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RESEARCH INTERESTS

Excited-state dynamics of organometallic complexes
Ultrafast time-resolved laser spectroscopy

EMPLOYMENT

- 2021- Special Postdoctoral Researcher, RIKEN
- 2018-2021 JSPS Superlative Postdoctoral (SPD) Research Fellowship, JSPS
- 2017-2018 JSPS Postdoctoral (PD) Research Fellowship, JSPS
- 2016-2017 JSPS Doctoral Course (DC2) Research Fellowship, JSPS

EDUCATION

- 2014-2017 Ph.D., Department of Science, Tohoku university
- 2012-2014 M. Sc., Department of Applied Chemistry, Tohoku university
- 2008-2012 B. Sc., Faculty of Applied Chemistry, Tohoku university

SELECTED PUBLICATIONS

- 1) C. Callegari*, **T. Takanashi***, H. Fukuzawa, K. Motomura,
D. Iablonskyi, Y. Kumagai, S. Mondal, T. Tachibana, K. Nagaya,
T. Nishiyama, K. Matsunami, P. Johnsson, P. Piseri, G. Sansone,
A. Dubrouil, M. Reduzzi, P. Carpeggiani, C. Vozzi, M. Devetta,
D. Faccialà, F. Calegari, M. C. Castrovilli, M. Coreno, M. Alagia,
B. Schütte, N. Berrah, O. Plekan, P. Finetti, E. Ferrari, K. C. Prince,
K. Ueda,
『Application of Matched-Filter Concepts to Unbiased Selection of Data
in Pump-Probe Experiments with Free Electron Lasers』,
『Applied Sciences』, vol. 7, pp621-1 – 621-9, (2017).
(* equal contribution).
- 2) **T. Takanashi**, K. Nakamura, E. Kukk, K. Motomura, H. Fukuzawa,
K. Nagaya, S. Wada, Y. Kumagai, D. Iablonskyi, Y. Ito, Y. Sakakibara,
D. You, T. Nishiyama, K. Asa, Y. Sato, T. Umemoto, K. Kariyazono,
K. Ochiai, M. Kanno, K. Yamazaki, K. Kooser, C. Nicolas, C. Miron,
T. Asavei, L. Neagu, M. S. Schöffler, G. Kastirke, X.-J. Liu,
A. Rudenko, S. Owada, T. Katayama, T. Togashi, K. Tono, M. Yabashi,
H. Kono, K. Ueda,
『Ultrafast Coulomb Explosion of the Diiodomethane Molecule Induced
by an X-ray Free-electron Laser Pulse』, 『Physical Chemistry Chemical
Physics』, vol. 19, pp19707 – 19721, (2017).
- 3) **T. Takanashi**, N. V. Golubev, C. Callegari, H. Fukuzawa,
K. Motomura, D. Iablonskyi, Y. Kumagai, S. Mondal, T. Tachibana,
K. Nagaya, T. Nishiyama, K. Matsunami, P. Johnsson, P. Piseri,
G. Sansone, A. Dubrouil, M. Reduzzi, P. Carpeggiani, C. Vozzi,
M. Devetta, M. Negro, D. Faccialà, F. Calegari, A. Trabattoni,
M. C. Castrovilli, Y. Ovcharenko, M. Mudrich, F. Stienkemeier,
M. Coreno, M. Alagia, B. Schütte, N. Berrah, O. Plekan, P. Finetti,
C. Spezzani, E. Ferrari, E. Allaria, G. Penco, C. Serpico, G. De Ninno,
B. Diviacco, S. Di Mitri, L. Giannessi, G. Jabbari, K. C. Prince,
L. S. Cederbaum, Ph. V. Demekhin, A. I. Kuleff, K. Ueda,
『Time-Resolved Measurement of Interatomic Coulombic Decay
Induced by Two-Photon Double Excitation of Ne₂』,
『Physical Review Letters』, vol. 118, pp033202-1 – 033202-6, (2017).

- 4) **T. Takanashi**, M. Tamura, Y. Nakagawa, K. Tomishige,
『Structure of Catalytically Active Rh-In Bimetallic Phase for Amination
of Alcohols』,『Royal Society of Chemistry Advances』, vol. 4,
pp28664 – 28672, (2014).
- 5) **T. Takanashi**, Y. Nakagawa, K. Tomishige,
『Amination of Alcohols with Ammonia in Water over Rh-In Catalyst』,
『Chemistry Letters』, vol. 43, pp822 – 824, (2014).

ORAL PRESENTATIONS (INTERNATIONAL CONFERENCE)

- 1) **T. Takanashi**, T.Tahara,
『Observation of ultrafast excited-state dynamics in multivalent Ru(III)
complex by femtosecond time-resolved absorption spectroscopy』,
『25th International Symposium on the Photochemistry and
Photophysics of Coordination Compounds』, Ulm, Germany, 2023/7/27
- 2) **T. Takanashi**, 『Multiple excitation ICD in neon dimers and
clusters』,
『The International Symposium on (e,2e) Double Photo-ionization and
Related Topics and The International Symposium on Polarization and
Correlation in Electronic and Atomic Collisions』,
Palm Cove, Australia, 2017/8/2-4 (**Invited Talk**)
- 3) **T. Takanashi**, H. Fukuzawa, K. Motomura, K. Nagaya, S. Wada,
Y. Kumagai, D. Iablonskyi, S. Mondal, Y. Ito, T. Tachibana,
S. Yamada, Y. Sakakibara, D. You, T. Nishiyama, K. Ueda,
『Time-resolved measurement for ultrafast molecular dynamics of
diiodomethane using X-ray free-electron laser from SACL』,
『The International Conference on Many Particle Spectroscopy of
Atoms, Molecules, Clusters and Surfaces MPS-2016』,
Moscow, Russia, 2016/8/24 (**Invited Talk**)

4) **T. Takanashi**, H. Fukuzawa, K. Motomura, D. Iablonskyi,
Y. Kumagai, S. Mondal, T. Tachibana, T. Nishiyama, K. Matsunami,
K. Nagaya, P. Johnsson, P. Piseri, G. Sansone, A. Dubrouil, M.
Reduzzi, P. Carpeggiani, C. Vozzi, M. Devetta, M. Negro, D. Faccialà,
F. Calegari, A. Trabattoni, K. Ueda,
「XUV pump-UV probe measurement of the interatomic Coulombic
decay process induced by two-photon double excitation in Ne₂」,
『Intense field, Short Wavelength Atomic and Molecular Processes-3』,
Hamburg, Germany, 2015/7/19

AWARDS & FELLOWSHIPS

- 1) Special Postdoctoral Researcher, RIKEN (2021–)
- 2) JSPS Superlative Postdoctoral (SPD) Research Fellowship, JSPS
(2018–2021)
- 3) JSPS Postdoctoral (PD) Research Fellowship, JSPS (2017–2018)
- 4) The Tohoku University President's Award, 2017/3
- 5) JSPS Doctoral Course (DC2) Research Fellowship, JSPS
(2016–2017)
- 6) The Poster Award of International Symposium for the 70th
Anniversary of the Tohoku Branch of the Chemical Society of Japan,
「Structure and performance of Rh-In/C for the amination of various
alcohols with aqueous ammonia」, 2013/9