

KAAN GÜVEN

Associate Professor of Physics

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PROFILE

- ❖ 8 years experience in international research projects,
- ❖ 10+ years experience in academic teaching.
- ❖ 10+ years experience in theoretical condensed matter, experimental and computational electromagnetism.

SCIENTIFIC RESEARCH

- ❖ Experimental and computational electromagnetism:
 - ◆ Microwave/THz metamaterials ◆ Plasmonics ◆ Photonic crystals ◆ Nanophotonics
- ❖ Theoretical and computational condensed matter physics:
 - ◆ Many particle physics ◆ Low dimensional semiconductor systems
- ❖ Computer literacy and scientific/engineering software:
 - ◆ Fortran 77/95 ◆ Matlab ◆ CST Microwave Studio ◆ Rsoft Photonics ◆ Comsol Multiphysics ◆ Lumerical FDTD Solutions ◆ NI Labview

PROFESSIONAL BACKGROUND

- ❖ KOÇ UNIVERSITY, ISTANBUL, TURKEY 02/2009 - present
 - ◆ **Department of Physics, Representative 2014-2016**
 - ◆ **Department of Physics, Associate Professor**
 - ◆ **Metamaterials and Plasmonics Laboratory, Director**
 - ◆ **Harvard University, School of Engineering and Applied Sciences**
Visiting Scholar, Surface-Plasmon nanooptics research (2010)
- ❖ BILKENT UNIVERSITY, ANKARA, TURKEY 10/2002 – 01/2009
 - ◆ **Nanotechnology Research Center, Research Associate (2002-- 2009):**
Electromagnetic metamaterials, photonic crystals, plasmonics.
 - ◆ **Bilkent Space Technologies Research Center (2007--2009):**
Research Staff
 - ◆ **Department of Physics, Instructor (2002 – 2007):**
Courses taught: Scientific Computation, Experimental methods in applied physics
- ❖ MAX-PLANCK INSTITUTE FKF, STUTTGART, GERMANY 10/1999 – 10/2001
 - ◆ **Department of Prof. Klaus von Klitzing, Research Associate**
Research: Magnetotransport in low dimensional semiconductor heterostructures, Quantum Hall Effect, Coulomb Drag Effect.
- Administrative: Academic Staff in IT system administration.
- ❖ BILKENT UNIVERSITY, ANKARA, TURKEY 02/1997-09/1998
 - ◆ **Department of Physics, Instructor**
Courses taught: Modern Physics and Quantum Mechanics Laboratory.

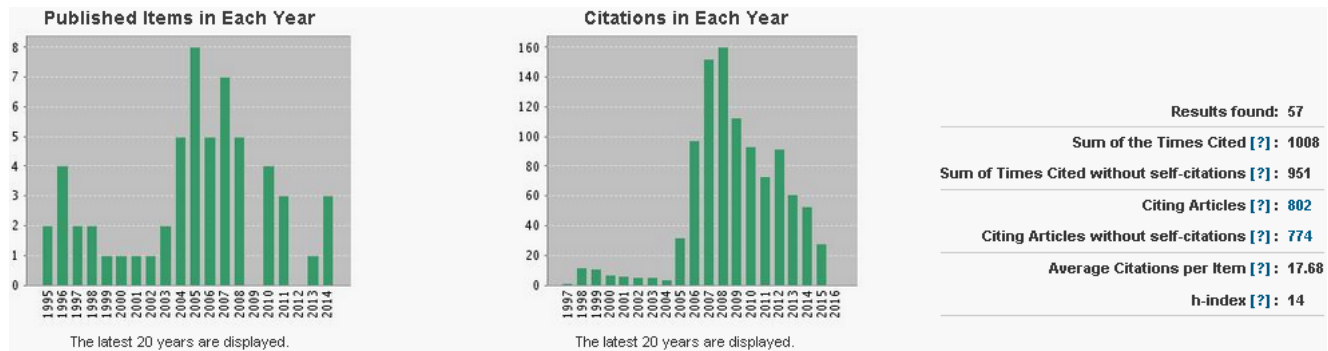
ACADEMIC DEGREES

- ❖ Assoc. Prof. Physics, 2014, Koç University.
- ❖ Assoc. Prof. Physics, 2004, Higher Academic Council (ÜAK) of Turkey.
- ❖ Ph. D. Physics, 1999, Bilkent University, Bilkent, Ankara, Turkey.
Thesis: “Many body interaction effects in quasi-one dimensional photoexcited electron-hole systems.” Supervisor: Bilal Tanatar.
- ❖ M. S. Physics, 1995, Bilkent University, Bilkent, Ankara, Turkey.
Thesis: “Phonon renormalization effects in low dimensional electron-hole systems.” Supervisor: Bilal Tanatar.
- ❖ B. S. Physics, 1993, Bilkent University, Bilkent, Ankara, Turkey.

CAREER HIGHLIGHTS

❖ RESEARCH PRODUCTIVITY

- ◆ Authored and co-authored 50 articles in refereed journals.
- ◆ Attended 30+ international scientific conferences.
- ◆ Refereed 40+ articles in international scientific journals.
- ◆ ISI Web of Science citation report:



❖ SCIENTIFIC PROJECT EXPERIENCE

- 2011 - 2013 ◆ “Physics and Applications of Dielectric Waveguide – Surface Plasmon Josephson Junctions: From Classical to Quantum Plasmonics,” TUBITAK, Project no: 111T285 (**Principle Investigator**).
- 2009 - 2010 ◆ “Integration of Optical Monolithic Resonators on Silicon for Photonic Communications,” TUBITAK, Project no: 106E215
- 2007 – 2010 ◆ “Development and Integration of Compact Metamaterials for Wireless Communication Systems,” TUBITAK, Project no: 106E198 (**Principle Investigator**)
- 2004 – 2007 ◆ EU PHOREMOST: NanoPhotonics to Realise Molecular Scale Technologies (Network of Excellence, 6th Framework Programme) <http://www.phoremmost.org/cf/index.cfm>
- 2004 – 2007 ◆ EU METAMORPHOSE: Metamaterials organized for radio, millimeter wave and photonic superlattice engineering (Network of Excellence, 6th Framework Programme) www.metamorphose-eu.org
- 2002 – 2006 ◆ EU DALHM: Development and analysis of left handed materials (Information Societies Technology (IST) Programme).
- 1999 – 2001 ◆ “Theoretical and numerical study of electron transport in double layer two-dimensional electron systems”, Max-Planck Institute FKF, Stuttgart, Germany.

❖ SCIENTIFIC AND TECHNICAL CONSULTANCY

- ◆ Editor and co-author of the reports prepared by the Nanotechnology Research Center for the establishment of the nanotechnology roadmap of defense technologies for the Department of Defense.



- ◆ Co-editor of the science and technology news for the METAMORPHOSE Virtual Institute website (<http://www.metamorphose-eu.org>)
- ◆ Authored the report “Metamaterials for space communication systems” for Bilkent Research Center for Space Technologies.

❖ SCHOLARSHIPS AND AWARDS

- ◆ TÜBİTAK – TWAS Award, 2011.
- ◆ Feyzi Akkaya Bilimsel Etkinlikleri Destekleme Fonu (FABED) “Eser Tümen Üstün Başarı” Ödülü, (FABED Eser Tümen Award for Scientific Achievement) 2010.
- ◆ Turkish Academy of Sciences (TUBA) Successful Young Scientist Award, 2008.
- ◆ Participated as senior scientist in the EU DALHM (Development and analysis of left handed materials) project which received the prestigious EU **Descartes Prize** on December 2, 2005.
- ◆ Received Faculty of Science Dean’s Letter of Recognition for academic excellence and outstanding research three times throughout the Ph.D study (1995 – 1999).
- ◆ Ranked in the first 100 successful students in the university entrance exam among ~ 600.000 candidates (1989).

2010	◆ Koç U. – Harvard U. Visiting Scholar Program Scholarship.
1999 – 2001	◆ Max-Planck Institute Research Scholarship.
1995 – 1999	◆ Bilkent University Ph.D. Scholarship, grade A.
1995 – 1999	◆ The Scientific and Technical Research Council of Turkey (TUBITAK) Unified Ph. D. Program Fellowship.
1994 – 1998	◆ The British Council Academic Link Scheme Fellowship.
1993 – 1995	◆ Bilkent University Graduate Scholarship.
1989 – 1993	◆ Bilkent University Undergraduate Scholarship.

❖ PROFESSIONAL AFFILIATIONS:

- ◆ Member, SPIE 2010.
- ◆ Member, Turkish Physical Society.
- ◆ Member, American Physical Society.

REFERENCES

- ❖ Professor Ekmel Özbay,
Department of Physics, Bilkent University
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- ❖ Professor Bilal Tanatar,
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- ❖ Professor Ahmet Oral,
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- ❖ Professor Rolf R. Gerhardtts,
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- ❖ Professor Costas M. Soukoulis,
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Ames, Iowa 50011, USA
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PERSONAL INFORMATION

Nationality	Turkish	Marital Status	Married
Birth Date	11.24.1971	Driving License	B-class
Birth Place	Izmir, Turkey	Military Service	Completed in 2000
Languages	English (fluent) German (very good) Spanish (beginner)		

PUBLICATIONS

1. Yalçın U. A., Müstecaplıoğlu Ö. E., Güven K “Modification of the surface plasmon enhanced optical forces on metal nanorod pairs by axial rotation and by dielectric intralayer,” *Appl. Surf. Sci.* **318**, 285, (2014).
2. Karakaya E., Altıntaş F., Güven K., Müstecaplıoğlu Ö. E. “Non-Hermitian quantum dynamics and entanglement of coupled nonlinear resonators,” *EPL* **105**, 40001 (2014).
3. Karakaya E., Güven K., Müstecaplıoğlu Ö. E. “Controlled excitations of surface plasmons via optical soliton photons in the quantum regime,” *Physica Scripta* **T160**, 014020 (2014).
4. Y. Eksioğlu, Ö. E. Müstecaplıoğlu and K. Güven, “Dissipative nonlinear Josephson junction of an optical soliton and a surface plasmon,” *Phys. Rev. A* **87**, 023823 (2013).
5. Y. Eksioğlu, Ö. E. Müstecaplıoğlu and K. Güven, “Dynamical analysis of a weakly coupled nonlinear dielectric waveguide – surface plasmon model as another type of Josephson Junction,” *Phys. Rev. A* **84**, 033805 (2011).
6. A. E. Çetin, K. Güven, O. E. Müstecaplıoğlu, “Active control of focal length and beam deflection in a metallic nano-slit array lens with multiple sources,” *Opt. Lett.* **35**, No. 12, 1980 (2010).
7. E. Saenz, K. Güven, E. Ozbay, I. Eder, R. Gonzalo, “Decoupling of multi-frequency dipole antenna arrays for microwave imaging applications,” *Int. J. Antennas and Propagation*, **2010**, 843624, (2010).
8. T. F. Gündoğdu, K. Güven, M. Gökavas, C. M. Soukoulis, E. Özbay, “A planar metamaterial with dual-band double negative response at EHF,” *IEEE J. Special Topics in Quant. Elect.*, **16**, 376-379 (2010). DOI : [10.1109/JSTQE.2009.2031618](https://doi.org/10.1109/JSTQE.2009.2031618)
9. K. Guven, E. Saenz, R. Gonzalo, E. Ozbay, S. Tretyakov, “Electromagnetic cloaking with canonical spiral inclusions,” *New J. Phys.* **10**, 115037 (2008).
10. E. Saenz, I. Semchenko, S. Khakomov, K. Guven, R. Gonzalo, E. Ozbay, and S. Tretyakov, “Modeling of Spirals with Equal Dielectric, Magnetic, and Chiral Susceptibilities,” *Electromagnetics* **28**, 476 (2008).
11. Elena Saenz, Kaan Guven, Ekmel Ozbay, Iñigo Eder, Ramon Gonzalo, “Enhanced directed emission from metamaterial based radiation source,” *Applied Physics Letters* **92**, 135011 (2008).
12. Kaan Güven, Afif Siddiki, Phani M. Krishna, and Tuğrul Hakioglu, “A self-consistent microscopic model of Coulomb interaction in a bilayer system as an origin of Drag effect phenomenon,” *Physica E* **40**, 1169-1171, (2008).
13. Phani M. Krishna, Afif Siddiki, K. Güven, and Tuğrul Hakioglu, “Local current distribution at large quantum dots (QDs): A self-consistent screening model,” *Physica E* **40**, 1142-1144, (2008).
14. Kaan Guven and Ekmel Ozbay, “Directivity Enhancement and deflection of the beam emitted from a photonic crystal waveguide via defect coupling,” *Optics Express* **15**, 14973-14978 (2007).
15. Tamar F. Gundogdu, Mutlu Gokkavas, Kaan Guven, M. Kafesaki, C.M. Soukoulis, and Ekmel Ozbay “Simulation and micro-fabrication of optically switchable split ring resonators,” *Photonics and Nanostructures* **5**, 106 (2007).
16. (INVITED) Ekmel Ozbay, Koray Aydin, and Kaan Guven, “Metamaterials with negative permeability and negative refractive index: experiments and simulations,” *Journal of Optics A: Pure and Applied Optics* **9**, 301 (2007).
17. Kaan Guven, Atilla O. Cakmak, Mehmet D. Caliskan, Tamar F Gundogdu, Maria Kafesaki, Costas M Soukoulis, and Ekmel Ozbay, “Bilayer metamaterial: analysis of left-handed transmission and retrieval of effective medium parameters,” *Journal of Optics A: Pure and Applied Optics* **9**, 361 (2007).
18. Ekmel Ozbay, Koray Aydin, Irfan Bulu and Kaan Guven, “Negative refraction, subwavelength focusing and beam formation by photonic crystals,” *Journal of Physics D: Applied Physics* **40**, 2652 (2007).
19. A. Ozgur Cakmak, Kaan Guven, and Ekmel Ozbay “Planar bilayer metamaterial with left-handed transmission and negative refraction at microwave frequencies,” *Physica Status Solidi B* **244**, 1188 (2007).
20. Kaan Guven, and Ekmel Ozbay “A plain photonic crystal for generating directional radiation from embedded sources,” *Journal of Optics A: Pure and Applied Optics* **9**, 239 (2007).
21. K. Guven and E. Ozbay, “Near-field imaging in the microwave regime using double layer split-ring resonator based metamaterial,” *Optoelectronics Review* **14**, 213 (2006).
22. Kaan Guven, Deniz Caliskan, and Ekmel Ozbay “Experimental observation of left-handed transmission in a bilayer metamaterial under normal-to-plane propagation”, *Optics Express* **14**, 8685 (2006).
23. (INVITED) Ekmel Ozbay, Irfan Bulu, Kaan Guven, Humeyra Caglayan, and Koray Aydin, “Observation of Negative Refraction and Focusing in Two-Dimensional Photonic Crystals,” *Japanese Journal of Applied Physics* **45**, 6064 (2006).
24. M. Gokkavas, K. Guven, I. Bulu, K. Aydin, R. S. Penciu, M. Kafesaki, C.M. Soukoulis, and E. Ozbay, “Experimental demonstration of a left-handed composite metamaterial operating at 100 GHz,” *Physical Review B* **73**, 193103 (2006).
25. K. Guven, K. Aydin, and E. Ozbay, “Experimental analysis of true left-handed behavior and transmission properties of composite metamaterials,” *Photonics and Nanostructures: Fundamentals and Applications* **3**, pp. 75-78 (2005).
26. K. Aydin, I. Bulu, K. Guven, M. Kafesaki, C. M. Soukoulis, and E. Ozbay, “Investigation of magnetic resonances for different split-ring resonator parameters and designs,” *New Journal of Physics* **7**, 168 (2005).
27. R. Moussa, S. Foteinopoulou, L. Zhang, G. Tuttle, K. Guven, E. Ozbay, and C. M. Soukoulis, “Negative refraction and superlens behavior in a two-dimensional photonic crystal,” *Physical Review B* **71**, 117504 (2005).
28. K. Aydin, K. Guven, C. M. Soukoulis, and E. Ozbay, “Observation of negative refraction and negative phase velocity in left-handed metamaterials,” *Applied Physics Letters* **86**, 124102 (2005).
29. K. Guven and E. Ozbay, “Coupling and phase analysis of cavity structures in two-dimensional photonic crystals,” *Physical Review B* **71**, 085108 (2005).
30. E. Ozbay, I. Bulu, K. Aydin, H. Caglayan, K. B. Alici, and K. Guven, “Highly directive radiation and negative refraction using photonic crystals,” *Laser Physics* **15**, 1 (2005).
31. E. Ozbay, K. Guven, K. Aydin, and M. Bayindir, “Physics and applications of photonic nanocrystals”, *International Journal of Nanotechnology* **4**, 379 (2004).
32. E. Ozbay, I. Bulu, K. Aydin, H. Caglayan, and K. Guven, “Physics and applications of photonic crystals,” *Photonics and Nanostructures – Fundamentals and Applications* **2**, 87 (2004).
33. K. Aydin, K. Guven, N. Katsarakis, C. M. Soukoulis, and E. Ozbay, “Effect of disorder on magnetic resonance band of split-ring resonator structures,” *Optics Express* **12**, 5896 (2004).
34. K. Guven, K. Aydin, K. B. Alici, C. M. Soukoulis, and E. Ozbay, “Spectral negative refraction and focusing analysis of a two-dimensional left-handed photonic crystal lens,” *Physical Review B* **70**, 205125 (2004).
35. K. Aydin, K. Guven, L. Zhang, M. Kafesaki, C. M. Soukoulis, and E. Ozbay, “Experimental observation of true left-handed peak in composite metamaterials,” *Optics Letters* **26**, 2623 (2004).
36. E. Ozbay, K. Guven, E. Cubukcu, K. Aydin, and B. K. Alici, “Negative refraction and subwavelength focusing using photonic crystals,” *Modern Physics Letters B*, **18**, 1275 (2004).

37. K. Guven, and R. R. Gerhardt, "Self-consistent local equilibrium model for density profile and distribution of dissipative currents in a Hall bar under strong magnetic fields," *Physical Review B* **67**, 115327 (2003).
38. K. Guven, R. R. Gerhardt, I. I. Kaya, B. E. Sagol, and G. Nachtwei, "Two-level model for the generation and relaxation of hot electrons near the breakdown of the quantum Hall effect," *Physical Review B* **65**, 155316 (2002).
39. J. G. S. Lok, S. Kraus, M. Pohl, K. Guven, W. Dietsche, K. Von Klitzing, W. Wegscheider, and M. Bichler, "Spin anomalies in the magneto-drag between double layer 2DEGs," *Physica B* **298**, 135 (2001).
40. K. Guven, B. Tanatar, and C. R. Bennett, "Band-gap renormalization in quantum wire systems: dynamical correlations and multi-subband effects," *Journal of Physics Condensed Matter* **12**, 2031 (2000).
41. C. R. Bennett, K. Guven, and B. Tanatar, "Confined optical phonon effects on the band-gap renormalization in quantum wire structures," *Physica B* **263**, 546 (1999).
42. B. H. Bairamov, A. Aydinli, B. Tanatar, K. Guven, S. Gurevich, B. Y. Mel'tser, S. V. Ivanov, P. S. Kop'ev, V. B. Smirnovskii, and F. N. Timofeev, "Raman scattering from confined phonons in GaAs/AlGaAs quantum wires," *Superlattices and Microstructures* **24**, 299 (1998).
43. C. R. Bennett, K. Guven, and B. Tanatar, "Confined phonon effects in the band-gap renormalization of semiconductor quantum wires," *Physical Review B* **57**, 3994 (1998).
44. K. Guven, and B. Tanatar, "Coupled plasmon-phonon effects on the Coulomb Drag in double quantum well systems," Proc. of the "The Physics of Semiconductors ICPS 24", Jerusalem, (ed. D. Gershoni), World Scientific, Singapore, (1999).
45. K. Guven and B. Tanatar, "Coupled plasmon-phonon mode effects on the Coulomb drag in double quantum-well systems," *Physical Review B* **56**, 7535 (1997).
46. K. Guven and B. Tanatar, "Plasmon-LO-phonon coupling effects on the drag rate in double quantum-well systems," *Solid State Communications* **104**, 439 (1997).
47. K. Guven and B. Tanatar, "Variational approach for phonon renormalization effects in photo-excited quantum wires and quantum wells," *Physica Statu Solidi B* **197**, 369 (1996).
48. B. Tanatar, K. Guven, C. R. Bennett, and N. C. Constantinou, "Screening effects on the confined and interface polarons in cylindrical quantum wires," *Physical Review B* **53**, 10866 (1996).
49. K. Guven and B. Tanatar, "Simplified calculations of band-gap renormalization in quantum wells," *Superlatt. Microstruct* **20**, No. 1 (1996).
50. K. Guven and B. Tanatar, "Phonon confinement and screening effects on the polaron energy in quantum wires," *Semiconductor Science Technology* **10**, 803 (1995).
51. K. Guven and B. Tanatar, "Phonon renormalization effects in photoexcited quantum wires," *Physical Review B* **51**, 1784 (1995).

OTHER PUBLICATIONS

52. K. Guven C. R. Bennett, B. Tanatar, "Band-gap renormalization in quantum wires," *Turkish Journal of Physics* **23**, 739 (1999).

CONFERENCES & PROCEEDINGS

1. "Dynamical properties of a coupled nonlinear dielectric waveguide surface-plasmon system as a new type of Josephson Junction," 7th Int. Conf. on Photonics, Device and Systems, Prague, Czech Republic, Aug. 24 - 27 2011.
2. "Coupled nonlinear dielectric waveguide surface-plasmon system as a new type of Josephson Junction," 16th Int. Conf. on Optical MEMS and Nanophotonics, Istanbul, Turkey, Aug. 8-11 2011.
3. Workshop: An overview of the recent developments at the interaction theory of the integer quantized Hall effect, Feza Gürsey Institute for Fundamental Sciences, Kandilli, İstanbul, Turkey, Sep. 17, 2010.
4. (INVITED) K. Güven, "Transformation Optics: Bending the Light," 2nd Greek – Turkish Conference on Statistical Mechanics and Dynamical Systems, Marmaris, Turkey, Rhodes, Greece, Sep. 5 – 12, 2010.
5. (INVITED) K. Güven, E. Saenz, R. Gonzalo, E. Ozbay, S. Tretyakov, "Metamaterial based cloaking with sparse distribution of spiral resonators," Proceedings SPIE 0277-786X vol. 7711, Photonics Europe, Metamaterials Conference, Brussels, Belgium, April 11 – 16, 2010.
6. (INVITED) K. Güven, "Electromagnetic Metamaterials," 11th National Workshop on Optics, Optoelectronics, and Photonics (FOTONIK-2009), Middle East Technical University, Ankara, Turkey, October 16, 2009.
7. (INVITED) K. Güven, "Transformation Optics by Metamaterials," 26th Turkish Physical Society International Physics Congress, Bodrum, Turkey September 24-27 2009.
8. (INVITED) K. Güven, Lectures on Numerical Methods, Summer School on Modeling Nanostructures using Density Functional Theory, İzmir Institute of Technology, İzmir, Turkey, August 10-21 2009.
9. (INVITED) K. Güven, "Metamaterials: New Toys of Electromagnetism," 16th Statistical Physics Days, Koç University, Istanbul Turkey, June 25-27 2009.
10. K. Güven, A. Siddiki, T. Hakioglu, "Nano-TR, Istanbul Technical University, 2008.
11. K. Guven, et. al., "Negative refraction and negative phase velocity through cutwire/wire based metamaterial," First International Congress on Advanced Electromagnetic Materials in Microwaves and Optics, Rome, Italy, October 22-26 2007.
12. EP2DS 17 "International Conference on Electronic Properties of Two-dimensional Systems and Modulated Semiconductor Structures," Genova, Italy, July 15-20, 2007.
13. K. Guven, M. D. Caliskan, and E. Ozbay, "Left-handed transmission through a bilayer metamaterial under normal-to-plane propagation at microwave frequencies," NANOMETA 2007 The 1st European Topical Meeting on Nanophotonics and Metamaterials, Seefeld, Tirol, Austria, January 8-15 2007.
14. Fotonik 2007 "Ulusal optik, elektro-optik ve fotonik çalışma toplantısı," Aselsan, Ankara, September 28 2007.
15. First Workshop of the Metamorphose Network of Excellence, Lille-Louvain-la-Neuve Belgium and France, November 24-26 2006.
16. C. Croënne, K. Guven, M. Foulon, E. Ozbay, T. Crepin, and D. Lippens, "Loss in Terahertz double negative media," International Student Seminar on Microwave Applications of Novel Physical Phenomena, Lapland Finland, August 21-23 2006.
17. "Lecture Series on Nanotechnology," Nanotechnology Research Center, Bilkent University, June 26–July 11, 2006
18. "Towards Space" a course organized by the International Space University, Bilkent University and Ankara Cyberpark, June 19-21, 2006.
19. (INVITED) Workshop on Metamaterials for Microwave and Optical Technologies, San Sebastian, Spain, July 18-20 2005, "Development and analysis of metamaterials with negative index of refraction."
20. International Symposium on Photonic and Electromagnetic Crystal Structures (PECS-VI), Aghia Pelaghia, Crete, Greece, June 19-24 (2005), "Experimental analysis of true left-handed behavior and transmission properties of composite metamaterials."
21. NanoTR-I Nanoscience and Nanotechnology Conference, Bilkent University, Ankara, TURKEY, May 25-27 (2005).
22. (INVITED) E. Ozbay, K. Guven, and M. Bayindir, "Physics and applications of defect structures in photonic crystals," [Proc. of the Integrated Optoelectronic Devices, vol. 5000, 237, 2003], SPIE 2002 San Jose, USA.
23. The American Physical Society Centennial Meeting, Atlanta GA, USA, March 20-26 1999, "Band-Gap Renormalization in Semiconductor Quantum Wires: Dynamical Correlations and Multisubband Effects."

24. Quantum Mesoscopic Phenomena and Mesoscopic Devices in Microelectronics, NATO Advanced Study Institute Conference, Antalya, TURKEY, July 13-15 1999, conference secretariat member.
25. 5th International Research Workshop on Low Dimensional Semiconductors, Physics and Devices: Scattering Mechanisms and Device Performance, Antalya, TURKEY, September 8-11 1998, ``Band Gap Renormalization in Quantum Wires," (poster session).
26. Bennett C. R., Guven K. and Tanatar B. "Confined optical phonon effects on the band-gap renormalization in quantum wire structures," *Proc. 9th Int. Conference on Phonon Scattering in Condensed Matter*, Phonons 98, Lancaster UK, 1998.
27. 24th International Conference on The Physics of Semiconductors (ICPS-24), Jerusalem, Israel, August, 1998, "Coupled plasmon-phonon effects on the Coulomb Drag in double quantum well systems," (poster session).
28. V. İstatistiksel Fizik Gunleri, Istanbul Technical University, Istanbul, TURKEY, July 17-18 1997, ``Band gap renormalization in semiconductor quantum wires."
29. Spectroscopy of Low dimensional Semiconductors, NATO-ASI conference, Bilkent University, Ankara, TURKEY, September 1996, ``Confined phonons in GaAs/AlGaAs quantum wires."
30. IV. İstatistiksel Fizik Gunleri, Istanbul Technical University, Istanbul, TURKEY, July 14-15 1996, "Coupled plasmon-phonon mode effects on the Coulomb Drag in double quantum wells."
31. B. Tanatar, C. R. Bennett, N. C. Constantinou, and K. Guven, "Hot electron scattering from electron-hole plasma and coupled LO-phonon modes in GaAs quantum wires," *Hot Carriers IX*, ed. J. P. Leburton, Plenum, NY (1996).
32. 9th International Conference on Superlattices, Microstructures, and Microdevices (ICSMM-9), Liege BELGIUM, July 1996 ``Raman Scattering from confined phonons in GaAs/AlGaAs quantum wires," (poster session).
33. Symmetry of the Order Parameter in High Temperature Superconductors, Bilkent University, Ankara, TURKEY, June 1996, member of organizing comitee.
34. Ankara Condensed Matter Days, Hacettepe University, Ankara, TURKEY, November 1994, "Effect of confined phonons on the polaron energy in quantum wires."
35. Conference on Condensed Matter Physics, Middle East Technical University (METU), Ankara, TURKEY, September 1994, "Phonon renormalization effect in photoexcited quantum wires."
36. II. İstatistiksel Fizik Gunleri, Istanbul Technical University, Istanbul, TURKEY, July 1994, ``Band gap renormalization in quasi-one-dimensional electron-hole systems.'