

## Asst. Prof. TOLGA ATAY

### Personal Information

**Email:** atay@akdeniz.edu.tr

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### Education Information

Post Doctorate, Brown University, School Of Engineering, School Of Engineering, United States Of America 2008 - 2009

Doctorate, Brown University, Department Of Physics, Department Of Physics, United States Of America 2000 - 2008

Undergraduate, Bogazici University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 1994 - 1999

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, NANOSCALE OPTICS BY LOCALIZED SURFACE PLASMON POLARITONS, Brown University, Department Of Physics, Department Of Physics, 2008

### Research Areas

Mathematics, Computer Science, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Akdeniz University, Faculty of Science, Department of Space Sciences and Technologies, 2011 - Continues

### Academic and Administrative Experience

Akdeniz University, Faculty of Science, 2014 - Continues

### Courses

DİJİTAL ELEKTRONİK, Undergraduate, 2015 - 2016

BİLGİSAYAR PROGRAMLAMA II, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013

NÜMERİK YÖNTEMLER, Undergraduate, 2014 - 2015, 2013 - 2014

UZAY BİLİMLERİNDE BİLGİSAYAR UYGULAMALARI, Postgraduate, 2015 - 2016, 2014 - 2015

BİLGİSAYAR PROGRAMLAMA, Undergraduate, 2015 - 2016

BİLGİSAYAR DESTEKLİ TASARIM, Undergraduate, 2014 - 2015

UZAY BİLİMLERİ VE TEKNOLOJİLERİNE GİRİŞ, Undergraduate, 2012 - 2013

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Flare-production potential associated with different sunspot groups**  
EREN S., KILÇIK A., ATAY T., MITEVA R., Yurchyshyn V., Rozelot J. P., Ozguc A.  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY, vol.465, no.1, pp.68-75, 2017 (SCI-Expanded)
- II. **Optical Detection of Brain Cell Activity Using Plasmonic Gold Nanoparticles**  
Zhang J., Atay T., Nurmikko A. V.  
NANO LETTERS, vol.9, no.2, pp.519-524, 2009 (SCI-Expanded)
- III. **Highly efficient resonant coupling of optical excitations in hybrid organic/inorganic semiconductor nanostructures**  
Zhang Q., Atay T., Tischler J. R., Bradley M. S., Bulovic V., Nurmikko A. V.  
NATURE NANOTECHNOLOGY, vol.2, no.9, pp.555-559, 2007 (SCI-Expanded)
- IV. **Solid state cavity QED: Strong coupling in organic thin films**  
Tischler J. R., Bradley M. S., Zhang Q., Atay T., Nurmikko A., Bulovic V.  
ORGANIC ELECTRONICS, vol.8, no.2-3, pp.94-113, 2007 (SCI-Expanded)
- V. **Large enhancement of fluorescence efficiency from CdSe/ZnS quantum dots induced by resonant coupling to spatially controlled surface plasmons**  
Song J., Atay T., Shi S., Urabe H., Nurmikko A.  
NANO LETTERS, vol.5, no.8, pp.1557-1561, 2005 (SCI-Expanded)
- VI. **Strongly interacting plasmon nanoparticle pairs: From dipole-dipole interaction to conductively coupled regime**  
Atay T., Song J., Nurmikko A.  
NANO LETTERS, vol.4, no.9, pp.1627-1631, 2004 (SCI-Expanded)

### Refereed Congress / Symposium Publications in Proceedings

- I. **A-Track: Ardışık Teleskop Görüntülerinden Hareketli Cisimlerin Otomatik Tespiti**  
Karapınar N., Atay T., KAPLAN M., Kılıç Y.  
20.Ulusal Astronomi Kongresi 2016, Erzurum, Turkey, 5 - 09 September 2016, pp.100
- II. **Detection of Neural Cell Activity Using Plasmonic Gold Nanoparticles**  
Zhang J., ATAY T., Nurmikko A.  
Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference, San Jose, United States Of America, 4 - 09 May 2008, pp.1903-1904
- III. **Increasing the Rabi Splitting of Exciton-Polaritons in J-Aggregate Microcavity Systems**  
Bradley M., Tischler J., Shirasaki Y., Zhang Q., ATAY T., Nurmikko A., Bulovic V.  
MRS Fall Meeting & Exhibit, Boston, United States Of America, 26 - 30 November 2007
- IV. **Highly Efficient Resonance Energy Transfer in Ultrathin Organic-Inorganic Semiconductor Hybrid Films**  
Zhang Q., ATAY T., Nurmikko A.  
Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference, Baltimore, United States Of America, 6 - 11 May 2007, pp.45-46
- V. **Study of phonon propagation in water using picosecond ultrasonics**  
Yang F., Atay T., Dang C. H., Grimsley T. J., Che S., Ma J., Zhang Q., Nurmikko A. V., Maris H. J.  
12th International Conference on Phonon Scattering in Condensed Matter (PHONONS 2004), Paris, France, 15 - 20 July 2007, vol.92
- VI. **Ultrafast Exciton Response of High Optical Density J-aggregates**

ATAY T., Zhang Q., Nurmikko A., Tischler J., Bradley M., Bulovic V.

MRS Fall Meeting & Exhibit, Boston, United States Of America, 27 November - 01 December 2006

VII. **Energy Transfer between Semiconductor Colloidal Quantum Dots and J-aggregates of Cyanine Dye**

Zhang Q., ATAY T., Urabe H., Nurmikko A., Tischler J., Bradley M., Bulovic V.

MRS Fall Meeting & Exhibit, Boston, United States Of America, 27 November - 01 December 2006

VIII. **Gallium Nitride - Organic Semiconductor Heterojunctions for Optoelectronic Devices**

Song Y., Kim H., ATAY T., Patterson W., Nurmikko A., Gherasimova M., Kim K., Han J.

Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference, Long Beach, United States Of America, 21 - 26 May 2006

IX. **Ultrafast Exciton Response of High Optical Density J-aggregates from Ultrathin Films of Cyanine Dyes**

ATAY T., Zhang Q., Nurmikko A., Tischler J., Bradley M., Bulovic V.

Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference, Long Beach, United States Of America, 21 - 26 May 2006

X. **Large Enhancement of Fluorescence from CdSe/ZnS Quantum Dots induced by Resonant Coupling to Spatially Controlled Surface Plasmons**

Shi S., ATAY T., Urabe H., Song J., Nurmikko A.

Conference on Lasers and Electro-Optics/Quantum Electronics and Laser Science Conference, Baltimore, United States Of America, 22 - 27 May 2005

XI. **Strongly Interacting Plasmon Nanoparticles: From Dipole Interaction to Conductively Coupled Regime**

ATAY T., Song J., Nurmikko A.

Conference on Lasers and Electro-Optics and The International Quantum Electronics Conference, San Francisco, United States Of America, 16 - 21 May 2004

XII. **Photovoltaic energy converter as a chip-scale high efficiency power source for implanted active microelectronic devices**

Hwang N., Patterson W., Song Y., Atay T., Nurmikko A.

26th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society, San-Francisco, Costa Rica, 1 - 05 September 2004, vol.26, pp.4091-4092

## Supported Projects

KAPLAN M., ATAY T., TUBITAK Project, Ardışık Teleskop Görüntülerindeki Hareketli Cisimlerin Doğru Tanıma Algoritması İle Otomatik Tespiti, 2015 - Continues

## Metrics

Publication: 18

Citation (WoS): 1223

Citation (Scopus): 1250

H-Index (WoS): 6

H-Index (Scopus): 6