

# Curriculum Vitae

## **Ece Uykur**

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## **Education**

### **Osaka University**

Degree: Ph.D. December 2013

Thesis advisor: Prof. Setsuko Tajima

Thesis topic: Pseudogap and Precursor Superconductivity of  $\text{YBa}_2(\text{Cu}_{1-x}\text{Zn}_x)_3\text{O}_y$  :  
*c*-Axis Optical Study from Underdoped to Overdoped Region

### **Osaka University**

Degree: M.S. March 2011

Thesis advisor: Prof. Setsuko Tajima

Thesis topic: In-plane optical spectra of  $\text{Y}_{1-x}\text{Ca}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$  single crystals from  
optimally doped to overdoped region

### **Istanbul Technical University**

Degree: June 2008, B.S.

## Major Honors and Awards

- Bavarian Research Foundation Postdoctoral Fellowship, 2014–2015
- Osaka University Interdisciplinary Education Center for Material Science (GCOE) best poster award, 2012
- Osaka University Science Faculty Fellowship, 2009–2011

## Research Interests

My current research interests are low energy, high pressure infrared spectroscopy and THz-TDS spectroscopy of the strongly correlated electron systems (high temperature superconductors and heavy fermion systems, in particular).

## Relevant Employment History

### April 2014–present. Augsburg University

Postdoctoral Research Fellow: High pressure infrared spectroscopy of iron-pnictide superconductors.

### April 2013–December 2013. Osaka University

Research Assistant, Interactive Material Science Cadet Program: Precursor superconductivity and pseudogap phenomena in high temperature cuprate superconductors.

### April 2011–April 2013. Osaka University

Research Assistant, Interdisciplinary Education Center for Material Science: Charge dynamics of high temperature cuprate superconductors in the underdoped region of the phase diagram

## Conferences

1. **E. Uykur**, K. Tanaka, T. Masui, S. Miyasaka, S. Tajima, “Evidence of the existence of superconducting carriers above  $T_c$ :  $c$ -axis optical study of  $\text{YBa}_2(\text{Cu}_{1-x}\text{Zn}_x)_3\text{O}_y$ ”, **Japanese Physical Society Spring Meeting**, 27pXJ-8, Hiroshima, JAPAN, March 2013 -oral
2. **E. Uykur**, K. Tanaka, T. Masui, S. Miyasaka, S. Tajima, “Precursor superconductivity and superconducting fluctuation regime revealed by the  $c$ -axis optical spectra of  $\text{YBa}_2(\text{Cu}_{1-x}\text{Zn}_x)_3\text{O}_y$ ” **International Symposium on Superconductivity**, Tokyo, JAPAN, December 2012 - oral
3. **E. Uykur**, K. Tanaka, T. Masui, S. Miyasaka, S. Tajima, “Coexistence of the pseudogap and the superconducting gap below  $T_c$  revealed by the  $c$ -axis optical study of  $\text{YBa}_2(\text{Cu}_{1-x}\text{Zn}_x)_3\text{O}_y$ ”, **Japanese Physical Society Autumn Meeting**, 21aGB-1, Yokohama, JAPAN, September 2013 - oral
4. **E. Uykur**, K. Tanaka, T. Masui, S. Miyasaka, S. Tajima\*, “Persistence of the pseudogap below  $T_c$  and disappearance of the kinetic energy change in  $\text{YBa}_2(\text{Cu}, \text{Zn})_3\text{O}_y$ ”, **Materials and Mechanisms of Superconductivity**, P1-91, Washington, USA, July 29 - August 3, 2012 - poster
5. **E. Uykur**, K. Tanaka, T. Masui, S. Miyasaka, S. Tajima, “Optical Study of the Pseudogap State in  $\text{YBa}_2(\text{Cu}_{1-x}\text{Zn}_x)_3\text{O}_y$ ”, **Low Energy Electrodynamics in Solids**, P47, Napa Valley, USA, 22–27 July 2012 - poster

6. Setsuko Tajima\*, **E. Uykur**, K. Tanaka, T. Masui and S. Miyasaka, “Coexistence of competing orders in unconventional superconductors”, **International Conference on Magnetism**, HA01, Korea, July 2012 - oral
7. K. Hemmi\*, R. Fukuta, **E. Uykur**, S. Miyasaka, S. Tajima, A. Nakao, H. Nakao, R. Kumai, Y. Murakami, “Cr- and Mo-doping effects on structural and orbital order phase transition in spinel-type  $MnV_2O_4$ ”, **International Conference on Magnetism**, PH07, Korea, July 2012 - poster
8. **E. Uykur**, T. Masui, K. Tanaka, S. Miyasaka, S. Tajima, “Pseudogap studied by optical conductivity spectra of Zn-substituted  $YBa_2Cu_3O_y$ ”, **American Physical Society March Meeting**, Boston, USA, February 27–March 2, 2012 - oral
9. **E. Uykur**, K. Tanaka, T. Masui, S. Miyasaka, S. Tajima, “Pseudogap study using *c*-axis optical spectra of underdoped  $YBa_2Cu_3O_{7-\delta}$ ”, **International Workshop on Heavy Fermions**, 24P-39, Osaka, JAPAN, November 2011 - poster
10. T. Kobayashi\*, W. Hirata, **E. Uykur**, S. Miyasaka, S. Tajima, “Optical properties of iron-pnictide superconductor  $AFe_2As_2$ ”, **Japanese Physical Society Autumn Meeting**, 24aGL-10, Toyama University, JAPAN, September 2011 - oral
11. **E. Uykur**, K. Tanaka, T. Masui, S. Miyasaka, and S. Tajima\*, “Overdoping Effect on the In-plane Charge Dynamics in  $(Y, Ca)Ba_2Cu_3O_{7-\delta}$ ”, **26th International Conference on Low Temperature Physics (LT26)**, 12P-B062, Beijing, CHINA, August 2011 - poster
12. **E. Uykur**, K. Tanaka, T. Masui, S. Miyasaka, S. Tajima, “Intrinsic gapless superconductivity in overdoped  $(Y; Ca)Ba_2Cu_3O_y$ : Study of in-plane optical spectra”, **International Symposium on Superconductivity**, Tsukuba, JAPAN, November 2010 - oral
13. **E. Uykur**, K. Tanaka, T. Masui, S. Miyasaka, and S. Tajima, “Residual Conductivity in Heavily Overdoped  $(Y, Ca)Ba_2Cu_3O_y$ ”, **International Conference on Core Research and Engineering Science of Advanced Materials**, PS II-82, Osaka, Japan, May 2010 - poster