

Rüştü Umut TOK

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Personal Information

Place of Birth : Istanbul, Turkey
Date of Birth : 16/12/1979
Address : 420 Westwood Plaza, 14-128A Engr. IV, Los Angeles, CA 90095

Research & Education

Postdoctoral Research, Dept. of Electrical engineering, P.I. – Prof. Dr. Aydoğan Ozcan. (July 2015-Present)

Postdoctoral Research, Sabanci University, Faculty of Engineering and Natural Science, Mechatronics, P.I. – Associate Prof. Dr. Kürşat Şendur. (January 2015-June 2015)

Ph.D., Sabanci University, Faculty of Engineering and Natural Science, Mechatronics, 2015.
Advisor: Associate Prof. Dr. Kürşat Şendur (Sabanci University)

M.S., Istanbul Technical University, Faculty of Electrical and Electronic Engineering, Biomedical Engineering, 2010.

Thesis: Elimination of the disruptive effect of extra cerebral biological tissues in near infrared spectroscopy.

Advisor: Prof. Dr. Tamer Ölmez (Istanbul Technical University)

Co-advisor: Prof. Dr. Ata Akın (Bosphorus University)

B.S., Isik University, Faculty of Arts and Sciences, Physics, 2004 (Honor Degree).

Work Experience

1. Postdoctoral researcher, UCLA, July 2015- Present.
2. Postdoctoral researcher, Sabanci University, January 2015- June 2015.
3. Research & Teaching Assistant, Sabanci University, August 2010- January 2015.
4. Lecturer, Istanbul Aydın University, August 2009-August 2010
5. Research Assistant, Halic University, August 2008-August 2009
6. Research Assistant, Isik University, September 2004-July 2007.

Honors and Awards

- Dr. Gürsel Sönmez Research Award for 2013-2014 Academic Year
- Leopold B. Felsen 2013 Award for Excellence in Electrodynamics

Refereed Journal Papers

- Rüştü Umut Tok, Kürşat Şendur, “Plasmonic spiderweb nanoantenna surface for broadband hotspot generation,” *Opt. Lett.* **24**, 6977-6980 (2014)
- Rüştü Umut Tok, Kürşat Şendur, “Absorption efficiency enhancement in inorganic and organic thin film solar cells via plasmonic honeycomb arrays,” *Opt. Lett.* **38**, 3119-3122 (2013)
- Rüştü Umut TOK, Kürşat Şendur, “Engineering the broadband spectrum of close-packed plasmonic honeycomb array surfaces,” *J. Quant. Spectrosc. Radiat. Transfer* **120**, 70-80 (2013)

- Rüştü Umut TOK, Cleva Ow-Yang, and Kürşat Şendur, “Unidirectional broadband radiation of honeycomb plasmonic antenna array with broken symmetry”, *Opt. Express* **19**, 22731-22742 (2011)
- Rüştü Umut TOK and Kürşat Şendur, “Femtosecond pulse shaping using plasmonic snowflake nanoantennas,” *Phys. Rev. A* **84**, 033847 (2011)
- Eren Seydi Ünlü, Rüştü Umut Tok, Kürşat Şendur, “Broadband Plasmonic Nanoantenna with an Adjustable Spectral Response,” *Opt. Express* **19**, 1000-1006 (2011)

Proceedings

- Rüştü Umut Tok, Kürşat Şendur, “*Improving the absorption efficiency of thin film Si and organic solar cells with plasmonic honeycomb antenna arrays,*” SPP6, Ottawa, Canada, May 26-31, 2013.
- Kürşat Şendur, Rüştü Umut Tok, “*Engineering the broadband spectrum of plasmonic nanoantenna surfaces,*” SolarTR-2, Antalya, Turkey, November 7-9, 2012.
- R. U. Tok, C. W. Ow-Yang, and K. Sendur, “*Engineering the directionality and spectrum of plasmonic nanoantenna honeycomb arrays,*” META’12, Paris, France, April 19-22, 2012.
- Rüştü U. Tok, Eren S. Ünlü and Kürsat İ. Şendur, “*Plasmonic snowflake antennas with an adjustable broadband spectral response*”, 2011 MRS Fall Meeting & Exhibit, Boston, MA, 28 November-02 December, 2011.
- Umut Tok and Kürşat Şendur, “*Plasmonic snowflake antennas with an adjustable broadband spectral response,*” Frontiers in Optics (FIO)/Laser Science (LS) (Optical Society of America, Washington, DC, 2011), LThD2.
- U. Tok, E. Unlu, and K. Sendur, “*Broadband six-particle and eight-particle common-gap plasmonic nanoantennas,*” Nano Structures on Surfaces and Light Scattering, Bremen, Germany, 24-25 March 2011.
- R.U. Tok, D. Nevşehirli and Ata Akın, “*Investigating the effect of vessel dilation in near infrared spectroscopy measurement by employing a Monte Carlo simulation,*” The Fifth International Symposium on Wavelets Applications to World Problems, Istanbul, Turkey, 7-8 June 2010.
- R. Umut TOK, Tamer OLMEZ, Ata AKIN, “*Elimination of the Disruptive Effect of Extra cerebral Biological Tissues in Near Infrared Spectroscopy,*” 15th National Biomedical Engineering Meeting, Antalya, Turkey, 21-24 April 2010.
- R. Umut TOK, Tamer OLMEZ, Ata AKIN, “*A Monte Carlo Simulation for Photon Migration in Non-Homogeneous Medium,*” 14th National Biomedical Engineering Meeting, Izmir, Turkey, 20-24 May 2009.
- Rüştü Umut TOK, Mahmut Can Hız, Ata Akın, “*The Effect of Demyelization on Propagation Time of Action Potential,*” 13. National Biomedical Engineering National Meeting; ODTÜ, Ankara, Turkey, 29-31 May 2008.
- N. G. KIYAK, U. TOK, “*Signal characteristic of blue-light stimulated luminescence components in quartz sampled,*” NANOVED 2006 -NENAMAT(Advances in nanostructured materials, processing – microstructure – properties), Stara Lesna, The High Tatras, Slovak Republic, May 14-17, 2006.