The 1st Shanghai Tokyo Advanced Research Symposium on

Ultrafast Intense Laser Science

Program

February 11th (Wed)
18:00-20:00  Welcome reception at Sanjo Kaikan Hall

February 12th (Thu)
9:30-9:40    Opening remarks
9:40-10:00   Katsumi Midorikawa (RIKEN )
             Recent progress on XUV and attosecond science at RIKEN
10:00-10:20  Ruxin Li (SIOM)
             High order harmonic generation in a shaped laser field
10:20-10:40  Tomoya Okino (The University of Tokyo)
             Attosecond nonlinear molecular spectroscopy of polyatomic molecules in VUV and XUV wavelength region

[Coffee break]

11:00-11:20  Peng Liu (SIOM)
             Angular distribution of high harmonic generation from aligned CO₂ molecules
11:20-11:40  Hiroki Yazawa (Keio University)
             Dissociative ionization dynamics of molecules with intense femtosecond pump-probe laser excitation
11:40-12:00  Pengfei Yu (SIOM)
             Controlling recombination interference in high-order harmonic generation from aligned molecules

[Lunch]

13:20-13:40  Ya Cheng (SIOM)
             High field laser physics in long wavelength regime
13:40-14:00 Yonghao Xu (Shanghai Jiaotong University)
   Fabrication and potential use in nonlinear optics of sub-wavelength LCOF

14:00-14:20 Koji Hatanaka (The University of Tokyo)
   Femtosecond laser-induced X-ray pulse emission intensity increase from structured surface of solids or solutions

14:20-14:40 Xianfeng Chen
   Interaction between femtosecond pulse and domain engineered optical superlattice

[Coffee break]

15:00-15:20 Kazutaka Nakamura (Tokyo Institute of Technology)
   Femtosecond time-resolved X-ray diffraction from coherent optical phonons using laser-plasma X-rays

15:20-15:40 Remy Toth (The University of Tokyo)
   Ion emission from thick solid target with 3kHz intense femtosecond laser

15:40-16:00 Tianqing Jia (East China Normal University)
   “Black” SiC fabricated by the interference of two intense femtosecond laser beams

[Coffee break]

16:20-16:40 Keisuke Isobe (RIKEN)
   Selective excitation in nonlinear optical microscope by using an ultra-broadband pulse

16:40-17:00 Heping Zeng (East China Normal University)
   High-peak-intensity nonlinear photonic-crystal waveguides in air with periodic plasma density modulation

17:00-17:20 Makoto Gonokami (The University of Tokyo)
   Optical manipulation of cold excitons
February 13th (Fri)

9:40-10:00  Jian Wu (East China Normal University)
Filamentation dynamics of intense ultrashort laser pulse in the quantum wake of molecular alignment

10:00-10:20  Hirofumi Sakai (The University of Tokyo)
Recent progress in laser-induced molecular orientation

10:20-10:40  Shitong Zhao (Shanghai Institute of Optics and Fine Mechanics)
The optimal alignment of acetylene in the strong laser field

[Coffee break]

11:00-11:20  Liang En Ding (East China Normal University)
Efficient third-harmonic generation and spectral modulation by molecular alignment

11:20-11:40  Reika Kanya (The University of Tokyo)
Dissociative ionization of mass selected molecular ions in intense laser fields by ion trap SWIFT

11:40-12:00  Katsunori Nakai (The University of Tokyo)
Theoretical investigation of dissociation dynamics of methanol dications in intense laser fields by Geographical Orienteering method

[Lunch]

13:20-13:40  Huailiang Xu (The University of Tokyo)
Ultrafast mapping of hydrogen migration in allene in intense laser fields

13:40-14:00  Tsuyoshi Kato (The University of Tokyo)
Ab initio description of electronic dynamics in molecules interacting with intense laser fields

14:00-14:20  Zhongchao Zhang (Shanghai Jiaotong University)
Ultrafast electron diffraction with spatiotemporal resolution on atomic motion scale

[Coffee break]

14:40-15:00  Takahiro Sato (The University of Tokyo)
Ionization and dissociation of molecules at 50–60 nm by XFEL
15:00-15:20  Yuping Chen (Shanghai Jiaotong University)
   All-optical control on femtosecond pulse laser by quadratic nonlinear
cascading interactions @ 1.5µm
15:20-15:40  Hitoki Yoneda (The University of Electro-Communication)
   Interaction experiments of intense EUV laser with condensed matter

[Coffee break]

16:00-16:20  Wenxue Li (East China Normal University)
   High-average-power fiber laser synchronization and amplification
16:20-16:40  Peng Yuan (Fudan University)
   Fiber-array based detection scheme for single-shot pulse contrast
   characterization
16:40-17:00  Ken-ichi Ueda (The University of Electro-Communication)
   Ceramic lasers toward super high power systems
17:00-17:20  Concluding remarks

**February 14th (Sat)**  
Departure