculations"
M. Çakmak, G. P. Srivastava, and Ş. Ellialtıoğlu
Phys. Rev. B **67**, 205314 (2003). [5]

31. "Ab initio study of the one-monolayer Sb/Si(001) interface"
M. Çakmak, R. Shaltaf, G. P. Srivastava, and Ş. Ellialtıoğlu
Surf. Sci. **532–535**, 661 (2003). [4]

32. "Electronic and structural properties of a $4d$ perovskite: Cubic phase of $SrZrO_3$"
E. Mete, R. Shaltaf, and Ş. Ellialtıoğlu
Phys. Rev. B **68**, 035119 (2003). [44]

33. "Mg adsorption on Si(001) surface from first principles"
R. Shaltaf, E. Mete, and Ş. Ellialtıoğlu
Phys. Rev. B **69**, 125417 (2004). [7]

34. "An ab initio study of the Te surfactant on Ge/Si(001)"
M. Çakmak, G. P. Srivastava, and Ş. Ellialtıoğlu
Surf. Sci. **566–568**, 719 (2004).

35. "Ab initio study of the one-monolayer Sb/Ge(001) interface"
R. Shaltaf, M. Çakmak, E. Mete, G. P. Srivastava, and Ş. Ellialtıoğlu
Surf. Sci. **566–568**, 956 (2004).

36. "Electronic structure of the chainlike compound TlSe"
Ş. Ellialtıoğlu, E. Mete, R. Shaltaf, K. Allakhverdiev, F. Gashimzade,
M. Nizamettinova, and G. Orudzhev
Phys. Rev. B **70**, 195118 (2004). [14]

37. "DFT study of Rb/Si(100)-2×1 System"
E. Mete, R. Shaltaf and Ş. Ellialtıoğlu
Surf. Sci. **583**, 119 (2005). [2]

38. "Cs adsorption on Si(001) surface : ab initio study"
R. Shaltaf, E. Mete and Ş. Ellialtıoğlu
Phys. Rev. B **72**, 205415 (2005). [6]

39. "Lattice vibrations of pure and doped GaSe"
K. Allakhverdiev, T. Baykara, Ş. Ellialtıoğlu, F. Hashimzade,
D. Huseinova, K. Kawamura, A. A. Kaya, A. M. Kulibekov, and S. Onari
Mater. Res. Bull. **41**, 751 (2006). [8]

40. "Atomic and electronic structures of Sr/Si(001)-2×2"
M. Çakmak, E. Mete, and Ş. Ellialtıoğlu
Surf. Sci. **600**, 3614 (2006). [2]

41. "Effect of hydrogenation on B/Si(001)-1×2"
M. Cakmak, E. Mete, and Ş. Ellialtıoğlu
Surf. Sci. **601**, 3711 (2007).

42. "An ab initio study of 3-aminopropyltrimethoxysilane molecule
on Si(111)-($\sqrt{3} \times \sqrt{3}$) surface"
G. Demirel, G. Birlik, M. Cakmak, T. Caykara, and Ş. Ellialtıoğlu
Surf. Sci. **601**, 3740 (2007). [5]

43. "Effect of molecular and electronic structure on the light-harvesting properties
of dye sensitizers"
E. Mete, D. Uner, M. Cakmak, O. Gulseren, Ş. Ellialtıoğlu
J. Phys. Chem. C **111**, 7539 (2007).

44. "Chemisorption of 3-aminopropyltrimetoxysilane on Si(001)-(2×2)"
G. Demirel, M. Çakmak, T. Çaykara, Ş. Ellialtıoğlu
J. Phys. Chem. C **111**, 15020 (2007). [6]

45. "Atomic and electronic structure of Bi/GaAs(001)-α2(2×4)"
D. Usanmaz, M. Cakmak, and Ş. Ellialtıoğlu
J. Phys.: Condens. Matter **20**, 265003 (2008). [3]

46. "Pt-incorpoated anatase TiO_2(001) surface for solar cell applications"
E. Mete, D. Uner, O. Gulseren, Ş. Ellialtıoğlu
Phys. Rev. B **79**, 125418 (2009). [12]

47. "Modification of TiO_2(001) surface electronic structure by Au impurity investigated with density functional theory"
E. Mete, O. Gulseren, and Ş. Ellialtıoğlu
Phys. Rev. B **80**, 035422 (2009). [7]

48. "Dye adsorbates BrPDI, BrGly, and BrAsp on anatase TiO_2(001) for dye-sensitized solar cell applications"
D. Çakir, O. Gulseren, E. Mete, Ş. Ellialtıoğlu
Phys. Rev. B **80**, 035431 (2009). [8]

49. "Atomic and electronic structure of group-IV adsorbates on the GaAs(001)-(1×2) surface"
D. Usanmaz, M. Cakmak, and Ş. Ellialtıoğlu
Surf. Sci. **603**, 2683 (2009). [2]

50. "Pentacene multilayers on Ag(111) surface"
E. Mete, I. Demiroglu, M. F. Danisman, and Ş. Ellialtıoğlu
J. Phys. Chem. C **114**, 2724 (2010). [10]

51. "Theoretical analysis of small Pt particles on rutile TiO_2(110) surfaces"
V. Celik, H. Unal, E. Mete, and Ş. Ellialtıoğlu
Phys. Rev. B **82**, 205113 (2010). [10]

52. "Electronic and structural properties of armchair SWCNT/TiO_2(110)-(1×2) system"
C. Tayran, M. Çakmak, and Ş. Ellialtıoğlu
Surf. Sci. **605**, 593 (2011).

53. "Interaction of BrPDI, BrGly, and BrAsp with the Rutile TiO_2(110) Surface for Photovoltaic and Photocatalytic Applications: A First-Principles Study"
D. Çakır, O. Gülseren, E. Mete, and Ş. Ellialtıoğlu
J. Phys. Chem. C **115**, 9220 (2011). [1]

54. "Surface energy and excess charge in (1×2)-reconstructed rutile TiO_2(110) from DFT+U calculations"
Hatice Ünal, Ersen Mete, and Ş. Ellialtıoğlu
Phys. Rev. B **84**, 115407 (2011). [1]

55. "DFT study of noble metal impurities on TiO_2(110)"
E. Mete, O. Gülseren, and Ş. Ellialtıoğlu
Euro. Phys. J. B **85**, 204 (2012).

56. "Influence of steps on the tilting and adsorption dynamics of ordered pentacene films on vicinal Ag(111) surfaces"
E. Mete, İ. Demiroğlu, E. Albayrak, G. Bracco, Ş. Ellialtıoğlu, and M. F. Danışman
J. Phys. Chem. C **116**, 19429 (2012).

ARTICLES in SCIE :

57. "Raman Scattering and Hall Effect in Layer InSe Under Pressure"
K. Allakhverdiev, Ş. Ellialtıoğlu, A. Ismailov, and Z. Ibragimov
High Pres. Res. **13**, 121 (1994). [1]

58. "On the structure sensitivity of CO oxidation on alumina supported Pd–Pt bi-metallic catalysts"
S. Kaya, E. Erunal, R. Shaltaf, Ş. Ellialtıoğlu, D. Uner
Turk. J. of Chem. **33**, 11 (2009). [2]

ARTICLES in WoS :

59. "Phase Transitions in Ternary Layered $A^3B^3C_2^6$ Group Ferroelectric Semiconductors – A Review"
K. R. Allakhverdiev, T. G. Mamedov, B. G. Akınoğlu and Ş. S. Ellialtıoğlu
Turkish J. Phys. **18**, 1–66 (1994). [22]

60. "Enhancement of the Resolution of a Semiconductor Photographic System in a Magnetic Field"
B. G. Salamov, B. G. Akınoğlu, Ş. Ellialtıoğlu, K. Allakhverdiev, and N. N. Lebedeva
J. Photogr. Sci. **42**, 106 (1994). [21]

61. "Influence of Pressure on the Physical Properties of Chain TlSe-type Crystals"
K. R. Allakhverdiev and Ş. Ellialtıoğlu
NATO-ARW II-Math, Phys. and Chem. **48**, 119 (2001).
Eds. H. D. Hochheimer, B. Kuchta, P. K. Dorhout, J. L. Yarger. [4]

Index	Articles	Citations
SCI	56	547
SCIE	2	3
WoS	3	47
Total	61	597
Self		34
Others		563

h-indeks = 13

NATIONAL RESEARCH PROJECTS : (+5 BAPs)

1. "PtSi–Si/CCD Kızılötesi Gözenek Geliştirilmesi"
   DPT/TÜBİTAK [01.07.1992 – 01.10.1994] Yürütücü.

2. "Yüksek Anizotropiye Sahip İkili ve Üçlü Yarıiletkenlerin Fiziksel Özellikleri"
   DPT/TÜBİTAK [01.10.1993 – 01.04.1995] Araştırmacı.

3. "Düşük-Boyutlu Sistemlerin Benzetişimleri, Yapısal ve Elektronik Özellikleri"
   TÜBİTAK [01.01.2002 – 01.01.2004] Yürütücü.

4. "TlSe ve InTe Malzemelerinin Elektronik ve Fononik Özellikleri"
   TÜBİTAK [01.06.2004 – 01.06.2005] Yürütücü.

5. "Titanya Destekli Nanoyapıların ve Yüzeylerin Yapısal ve Elektronik Özellikleri"
   TÜBİTAK [01.10.2007 – 01.10.2010] Yürütücü.

6. "Nano Ölçekli GeSbTe Malzemelerinin Faz-Değişim Mekanizması"
   TÜBİTAK [01.01.2011 – 01.01.2013] Araştırmacı.

7. "Güneş Pili Uygulamaları İçin İlk Prensiplerden Dizayn Edilmiş
   Yüzey Safsızlıklarının Uyarılmış Durum Özellikleri"
   TÜBİTAK [01.10.2010 – 01.10.2013] Araştırmacı.

Projects just submitted:

8. "GaAs(110), GaP(110), ve InP(110) yüzeylerine tutunmuş p ve n tipli
   grafen yapıların elektronik ve kuantum transport özellikleri"
   TÜBİTAK – Yeni Başvuru [2013 – 2016] Araştırmacı.

9. "Altın katalizörler üzerinde alkollerin seçici oksitlenmesi reaksiyon
   mekanizmalarının yük yoğunluğu fonksiyoneli teorisi ile incelenmesi"
   TÜBİTAK – Yeni Başvuru [2013 – 2016] Danışman.

INVITED TALKS :

1. "ab-initio Calculations of Interstitial Impurities in Metals"
   Ş. Ellialtıoğlu
   Dresdener Seminar für Theoretische Physik
   Dresden, DDR, April 15–19, 1985.

2. "Computer Simulation of Growth and Etching"
   Ş. Ellialtıoğlu
   2nd General Conference of the Balkan Physical Union
   İzmir, Turkey, September 12–14, 1994.

3. "Computer Simulation of Si and Ge Growth"
   Ş. Ellialtıoğlu
   TFD18 (Turkish Physical Society – 18th International Physics Congress)
   Adana, Turkey, September 12–14, 1998.

4. "Electronic Properties of TlSe-type Chain Crystals"
   Ş. Ellialtıoğlu
   TFD22 (Turkish Physical Society – 22nd International Physics Congress)
   Bodrum, Turkey, September 14–17, 2004.

5. "Towards theory assisted design of biologically inspired catalysts"
   Ş. Ellialtıoğlu
   NANO-TR I NanoScience and NanoTechnology 2005
   Bilkent University, Ankara, Turkey, 25–27 May 2005.

6. "Activation of titania by precious metal incorporation for solar cell applications"
   Ş. Ellialtıoğlu
   VI. Renewable Energies Symposium,
   Aegean University, İzmir, Turkey, October 9–11, 2008, pp.36–38.

7. "Understanding and designing highly active titania for photovoltaics and photocatalysis by number crunching"
   Ş. Ellialtıoğlu
   TFD29 (Turkish Physical Society – 29th International Physics Congress)
   Bodrum, Turkey, September 5–8, 2012.

INTERNATIONAL CONFERENCES:
Oral Presentations:

1. "Surface Electronic Properties of d-Band Perovskites"
   Ş. Ellialtıoğlu* and T. Wolfram
   Bull. Am. Phys. Soc. **22**, 315 (1977).
   (APS–March 1977 Meeting, San Diego, California, USA)

2. "Electronic Density of States for the Perovskites"
   T. Wolfram* and Ş. Ellialtıoğlu
   Bull. Am. Phys. Soc. **22**, 410 (1977).
   (APS–March 1977 Meeting, San Diego, California, USA)

3. "Surface Electronic States of d-Band Perovskites"
   Ş. Ellialtıoğlu* and T. Wolfram
   Proc. IV. Rolla Conf. Surface Properties of Materials
   Rolla, Missouri, USA, Aug.1–4, 1977.

4. "Electronic Properties of d-Band Metal Oxides"
   T. Wolfram* and Ş. Ellialtıoğlu
   Midwest Solid State Theory Symposium
   Argonne National Lab., Chicago, Illinois, USA, 1977.

5. "Surface Electronic Properties of d-Band Perovskites"
   Ş. Ellialtıoğlu and T. Wolfram*
   MASUA Theoretical Physics Conference
   University of Nebraska, Lincoln, Nebraska, USA, May 13, 1978.

6. "Electronic Structure of Interstitial Impurities in fcc Metals"
   Ş. Ellialtıoğlu, H. Akai, R. Zeller and P. H. Dederichs
   5th General Conference, Condensed Matter Division of EPS
   Berlin, FRG, March 18–22, 1985.

7. "Ab-initio Calculations of Interstitial Impurities in Cu"
   Ş. Ellialtıoğlu*, H. Akai, R. Zeller and P. H. Dederichs
   Proc. 15th Int. Symp. Electronic Structure of Metals and Alloys
   ed. P. Ziesche, (Gaussig, DDR, 1985), pp. 99–102. [5]

8. "Surface States and Chemisorption"
   Ş. Ellialtıoğlu
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Kopinjol Baishya*, Serdar Ögüt, Ersen Mete, Oguz Gülseren, and Şinasi Ellialtıoğlu
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Ş. Ellialtıoğlu (Colloqium)
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   K. B. Vural, E. Mete, ve Ş. Ellialtıoğlu
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   M. Mesta, E. Mete, ve Ş. Ellialtıoğlu
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THESES GIVEN

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   (Prof. Dr. C. Yalçın).

2. "Electronic Properties of d-Band Perovskites"
   Ph.D. Degree, 1977, University of Missouri–Columbia, Columbia, MO, USA.
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3. "Electronic Properties of Defect States on d-Band Metal-Oxides
   and Chemisorption"
   Habilitation Thesis (Dozentship), 1982.

Ph.D. THESES SUPERVISED

1. "Computer Simulation of the Structure of Amorphous Silicon
   using Monte–Carlo Technique"
   Gülay Dereli, June 1987.

2. "Two-Dimensional Systems in Solid State Physics"
   Şenay Katırcıoğlu, December 1987.
   (principal advisor: Prof. Dr. Salim Çıracı).

3. "A Tight-Binding Model of Chemisorption on Perovskite Surfaces"
   Hatice Kökten, January 1993.

4. "Electronic Properties of Transition Metal Oxides"
   Ersen Mete, December 2003.

5. "Adsorption and Growth on Si(001) Surface"
   Riad Shaltaf, April 2004.

6. "Steady State and Transient Simulations in 2D and 3D for Crystal Growth
   by Vertical Bridgman Systems"
   Ergun Taşarkuyu, January 2003.
   (principal advisor: Doç. Dr. Bülent Akınoğlu).

7. "The Structure, Energetics and Melting Behavior of Free Platinum Clusters"
   Ali Sebetci, January 2004 (co-advisor).

Thesis in progress:

8. "Adsorption of metal atoms on anatase TiO_2 surfaces"
   Kıvılcım Başak Vural, expected graduation date: December 2014.

M.S. THESES SUPERVISED

1. "Jellium Calculations for Metallic Slabs"
   Bassam Daghlas, September 1987.

2. "Construction of a Scanning Tunneling Microscope
   and its Application to Graphite Surface in Air"
   İsmet İnönü Kaya, February 1990.
   (principal-advisor: Prof. Dr. Recai Ellialtıoğlu).

3. "On the Theory of Conventional and High T_c Superconductivity"
   Ali Serdar Öğüt, June 1990.

4. "Amorf Germanyumun Büyütülmesinin Monte Carlo Simülasyonu"
   Görkem Oylumluoğlu, September 1999.
   (co-advisor: Prof. Dr. Şener Oktik).

5. "Energy Bands of TlSe and $TlInSe_2$ in Tight Binding Model"
   Özlem Yıldırım, September 2005.

6. "Structure Sensitivity of Selective CO Oxidation over Precious Metal Catalysts"
   Bora Atalık, February 2005.
   (principal advisor: Prof. Dr. Deniz Üner).

7. "Structure and activity predictions on supported mono- and bi-metallic catalysts"
   Ebru Erünal, April 2006.
   (principal advisor: Prof. Dr. Deniz Üner).

8. "Electronic Properties of Dye Molecules Adsorbed on Anatase-Titania Surface
   for Solar Cell Applications"
   Engin Torun, August 2009.
   (principal advisor: Doç. Dr. Hande Toffoli).

9. "Adsorption of Aromatic Molecules on Rutile TiO_2(110) Surfaces"
   Murat Mesta, September 2009.

10. "Adsorption of Gold Atoms on Anatase TiO_2(100)-1×1 Surface"
    Kıvılcım Başak Vural, September 2009.

11. "Density Functional Theory Investigation of TiO_2 Anatase Nanosheets"
    Sibel Ceren Sayın, September 2009.
    (principal advisor: Doç. Dr. Hande Toffoli).

12. "Ab-initio studies of pentacene on Ag(111) surfaces"
    İlker Demiroğlu, January 2010.
    (principal advisor: Doç. Dr. Mehmet Fatih Danışman).

Thesis in progress:

13. "Investigation of atomic and electronic structure of ternary $(GeTe)_m(SbTe)_n$ (GST)
    phase-change materials"
    Sibel Kurt Homurlu, expected graduation date:December 2013.

The Courses Given at METU:

- Phys 105–106 General Physics I–II
- Phys 202 Modern Physics
- Phys 215 Advanced Modern Physics
- Phys 291 Properties of Materials for EE
- Phys 309–310 Introduction to Solid State Physics I–II
- Phys 312 Solid State Physics
- Phys 303–304 Quantum Theory and its Applications I–II
- Phys 321–322 Quantum Physics I–II
- Phys 331–332 Electromagnetic Theory I–II
- Phys 431 Quantum Mechanics I
- Phys 400 Graduation Project
- Phys 415–416 Projects in Physics I–II
- Phys 409–410 Condensed Matter Physics I–II
- Phys 515–516 Special Topics in Solid State Physics I–II
- Phys 531–532 Solid State Theory I–II
- Phys 558–559 Topics in Theoretical Physics I–II
- Phys 565 Topics in Mathematical Physics I

The Courses Given at Konya Selçuk Üniversitesi (1978–1981) :

- Fiz 101–102 Genel Fizik I–II
- Fiz 612 Yarı İletkenler Fiziği

The Courses Given at Bilkent University (1987–1988) :

- Phys 301–302 Introduction to Condensed Matter Physics I–II

The Course Given at Georgia Institute of Technology (1996) :

- Phys 102 General Physics II

The Course Given at TED University (2012) :

- Phys 101 General Physics I