

Masayuki Suda

Assistant Professor, Research Center of Integrative Molecular Systems, Institute for Molecular Science

Address (affiliation):

Research Center of Integrative Molecular Systems

Institute for Molecular Science

Myodaiji, Okazaki, Aichi 444-8585 Japan

Tel: +81-(0)564-55-7347, Fax: +81-(0)564-55-7325

Email: msuda@ims.ac.jp

Education

2005 B.S. in Materials Chemistry (KEIO University)

2007 M.S. in Materials Chemistry (KEIO University)

2009 Ph. D in Materials Chemistry (KEIO University)

Academic Experience

2008-2009: JSPS Research Fellowship for Young Scientists (DC2), KEIO University

2009-2010: JSPS Research Fellowship for Young Scientists (PR) , KEIO University

2010-2011: Postdoctoral Researcher, RIKEN

2011-2012: Special Postdoctoral Researcher, RIKEN

2012-present: Assistant Professor, Institute for Molecular Science

Selected Awards and Honors

2018: The Young Scientists' Prize (The Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology)

2017: Condensed Matter Science Prize

2017: Morino Foundation for Molecular Science

2017: NINS Young Researcher Award

2016: CSJ Award for Young Chemists

2016: Nagoya University Ishida Prize

2016: Young Scientist Awards of the Japan Society for Molecular Science

2016: PCCP prize (The Royal Society of Chemistry)

2009: Fujiwara Award (KEIO Univ.)

Selected Publications

1. "Size Effects on Supercooling Phenomena in Strongly Correlated Electron Systems: IrTe₂ and θ -(BEDT-TTF)₂RbZn(SCN)₄"
H. Oike, M. Suda, M. Kamitani, A. Ueda, H. Mori, Y. Tokura, H. M. Yamamoto and F. Kagawa
Phys. Rev. B **97**, 085102 (2018).
2. "Mott Transition by an Impulsive dielectric Breakdown"
H. Yamakawa, T. Miyamoto, T. Morimoto, T. Tanishige, H. Yada, N. Kida, M. Suda, H. M. Yamamoto, R. Kato, K. Miyagawa, K. Kanoda and H. Okamoto
Nat. Mater., **16**, 1100-1105 (2017).
3. "N-type Superconductivity in an organic Mott insulator induced by light-driven electron-doping"
M. Suda, N. Takashina, S. Namuangruk, N. Kungwan, H. Sakurai and H. M. Yamamoto
Adv. Mater. **29**, 1606833 (2017).
4. "Critical Behavior in Doping-driven Metal-insulator Transition on Single-crystalline Organic Mott FET"
Y. Sato, Y. Kawasugi, M. Suda, H. M. Yamamoto and R. Kato
Nano Lett. **17**, 708-714 (2017).
5. "Light-induced Superconductivity using a Photoactive Electric Double Layer"
M. Suda, R. Kato and H. M. Yamamoto,
Science **347**, 743-746 (2015).
6. "Strain-Tunable Superconducting Field-Effect Transistor with an Organic Strongly-Correlated Electron System"
M. Suda, Y. Kawasugi, T. Minari, K. Tsukagoshi, R. Kato, and H. M. Yamamoto,
Adv. Mater., **26**, 3490-3495 (2014).
7. "A strained organic field-effect transistor with a gate-tunable superconducting channel"
H. M. Yamamoto, M. Nakano, M. Suda, Y. Iwasa, M. Kawasaki and R. Kato
Nature Commun. **4**, 2379/1-2379/7 (2013).
8. "Quantum Hall effect in multilayered massless Dirac fermion systems with tilted cones"
N. Tajima, T. Yamauchi, T. Yamaguchi, M. Suda, Y. Kawasugi, H. M. Yamamoto, R. Kato, Y. Nishio and K. Kajita
Phys. Rev. B, **88**, 075315/1-6 (2013).
9. "Reversible Optical Manipulation of Superconductivity"
Ikegami, M. Suda, T. Watanabe, and Y. Einaga
Angew. Chem. Int. Ed., **49**(2), 372-374 (2010).
10. "Reversible Photo-Tuning of Large Anisotropic Magnetization at Interface between Self-Assembled Photochromic Monolayer and Gold"
M. Suda, N. Kameyama, A. Ikegami, and Y. Einaga
J. Am. Chem. Soc., **131**(2), 865-870 (2009).
11. M. Suda and Y. Einaga
"Sequential Assembly of Ferromagnetic Ultra-Thin Films with Perpendicular Magnetic Anisotropy"
Angew. Chem. Int. Ed., **48**(10), 1754-1757 (2009).
12. M. Suda, N. Kameyama, M. Suzuki, N. Kawamura, and Y. Einaga
"Reversible Photo-Tuning of Ferromagnetism at Au-S Interfaces at Room Temperature"
Angew. Chem. Int. Ed., **47**(1), 160-163 (2008).
13. "Reversible Photo-Switching of Ferromagnetic FePt Nanoparticles at Room Temperature"
M. Suda, M. Nakagawa, T. Iyoda, and Y. Einaga
J. Am. Chem. Soc., **129**(17), 5538-5543 (2007).