



**姓名:** 南谷 英美

**Name:** Minamitani, Emi

**Position:** Lecturer

**Affiliation:** Department of Materials Engineering, Graduate School of Engineering, The University of Tokyo (UTokyo)

**Email:** eminamitani@cello.t.u-tokyo.ac.jp

### **Research areas (specialty) and Keywords**

Condensed matter physics, surface science, magnetism, electronic structure calculations, computational materials physics

### **EDUCATION**

2005 B. Eng.: Department of Applied Physics, Division of Applied Science, Osaka University

2007 M. Eng.: Department of Applied Physics, Graduate School of Engineering, Osaka University

2010 D. Eng.: Department of Applied Physics, Graduate School of Engineering, Osaka University

### **WORKING EXPERIENCE**

2009-2011 Research Fellow of the Japan Society for the Promotion of Science

2011-2013 Special Postdoctoral Researcher, RIKEN

2013-present Department of Materials Engineering, The University of Tokyo  
(2013-2015: Assistant Professor, 2015-present: Lecturer)

### **HONORS AND AWARDS**

2008 The 3rd L'Oréal-UNESCO for Women in Science Japan Fellowships

### **REPRESENTATIVE WORKS:**

- 1) "Effect of antiferromagnetic RKKY interaction and magnetic field in a two-impurity Kondo system", Emi Minamitani, Wilson Agerico Diño, Hiroshi Nakanishi, Hideaki Kasai, Physical Review B, 82 (2010)153203.
- 2) "Symmetry-driven novel Kondo effect in a molecule", Emi Minamitani, Noriyuki Tsukahara, Daisuke Matsunaka, Yousoo Kim, Noriaki Takagi, Maki Kawai, Phys. Rev. Lett., 109 (2012) 086602.
- 3) "Mode-selective electron-phonon coupling in laser photoemission on Cu(110)", Emi Minamitani, Ryuichi Arafune, Mayuko Q. Yamamoto, Noriaki Takagi, Maki Kawai, Yousoo Kim, Phys. Rev. B 88 (2013) 224301
- 4) "Controlling orbital-selective Kondo effects in a single molecule through coordination chemistry", Noriyuki Tsukahara, Emi Minamitani, Yousoo Kim, Maki Kawai, Noriaki Takagi, J. Chem. Phys. 141 (2014) 054702
- 5) "Spatially extended underscreened Kondo state from collective molecular spin", Emi Minamitani, Yingshuang Fu, Qi-Kun Xue, Yousoo Kim, Satoshi Watanabe, Phys. Rev. B, 92 (2015) 075144
- 6) "Surface phonon excitation on clean metal surfaces in scanning tunneling microscopy", Emi Minamitani, Ryuichi Arafune, Noriyuki Tsukahara, Yoshitaka Ohda, Satoshi Watanabe, Maki Kawai, Hiromu Ueba, Noriaki Takagi, Phys. Rev. B, 93 (2016) 085411