

ISSP International Workshop "Materials Science of Solids and Surfaces using Radiation Field Controlled in Time/Space Domain"

ISSP 6F Lecture Room

Monday, 28 Oct. 2024

Tuesday, 29 Oct. 2024

Wednesday, 30 Oct. 2024

Thursday, 31 Oct. 2024

9:00-9:15	Opening (Jun Yoshinobu)	Session 3: SPM and SPS coupled with photon (Chair: Komeda)	Session 6: Advanced light source and nonlinear optical phenomena & spectroscopy (Chair: Matsunaga)
9:15-9:30	Session 1: Plexciton physics and chemistry (Chair: Shiotari)	Keynote 3-0 Wilson Ho	Keynote 6-0 Hiaki Hirori
9:30-9:45	Keynote 1-0 Kazuya Watanabe	Probing Quantum Dynamics in Space-Time with THz-Radiation Coupled STM	Coherent spin switching of antiferromagnet initiated by dynamical modification of magnetic potential with THz magnetic fields
9:45-10:00	Exploring Plexciton Formation in the Ultraviolet Region	Invited 3-1 Akihito Shiotari	Invited 6-1 Yuta Muramatsu
10:00-10:15	Invited 1-1 Tomokazu Yasuike	Exploring the adaptability of tip-enhanced Raman spectroscopy	Multi-terahertz spectroscopy and Floquet engineering of light-driven Dirac semimetal
10:15-10:30	Control of chemical reactions by strong coupling between plasmon nanocavities and molecules	Invited 3-2 Yuji Kuwahara	Invited 6-2 Shunsuke Tanaka
10:30-10:45	Invited 1-2 Kenji Hirai	Stereochemical Recognition of Chiral molecules Investigated by STM-LE and STM-TERS	Gapless detection of broadband terahertz pulses based on nonlinear optical phenomena in reflection geometry
10:45-11:00	Molecular Assembly and Reactions in Cavity Strong Coupling	Invited 3-3 Osamu Takeuchi	Invited 6-3 Masaharu Horio
11:00-11:15	Invited 1-3 Emiko Kazuma	Pump-probe SPM techniques to study ultrafast dynamics at the nanoscale	Second harmonic generation by nano-focusing an x-ray free-electron laser beam
11:15-11:30	Mechanistic studies of plasmon-induced dissociation reactions at a single-molecule level	Invited 3-4 Takashi Kumagai	Invited 6-4 Hiroshi Imada
11:30-11:45	Invited 1-4 Kyoung-Duck Park	Low-dimensional material characterization using ultrafast IR SNOM	Single-molecule manipulation on insulating films by laser-driven localized plasmonic fields
11:45-12:00	Tip-enhanced nano-spectroscopic modulator for single polaritonic quantum dots	Contributed 3-1 Atsushi Kubo	Closing remarks (Takashi Kumagai)
	Lunch	Lunch	
13:30-13:45	Session 2: Electron/optical spectroscopy in time/space domain (Chair: Kumagai)	Session 4: Operando spectroscopy of materials (Chair: Matsuda)	Labotour
13:45-14:00	Keynote 2-0 Hrvoje Petek	Keynote 4-0 Hendrik Bluhm	
14:00-14:15	Ultrafast Microscopy of Structured Light-Matter Waves	Interplay of Ions and Surfactants at Liquid-Vapor Interfaces investigated by XPS	
14:15-14:30	Invited 2-1 Laurenz Rettig	Invited 4-1 Ryo Toyoshima	
14:30-14:45	Shaping the energy surface - Controlling ultrafast phase transitions by light	In situ / operando spectroscopic measurements for understanding working principle of metal thin-film gas sensors	
14:45-15:00	Invited 2-2 Toshiyuki Taniuchi	Invited 4-2 Takanori Koiwaya	
15:00-15:15	Laser-based Photoemission Electron Microscopy for High Resolution Surface and Interface Imaging	Catalytic activation of carbon dioxide on copper surfaces studied by operando spectroscopies	
15:15-15:30	Tea/coffee break	Contributed 4-1 Nobutaka Maeda	
15:30-15:45	Invited 2-3 Junsuke Yamanishi	Operando Modulation-Excitation IR Spectroscopy at Elevated	
15:45-16:00	Optical Force Nanoscopy of Chiro-Optical Effect	Tea/coffee break	
16:00-16:15	Tutorial Lecture (zoom/A612)	Session 5: Spin detection and control in atomic scale (Chair: Hasegawa)	
16:15-16:30	Takashi Oka	Keynote 5-0 Tadahiro Komeda	
16:30-16:45	Introduction to Nonlinear Geometric Effects in Laser induced Phenomena in Quantum Materials	Investigation of Spin State of Magnetic Molecule in Tunneling Junction Combined with RF Signal	
16:45-17:00		Invited 5-1 Massine Kelai	
17:00-17:15	Registration	Multi-Orbital Interactions and Spin Polarization of Single Rare-Earth Adatoms	
17:15-17:30		Invited 5-2 Masahiro Haze	
17:30-17:45		Quantum control of spin quantum bit by scanning tunneling microscopy	
17:45-18:00	Buffet Party		
18:00-19:00			
19:00-19:30			

Tutorial lecture: 60 min.

Key note talk: 40 + 5 = 45 min.

Invited talk: 25 + 5 = 30 min.

Contributed talk: 12 + 3 = 15 min.