

Program Book

UltrafastX

The 2nd International Conference on UltrafastX
and 3rd Youth Forum on Ultrafast Science

Xi'an · China

November 16-19
2023



Hosts



Organizers

Ultrafast Science
A SCIENCE PARTNER JOURNAL

光子学报
ACTA PHOTONICA SINICA

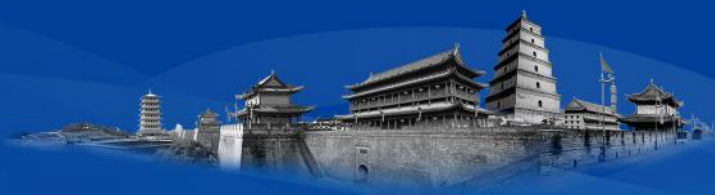


UltrafastX 2023



Program at a Glance

	Thursday	Friday	Saturday	Sunday	Address
	Nov.16	Nov.17	Nov.18	Nov.19	
Registration	08:00-22:00	08:00-19:00	08:00-18:30	08:00-15:00	Hotel lobby
Opening & Plenary Session		08:30-12:10			宴会厅 B2 层 Ballroom B2
Track 3- Ultrafast Terahertz Photonics		13:30-18:05			宴会厅 A 厅 B2 层 Ballroom Section A B2
Track 5- Ultrafast Phenomena and Dynamics		13:30-18:10			宴会厅 B 厅 B2 层 Ballroom Section B B2
Track 6- Ultrafast Particle Science Technology and Application		13:30-18:00			永宁厅 B2 层 Yong Ning Room B2
Track 1- Attosecond Science and Technology			08:30-18:00		宴会厅 A 厅 B2 层 Ballroom Section A B2
Track 2- Ultrafast Lasers and Applications			08:30-18:10		宴会厅 B 厅 B2 层 Ballroom Section B B2
Track 4- Ultrafast Imaging and Spectroscopy			08:30-17:55		永宁厅 B2 层 Yong Ning Room B2
Track 7- Youth Forum				08:30-15:30	永宁厅 B2 层 Yong Ning Room B2
Best Student Oral Session			9:00-11:45		朝阳厅 B2 层 Chao Yang Room B2
Poster Session		17:30-18:30			酒店长廊 B2 层 Hotel Promenade B2
Panel Discussion: Attosecond Science: Past, Present and Future	19:00-21:30				朱雀厅 B2 层 Zhu Que Room B2
Ultrafast Science Editorial Board Committee Conference		19:30-21:00			长乐厅 B2 层 Chang Le Room B2
Ultrafast Science Young Editors Conference	15:00-17:00				朱雀厅 B2 层 Zhu Que Room B2
Banquet and Awards Ceremony			18:30-20:00		宴会厅 B2 层 Ballroom B2



Program

[Fr1] Plenary Session

Date & Time: 8:30-10:25, Friday, November 17, 2023

Presider **Yuxi Fu** (Xi'an Institute of Optics and Precision Mechanics, CAS, China)

8:30-8:45 Opening Ceremony

8:45-8:55 Group Photo

Session Chair **Franz X. Kärtner** (Deutsches Elektronen Synchrotron, Germany)

8:55-9:40 **Fr1-1** **[Plenary] Ultrafast-laser-assisted lithography for optical artificial intelligence**
Min Gu
University of Shanghai for Science and Technology, China

9:40-10:25 **Fr1-2** **[Plenary] Making ambient air to nonlinear crystal?**
X.-C. Zhang
University of Rochester, USA

10:25-10:40 Tea Break

[Fr2] Plenary Session

Date & Time: 10:40-12:10, Friday, November 17, 2023

Session Chair **X.-C. Zhang** (The Institute of Optics, University of Rochester, USA)

10:40-11:25 **Fr2-1** **[Plenary] From lightwave electronics to terahertz accelerators**
Franz X. Kärtner
Deutsches Elektronen Synchrotron, Germany

11:25-12:10 **Fr2-2** **[Plenary] Relativistic lightwave electronics**
Rodrigo Lopez-Martens
Paris Institute of Technology, France

12:10-13:30 Lunch Break

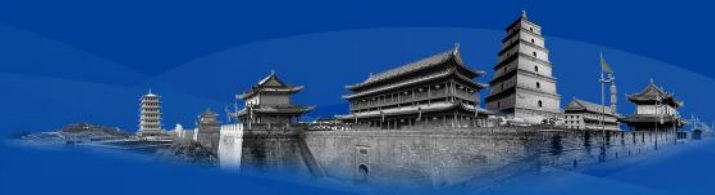
[Sa1] Track 1: Attosecond Science and Technology

Date & Time: 8:30–10:30, Saturday, November 18, 2023

Session Chair

Yuxi Fu (Xi'an Institute of Optics and Precision Mechanics, CAS, China)

8:30–9:00	Sa1-1	[Keynote] Ultrafast electron probing of plasmons and plasmon probing of electrons Péter Dombi Wigner Research Centre for Physics, Hungary
9:00–9:25	Sa1-2	[Invited] Generation and control of sub-cycle optical vortex pulses Katsumi Midorikawa RIKEN, Japan
9:25–9:50	Sa1-3	[Invited] Strong field quantum optics probed in attoseconds Zengxiu Zhao National University of Defense Technology, China
9:50–10:15	Sa1-4	[Invited] High harmonic generation driven by quantum light Oren Cohen Technion, Israel
10:15–10:30	Sa1-5	Polarization conversion from a radial polarized vector laser beam to structured high order harmonics in monolayer transition metal dichalcogenide Peng Ye ^{1,2,3,4} , David Gauthier ⁵ , Marie Froidevaux ⁶ , Sergey Babenkov ⁵ , Xu Liu ⁵ , Vijay Sunuganty ⁵ , Hamed Merdji ^{5,6} , Willem Boutu ⁵ 1.LIDYL, CEA, CNRS, Université Paris-Saclay, France; 2.LOA, ENSTA ParisTech, CNRS, Ecole Polytechnique, France; 3.Institute of Physics, Chinese Academy of Sciences, China; 4.Songshan Lake Material Lab, China; 5.LIDYL, CEA, CNRS, Université Paris-Saclay, 91191 Gif-sur-Yvette, France; 6.LOA, ENSTA ParisTech, CNRS, Ecole Polytechnique, 91120 Palaiseau, France
10:30–10:45		Tea Break



[Sa2] Track 1: Attosecond Science and Technology

Date & Time: 10:45–12:05, Saturday, November 18, 2023

Session Chair

Oren Cohen (Technion, Israel)

10:45–11:15	Sa2-1	[Keynote] Development and application of ultrafast light sources at SECUF Zhiyi Wei Institute of Physics, CAS, China
11:15–11:40	Sa2-2	[Invited] Ultrafast dynamics of microcavity exciton–polariton condensation at room temperature Jian Wu, Hui Li East China Normal University, China
11:40–12:05	Sa2-3	[Invited] Advanced attosecond sources for material science Oliviero Cannelli ATTO-CFEL, DESY, Germany
<hr/>		
12:05–13:30		Lunch Break

[Sa3] Track 1: Attosecond Science and Technology

Date & Time: 13:30–15:45, Saturday, November 18, 2023

Session Chair

Péter Dombi (Wigner Research Centre for Physics, Hungary)

13:30–14:00	Sa3-1	[Keynote] Strong field ultrafast optics and precision measurement of transient processes Peixiang Lu Huazhong University of Science and Technology, China
14:00–14:25	Sa3-2	[Invited] Femtosecond fieldoscopy Hanieh Fattahi Max Planck Institute for the Science of Light, Germany
14:25–14:50	Sa3-3	[Invited] Attosecond electron motion imaging and controlling Dandan Hui Xi'an Institute of Optics and Precision Mechanics, CAS, China
14:50–15:15	Sa3-4	[Invited] High-flux, attosecond, extreme-ultraviolet sources for studies of ultrafast processes in solid- and gas-phase targets Balazs Major The Extreme Light Infrastructure Attosecond Light Pulse Source(ELI-ALPS), Hungary
15:15–15:30	Sa3-5	Generation of 51 as isolated attosecond pulses with double optical gating Xiaowei Wang National University of Defense Technology, China
15:30–15:45	Sa3-6	Direct sampling of ultrashort laser pulses Pei Huang Center for Attosecond Science and Technology, Chinese Academy of Sciences, China
15:45–15:55		Tea Break



[Sa4] Track 1: Attosecond Science and Technology

Date & Time: 15:55–18:00, Saturday, November 18, 2023

Session Chair **Hanieh Fattahi** (Max Planck Institute for the Science of Light, Germany)

15:55–16:25	Sa4-1	[Keynote] Amplification of a single-cycle pulse Eiji J. Takahashi RIKEN, Japan
16:25–16:50	Sa4-2	[Invited] High power femtosecond solid-state lasers for driving high repetition rate HHG Jiangfeng Zhu Xidian University, China
16:50–17:15	Sa4-3	[Invited] Controlling laser-dressed Fano line shape using attosecond extreme-ultraviolet pulse with a spectral minimum Cheng Jin Nanjing University of Science and Technology, China
17:15–17:30	Sa4-4	High harmonic generation in solids: particle and wave perspectives Liang Li Huazhong University of Science and Technology, China
17:30–17:45	Sa4-5	High contrast sub-10 fs pulses from cross-polarized wave generation in multiple thin BaF₂ plates Xianzhi Wang*, Zhaohua Wang, Jiajun Li, Jiawen Li, Zhiyi Wei Institute of Physics, Chinese Academy of Sciences, China
17:45–18:00	Sa4-6	Electro-optic 3D snapshot of laser driven kilo-ampere electron bunches Kai Huang National Institutes for Quantum and Science and Technology, Japan

18:30–20:00		Banquet
-------------	--	----------------

UltrafastX

The 2nd International Conference on UltrafastX
and 3rd Youth Forum on Ultrafast Science

[Sa1] Track 2: Ultrafast Lasers and Applications

Date & Time: 8:30-10:30, Saturday, November 18, 2023

Session Chair **Masaki Kando** (National Institute for Quantum Science and Technology, Japan)

8:30-9:00	Sa1-1	[Keynote] O-FIB and beyond: Pursuing super-resolution in fs laser 3D manufacturing Hongbo Sun Tsinghua University, China
9:00-9:25	Sa1-2	[Invited] Generation of high-energy few-cycle laser pulses via OPCPA in the midwave and longwave infrared spectral region and their applications Uwe Griebner Max Born Institute for Nonlinear Optics and Short Pulse Spectroscopy, Germany
9:25-9:50	Sa1-3	[Invited] The progress and perspective of direct-liquid-cooled Yb:YAG thin disk laser technology Huabao Cao Xi'an Institute of Optics and Precision Mechanics, CAS, China
9:50-10:15	Sa1-4	[Invited] Energy transfer from two-color femtosecond laser pulses to semiconductors Kenichi L. Ishikawa University of Tokyo, Japan
10:15-10:30	Sa1-5	3-GHz Kerr-lens mode-locked Yb:KGW laser Haijing Mai ¹ , Li Zheng ² , Hanze Bai ¹ , Quanming Li ¹ , Wenlong Tian ² , Jiangfeng Zhu ^{2*} , Zhiyi Wei ^{3,4,5} , Hongwen Xuan ^{1,5*} 1.GBA branch of Aerospace Information Research Institute, CAS, China; 2.School of Physics and Optoelectronic Engineering, Xidian University, China;3.Institute of Physics,CAS, China;4.Songshan Lake Materials Laboratory, China;5.University of Chinese Academy of Sciences, China
10:30-10:45		Tea Break



[Sa2] Track 2: Ultrafast Lasers and Applications

Date & Time: 10:45–12:05, Saturday, November 18, 2023

Session Chair

Hongbo Sun (Tsinghua University, China)

10:45–11:15	Sa2-1	[Keynote] Laser plasma accelerator and radiation-induced cancer vaccine Xueqing Yan Peking University, China
11:15–11:40	Sa2-2	[Invited] Generation of high-quality electron beams from a laser wakefield accelerator and its application to coherent, ultrashort X-rays Masaki Kando National Institute for Quantum Science and Technology, Japan
11:40–12:05	Sa2-3	[Invited] Subrelativistic laser driven attosecond electron pulse generation and coherent surface plasmon polariton amplification Ye Tian Shanghai Institute of Optics and Fine Mechanics, CAS, China
12:05–13:30		Lunch Break

[Sa3] Track 2: Ultrafast Lasers and Applications

Date & Time: 13:30–15:40, Saturday, November 18, 2023

Session Chair

Andy Chong (Pusan National University, Korea)

13:30–14:00	Sa3-1	[Keynote] Attosecond soliton molecule dynamics and modulations Minglie Hu Tianjin University, China
14:00–14:25	Sa3-2	[Invited] Ultrafast research activities in APRI Do-Kyeong Ko Gwangju Institute of Science and Technology (GIST), Korea
14:25–14:50	Sa3-3	[Invited] Ultrafast ionization and spin correlation in few electron systems Camilo Ruiz University of Salamanca, Spain
14:50–15:15	Sa3-4	[Invited] Harmonic suppression induced by three-electron dynamics of Li in strong lasers Feng He, Yang Li Shanghai Jiao Tong University, China
15:15–15:40	Sa3-5	[Invited] Vortex and vector air lasing Yi Liu University of Shanghai for Science and Technology, China
15:40–15:55		Tea Break



[Sa4] Track 2: Ultrafast Lasers and Applications

Date & Time: 15:55–18:10, Saturday, November 18, 2023

Session Chair	Do-Kyeong Ko (Gwangju Institute of Science and Technology (GIST), Korea)	
15:55–16:25	Sa4-1	[Keynote] Three-dimensional spatiotemporal optical wave packets and phase singularities Andy Chong Pusan National University, Korea
16:25–16:50	Sa4-2	[Invited] Measuring pure and mixed photoelectron quantum states by high-resolution ultrafast interferometer Sizuo Luo Jilin University, China
16:50–17:15	Sa4-3	[Invited] Line shape control in ultrafast XUV transient absorption spectroscopy Peng Peng ShanghaiTech University, China
17:15–17:40	Sa4-4	[Invited] Generation of the highest laser intensity with multi-PW laser pulses Jin Woo Yoon Center for Relativistic Laser Science, Institute for Basic Science, Korea
17:40–17:55	Sa4-5	Towards a space-qualified Kerr-lens mode-locked femtosecond laser within a 40-mL volume Ye Feng [*] , Tong Zhang, Yishan Wang Xi'an Institute of Optics and Precision Mechanics, CAS, China
17:55–18:10	Sa4-6	High-performance ultrafast thin disk laser Xing Liu ^{1*} , Qitao Lv ² , Shuangchen Ruan ^{1*} 1. Shenzhen Technology University, China; 2. Han's Laser Technology Industry Group, China
18:30–20:00	Banquet	

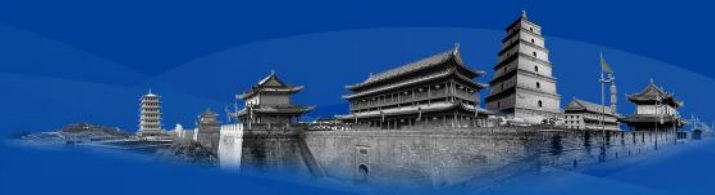
[Fr1] Track 3: Ultrafast Terahertz Photonics

Date & Time: 13:30–15:30, Friday, November 17, 2023

Session Chair

Weiwei Liu (Nankai University, China)

13:30–14:00	Fr1-1	[Keynote] Stimulated emission from molecular crystalline and phase-changing media Alexander Shkurinov Lomonosov Moscow State University, Russia
14:00–14:25	Fr1-2	[Invited] Temporal loss boundary engineered terahertz metamaterials Longqing Cong Southern University of Science and Technology, China
14:25–14:50	Fr1-3	[Invited] Ultrafast molecular dynamics of liquids revealed by terahertz techniques Liangliang Zhang Capital Normal University, China
14:50–15:15	Fr1-4	[Invited] Ultrafast carrier dynamics in film solar cells revealed by terahertz spectroscopy Juan Du Hangzhou Institute for Advanced Study, UCAS, China
15:15–15:30	Fr1-5	Advantage of pulse front tilting in organic crystal based THz sources Gyula Polonyi ^{1,2,3*} , György Tóth ¹ , János Hebling ^{1,2,3} 1.University of Pécs, Institute of Physics, Hungary; 2.HUN-REN-PTE High-Field THz Research Group, Hungary; 3.University of Pécs, Szentágotthai Research Centre, Hungary
15:30–15:45		Tea Break



[Fr2] Track 3: Ultrafast Terahertz Photonics

Date & Time: 15:45-18:05, Friday, November 17, 2023

Session Chair **Alexander Shkurinov** (Lomonosov Moscow State University, Russia)

15:45-16:15	Fr2-1	[Keynote] Terahertz emission based on ultrafast opto-spintronics Zuanming Jin University of Shanghai for Science and Technology, China
16:15-16:40	Fr2-2	[Invited] Spatial characteristics of fluorescence emission by femtosecond laser filament Weiwei Liu Nankai University, China
16:40-17:05	Fr2-3	[Invited] On-chip nonlinear photonics for terahertz applications Ileana-Cristina Benea-Chelmus EPFL, Switzerland
17:05-17:20	Fr2-4	Extreme terahertz radiation from relativistic laser plasmas Guoqian Liao Institute of Physics, Chinese Academy of Sciences, China
17:20-17:35	Fr2-5	Development of optical rectification based THz pulse sources pumped by CO₂ laser Gyorgy Toth ^{1,2*} , Gergo Illes ¹ , Gabit Nazymbekov ¹ , Gabor Almasi ^{1,3} , Janos Hebling ^{1,3,4} 1.University of Pecs, Hungary; 2.Szentágothai Research Centre, Hungary; 3.Szentagothai Research Centre, Hungary; 4.HU-REN-PTE High-Field Terahertz Research Group, Hungary
17:35-17:50	Fr2-6	Ultrafast lasers as a tool of high-precision micromachining Wenhu Zhao Suzhou Bellin Laser Co., Ltd
17:50-18:05	Fr2-7	Edwards Vacuum Product and Ultrafast Application Jie Yang Edwards Technologies Trading (Shanghai) Co., Ltd.
17:30-18:30		Poster Session

[Sa1] Track 4: Ultrafast Imaging and Spectroscopy

Date & Time: 8:30–10:30, Saturday, November 18, 2023

Session Chair

Keiichiro Kagawa (Shizuoka University, Japan)

8:30–9:00	Sa1-1	[Keynote] Coded optical streaking for multi-scale real-time ultrafast imaging Jinyang Liang Institut National de la Recherche Scientifique (INRS)–Université du Québec, Canada
9:00–9:25	Sa1-2	[Invited] Spatiotemporal characterization of femtosecond to attosecond laser pulses Zhengyan Li Huazhong University of Science and Technology, China
9:25–9:50	Sa1-3	[Invited] High-fidelity single-shot ultrafast optical imaging techniques Yunhua Yao East China Normal University, China
9:50–10:15	Sa1-4	[Invited] Research on information theory of ultrafast imaging Jingzhen Li Shenzhen University, China
10:15–10:30	Sa1-5	An ultrafast picosecond framing camera based on electron pulse dilation technology Yongsheng Gou Xi'an Institute of Optics and Precision Mechanics of CAS, China
10:30–10:45		Tea Break



[Sa2] Track 4: Ultrafast Imaging and Spectroscopy

Date & Time: 10:45-11:55, Saturday, November 18, 2023

Session Chair **Jinyang Liang** (Institut National de la Recherche Scientifique (INRS)-Université du Québec, Canada)

10:45-11:15	Sa2-1	[Keynote] Single-shot ultrafast photography based on spectral-temporal coupling Feng Chen Xi'an Jiaotong University, China
11:15-11:40	Sa2-2	[Invited] Single-shot pseudo-direct time-of-flight depth image sensors with charge-domain signal compression Keiichiro Kagawa Shizuoka University, Japan
11:40-11:55	Sa2-3	Off-resonant pumping exciton dynamics in quasi-2D perovskite for all-optical logic gates Yulan Fu Beijing university of Technology, China
11:55-13:30		Lunch Break

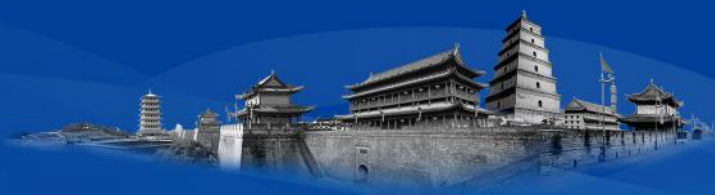
[Sa3] Track 4: Ultrafast Imaging and Spectroscopy

Date & Time: 13:30–15:40, Saturday, November 18, 2023

Session Chair

Yuqi Zhou (University of Tokyo, Japan)

13:30–14:00	Sa3-1	[Keynote] Molecular electronic–vibrational coupling revealed by two-dimensional electronic coherence spectroscopy Yuxiang Weng Institute of Physics, CAS, China
14:00–14:25	Sa3-2	[Invited] Micro-region ultrafast spectroscopy and the applications Xinfeng Liu National Center for Nanoscience and Technology, China
14:25–14:50	Sa3-3	[Invited] Photochemical reaction mechanism studies of organic molecules Jiani Ma Shaanxi Normal University, China
14:50–15:15	Sa3-4	[Invited] Excited-state dynamics in organics photovoltaic blends studied by ultrafast spectroscopy Rui Wang Nanjing University of Aeronautics and Astronautics, China
15:15–15:40	Sa3-5	[Invited] Quartz tuning fork based laser spectroscopy and its application for gas sensing Yufei Ma Harbin Institute of Technology, China
15:40–15:55		Tea Break



[Sa4] Track 4: Ultrafast Imaging and Spectroscopy

Date & Time: 15:55–17:55, Saturday, November 18, 2023

Session Chair

Yuxiang Weng (Institute of Physics, CAS, China)

15:55–16:25	Sa4-1	[Keynote] Ultrafast observation and manipulation of spin coherence in quantum dots Kaifeng Wu Dalian Institute of Chemical Physics, CAS, China
16:25–16:50	Sa4-2	[Invited] Uncovering thrombosis with ultrafast optofluidic imaging Yuqi Zhou University of Tokyo, Japan
16:50–17:15	Sa4-3	[Invited] Ultrafast multidimensional spectroscopy for electron dynamics of molecules: from quantum light to X ray Zhedong Zhang City University of Hong Kong, Hong Kong, China
17:15–17:40	Sa4-4	[Invited] Ultrafast dynamics in iron-based superconductors and innovation of on-site in situ high pressure ultrafast spectroscopy Jimin Zhao Institute of Physics, CAS, China
17:40–17:55	Sa4-5	Ultrafast topography of femtosecond laser ablation using structured illumination Jielei Ni ¹ , Xiaocong Yuan ^{1,2*} , Changjun Min ^{1*} 1. Shenzhen University, China; 2. Zhejiang Lab, China
18:30–20:00		Banquet

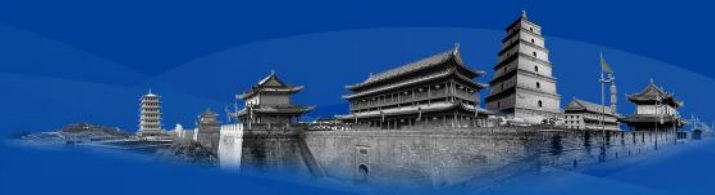
[Fr1] Track 5: Ultrafast Phenomena and Dynamics

Date & Time: 13:30–15:30, Friday, November 17, 2023

Session Chair

Peixiang Lu (Huazhong University of Science and Technology, China)

13:30–14:00	Fr1-1	[Keynote] Quantum electrodynamics of strong laser–matter interaction Marcelo Fabián Ciappina Guangdong Technion–Israel Institute of Technology, China
14:00–14:25	Fr1-2	[Invited] Ultrafast imaging and control of molecular dynamics Zheng Li Peking University, China
14:25–14:50	Fr1-3	[Invited] Ultrafast magnetization and coherent magnon dynamics in a 2D antiferromagnet MnBi_2Te_4 Luyi Yang Tsinghua University, China
14:50–15:15	Fr1-4	[Invited] Time–resolved multi–electron coincidence spectroscopy: from gas towards liquid Pengju Zhang ETH Zürich, Switzerland
15:15–15:30	Fr1-5	Dynamical spin–interlayer shear coupling in a van der Waals antiferromagnet Faran Zhou Institute of Physics, CAS, China
15:30–15:45		Tea Break



[Fr2] Track 5: Ultrafast Phenomena and Dynamics

Date & Time: 15:45–18:10, Friday, November 17, 2023

Session Chair

Yunquan Liu (Peking University, China)

15:45–16:10	Fr2-1	[Invited] High harmonics in classical ultrafast studies of nonadiabatic dynamics and quantum squeezing generation Konstantin E. Dorfman Hainan University, China
16:10–16:35	Fr2-2	[Invited] High-repetition-rate, few-cycle pulse compression and wavelength-tunable UV dispersive-wave generation in hollow-capillary fiber Meng Pang Shanghai Institute of Optics and Fine Mechanics, CAS, China
16:35–17:00	Fr2-3	[Invited] Intense, highly monochromatic high-order harmonics from gallium plasma Tsuneyuki Ozaki Institut National de la Recherche Scientifique, Canada
17:00–17:25	Fr2-4	[Invited] Are Weyl fermions in Weyl semimetals are truly massless Gopal Dixit Indian Institute of Technology Bombay, India
17:25–17:40	Fr2-5	Dynamics and artificial control of triplet excited states in DNA Jinquan Chen East China Normal University, China
17:40–17:55	Fr2-6	Auger-assisted secondary hot carrier transfer in a type I MoS₂/PtSe₂ heterostructure Jin Yang ¹ , Shaokuan Gong ² , Xiaguang Zhang ³ , Jianxun Liu ⁴ , Wen Luo ¹ , Zhongguang Lu ¹ , Yanjun Liu ⁴ , Xihan Chen ² , Christoph Lienau ⁵ , Jinhui Zhong ^{1*} 1.Department of Materials Science and Engineering, Southern University of Science and Technology, China; 2.SUSTech Energy Institute for Carbon Neutrality, Department of Mechanical and Energy Engineering, Southern University of Science and Technology, China; 3.Key Laboratory of Green Chemical Media and Reactions, Ministry of Education, Collaborative Innovation Center of Henan Province for Green Manufacturing of Fine Chemicals, College of Chemistry and Chemical Engineering, China; 4.Department of Electrical and Electronic Engineering, Southern University of Science and Technology, China; 5.Institut für Physik, Carl von Ossietzky Universität, Germany
17:55–18:10	Fr2-7	Femtosecond laser precision manufacturing technology and application Zi Wang Xi'an Zhongke Micro-precision Photonics Manufacturing Technology Co., Ltd.
17:30–18:30		Poster Session

[Fr1] Track 6: Ultrafast Particle Science, Technology and Application

Date & Time: 13:30–15:30, Friday, November 17, 2023

Session Chair

Dieter Hoffmann (Xi'an Jiaotong University, China)

13:30–14:00	Fr1-1	[Keynote] Ultrafast neutron source driven by intense laser pulses Bin Qiao Peking University, China
14:00–14:25	Fr1-2	[Invited] Laser-driven sources of ultra-relativistic electrons and MeV gammas N.E. Andreev Moscow Institute of Physics and Technology (State University), Russia
14:25–14:50	Fr1-3	[Invited] Metrology and development of coherent XUV sources Lu Li Shenzhen Technology University, China
14:50–15:15	Fr1-4	[Invited] Ultrafast free-electron laser based on laser wakefield accelerator Wentao Wang Shanghai Institute of Optics and Fine Mechanics, CAS, China
15:15–15:30	Fr1-5	High spatiotemporal resolution diagnosis for laser plasma by femtosecond laser Dacheng Zhang*, Zhongqi Feng, Hanxing Ge, Jiajia Hou Xidian University, China
15:30–15:45		Tea Break



[Fr2] Track 6: Ultrafast Particle Science, Technology and Application

Date & Time: 15:45-18:00, Friday, November 17, 2023

Session Chair

Bin Qiao (Peking University, China)

15:45-16:15	Fr2-1	[Keynote] Ultra-bright sources of MeV particles and radiation based on direct laser accelerated electrons O.N. Rosmej GSI Helmholtzzentrum für Schwerionenforschung, Germany
16:15-16:40	Fr2-2	[Invited] Atomic and nuclear processes in laser-accelerated intense ion beam interaction with dense plasmas Jieru Ren Xi'an Jiaotong University, China
16:40-17:05	Fr2-3	[Invited] Quantum splitting of electron peaks in ultra strong fields Bo Zhang China Academy of Engineering Physics, China
17:05-17:30	Fr2-4	[Invited] Theoretical studies on the ultrafast decay mechanism of excited states of metallofullerenes Tao Yang Xi'an Jiaotong University, China
17:30-17:45	Fr2-5	Hybrid DLA-LWFA acceleration of electrons in near-critical density plasma Diana Gorlova ^{1,2*} 1.Lomonosov MSU, Russia; 2.INR RAS, Russia
17:45-18:00	Fr2-6	Directly imaging excited state-resolved transient structures of water induced by valence and inner-shell ionization Chuncheng Wang Jilin University, China
17:30-18:30		Poster Session

[Su1] Track 7: Youth Forum

Date & Time: 8:30-10:45, Sunday, November 19, 2023

Session Chair

Ya Cheng (East China Normal University, China)

8:30-9:15	Su1-1	[Plenary] Attosecond – the Universal Response of Transparent Matter. Paul Corkum and Donghyuk Ko University of Ottawa and the National Research Council of Canada, Canada
9:15-9:45	Su1-2	[Keynote] Extreme-ultraviolet (XUV) frequency comb and its applications in precision measurements Xiaojun Liu Innovation Academy for Precision Measurement Science and Technology, CAS, China
9:45-10:05	Su1-3	[Invited] Terahertz spin currents resolved with nanometer spatial resolution Xiaojun Wu Beihang University, China
10:05-10:25	Su1-4	[Invited] Dynamically reconfigurable terahertz metadevices enabled by MEMS Xiaoguang Zhao Tsinghua University, China
10:25-10:45	Su1-5	[Invited] Highly efficient octave-spanning long-wavelength infrared generation in a $\chi^{(2)}$ waveguide Houkun Liang Sichuan University, China
10:45-10:55		Tea Break



[Su2] Track 7: Youth Forum

Date & Time: 10:55–12:05, Sunday, November 19, 2023

Session Chair **Huabao Cao** (Xi'an Institute of Optics and Precision Mechanics, CAS, China)

10:55–11:25 **Su2-1** **[Keynote] Large-scale lithium niobate integrated photonic circuits**
Ya Cheng
East China Normal University, China

11:25–11:45 **Su2-2** **[Invited] Polychromatic soliton in fiber laser**
Dong Mao
Northwestern Polytechnical University, China

11:45–12:05 **Su2-3** **[Invited] Attosecond photoionization time delays in atoms and molecules**
Xiaochun Gong
East China Normal University, China

12:05–13:30 **Lunch Break**

[Su3] Track 7: Youth Forum

Date & Time: 13:30–15:30, Sunday, November 19, 2023

Session Chair

Xueguang Ren (Xi'an Jiaotong University, China)

-
- | | | |
|-------------|--------------|--|
| 13:30–13:50 | Su3-1 | [Invited] Attosecond-resolved non-dipole electron dynamics
Yueming Zhou
Huazhong University of Science and Technology, China |
| 13:50–14:10 | Su3-2 | [Invited] Ultrafast dynamics and phonon-assisted upconverted emission of 2D excitons
Pengfei Qi
Nankai University, China |
| 14:10–14:30 | Su3-3 | [Invited] R&D of the fast microchannel plate photomultiplier tube
Ping Chen
Xi'an Institute of Optics and Precision Mechanics, CAS, China |
| 14:30–14:50 | Su3-4 | [Invited] Observation of ultrafast proton and energy transfer in hydrated pyrroledimers induced by electron impact
Jiaqi Zhou ¹ , Shaokui Jia ¹ , Xiaorui Xue ¹ , Xintai Hao ¹ , Lu Wu ² , Lanhai He [*] ,
Chuncheng Wang, Dajun Ding ² , Xueguang Ren ¹
1. MOE Key Laboratory for Nonequilibrium Synthesis and Modulation of Condensed Matter, School of Physic, Xi'an Jiaotong University, China;
2. Institute of Atomic and Molecular Physics, Jilin University, China |
| 14:50–15:10 | Su3-5 | [Invited] Coherent synthesis of arbitrary ultrafast space-time wave packets
Lu Chen
Nankai University, China |
| 15:10–15:30 | Su3-6 | Response time of photoemission at quantum-classic boundary
Jiayin Che ¹ , Chao Chen ¹ , Jianan Wu ¹ , Guoguo Xin ^{2*} , Yanjun Chen ¹
1. College of Physics and Information Technology, Shaan'xi Normal University, China; 2. School of Physics, Northwest University, China |
-



[Sa1] Best Student Oral Session

Date & Time: 9:00-10:30, Saturday, November 18, 2023

Session Chair

Hua Lin (Xi'an Institute of Optics and Precision Mechanics, CAS, China)

9:00-9:15	Sa1-1	Short-wave infrared streak camera for photoluminescence lifetime mapping of rare-earth doped nanoparticles Miao Liu, Yingming Lai, Miguel Marquez, Fiorenzo Vetrone, Jinyang Liang* Institut National de la Recherche Scientifique (INRS), Université du Québec, Canada
9:15-9:30	Sa1-2	A two-dimensional receive-only compressed ultrafast tomographic imaging method for streak cameras Yingming Lai, Jinyang Liang* Institut National de la Recherche Scientifique (INRS), Université du Québec, Canada
9:30-9:45	Sa1-3	Probing the ultrafast lattice dynamics of PbSe quantum dots under intense photoexcitation Luye Yue ¹ , Jingjun Li ¹ , Changyuan Yao ¹ , Zihui Zhou ¹ , Xuan Wang ^{2*} , Jie Chen ^{1*} , Jianming Cao ^{1*} 1. Shanghai Jiao Tong University, China; 2. Institute of Physics Chinese Academy of Sciences, China
9:45-10:00	Sa1-4	Four-wave mixing optical contents based on the dispersion management of the narrow-bandwidth fiber laser Jingyi Cui ¹ , Aimin Wang ^{1*} , Yizhou Liu ² 1. Peking University, China; 2. Shandong University, China
10:00-10:15	Sa1-5	Nonlinear temporal contrast enhancement of ultrashort pulses in multipass cells Jaismeen Kaur ^{1*} , Louis Daniault ² , Zhao Cheng ¹ , Oscar Tourneur ¹ , Olivier Tcherbakoff ³ , Fabrice Réau ³ , Jean-François Hergott ³ , Rodrigo Lopez-Martens ¹ 1. Laboratoire d'Optique Appliquée (LOA), France; 2. Laboratoire d'Optique Appliquée, France; 3. Université Paris-Saclay, CEA, CNRS, LIDYL, France
10:15-10:30	Sa1-6	Yb-doped ultrafast fiber laser system emitting 1.5 kW average power Yang Gui ^{1,2,3} , Libang Yao ^{1,2} , Chenyang Gao ^{1,2} , Meng Pang ^{1,2,3} , Gengji Zhou ^{1,2*} , Yuxin Leng ^{1,2,3} 1. State Key Laboratory of High Field Laser Physics and CAS Center for Excellence in Ultra-intense Laser Science, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, China; 2. University of Chinese Academy of Sciences, China; 3. Hangzhou Institute for Advanced Study, University of Chinese Academy of Sciences, China
10:30-10:45		Tea Break

[Sa2] Best Student Oral Session

Date & Time: 10:45–11:45, Saturday, November 18, 2023

Session Chair

Hua Lin (Xi'an Institute of Optics and Precision Mechanics, CAS, China)

10:45–11:00	Sa2-1	Optimized femtosecond laser cutting strategy of nitinol hypotube Yunfeng Song ¹ , Tiangang Xu ^{2,3} , Yitong Liu ^{3,4} , Ziyuan Li ^{3,4} , Chengrong Cao ⁵ , Xusan Yang ^{6*} 1. Yangtze River Delta Physics Research Center, China; 2. Medical and Applied Physics Platform, Institute of Physics, Chinese Academy of Sciences, China; 3. Guangdong Hicare Science Co., Ltd, China; 4. Medical and Applied Physics Platform, Yangtze River Delta Physics Research Center, China; 5. Intelligent Metal Materials and Device Platform, Institute of Physics, Chinese Academy of Sciences, China; 6. Medical and Applied Physics Platform, Yangtze River Delta Physics Research Center, China
11:00–11:15	Sa2-2	Ultrafast optical excitation of multistage phase transitions in chalcogenide phase transition material: Insights from real-time time-dependent DFT with molecular dynamics calculations Li Chen, Liyuan Chen East China Normal University, China
11:15–11:30	Sa2-3	Topologically protected strong interaction of photonics with free electron Jing Li Peking University, China
11:30–11:45	Sa2-4	High efficiency sub-two-cycle mid-infrared femtosecond pulses generation by DC-OPA Hao Yuan ^{1,2} , Pei Huang ¹ , Xianglin Wang ¹ , Huabao Cao ^{1,2} , Yuxi Fu ^{1,2*} 1. Center for Attosecond Science and Technology, Xi'an Institute of Optics and Precision Mechanics (XIOPM), Chinese Academy of Sciences (CAS), China; 2. University of Chinese Academy of Sciences, China
11:45–13:30		Lunch Break



Poster Session

Topic 1: Attosecond science and technology

UX2023-0906-1

Generation of 51 as Isolated Attosecond Pulses with Double Optical Gating

Xiaofan Fan, Jiacan Wang, Li Wang, Wenkai Tao, Zhigang Zhen, Zengxiu Zhao, Xiaowei Wang
National University of Defense Technology

UX2023-0925-1

Towards table-top and high-flux OPCPA drivers at 2.1 um for Soft-X-Ray generation

Olivier Zabiolle
Amplitude Laser

UX2023-0929-1

Tailoring the high-order harmonic generation spectrum by temporal synthesized pulses

Camilo Granados¹, Khadga J. Karki², Marcelo Ciappina²

1.Guangdong Technion Israel institute of technology;2.Guangdong technion Israel institute of technology

UX2023-1002-1

Quasi-Newton iterative algorithm for ultra-bandwidth attosecond pulses characterization

Jiacan Wang
Department of Physics, National University of Defense Technology

UX2023-1004-2

High-order harmonic generation in atomic gases using structured light beams: From Laguerre-Gaussian beam to perfect vortex beam.

Bikash Kumar Das, Marcelo Fabian Ciappina
Guangdong Technion-Israel Institute of Technology

UX2023-1007-5

Atomic partial wave meter by attosecond coincidence metrology

Wenyu Jiang
East China Normal University

UX2023-1007-16

Nonperturbative 1-XUV-photon-3-NIR-photon corrections in Attosecond Photoionization of Helium Atoms

Lulu Han
East China Normal University

UX2023-1008-1

High-order harmonic generation of H₂ in surface plasmon modulated chirped laser field

Yuan Shuo¹, Gao Si-Yu¹, Wang Jian², Liu Ji-Cai^{1,3}

1.School of Mathematics and Physics, North China Electric Power University;2.School of Nuclear Science and Engineering, North China Electric Power University;3.Hebei Key Laboratory of Physics and Energy Technology, North China Electric Power University

UX2023-1008-8

Waveform induced coherent dephasing in solid-state high harmonic generation

Gefei Li
University of Chinese Academy of Sciences

UX2023-1008-18

Twisted radiation vortex from nonlinear Thomson scattering with ultra intense Laguerre Gaussian laser

Weijun Zhou
Shanghai Jiao Tong University

UX2023-1014-1

Macroscopic effects of isolated-attosecond-pulse generation with a temporally asymmetric laser field

Jintan Cai

Shanghai Normal university

UX2023-1016-2

Deep learning for isolated attosecond pulse reconstruction with the all-optical method

Lihui Meng¹, Shiqi Liang¹, Lixin He¹; Jianchang Hu¹; Siqi Sun¹; Pengfei Lan¹; Peixiang Lu^{1,2}

1. Wuhan National Laboratory for Optoelectronics and School of Physics, Huazhong University of Science and Technology, China; 2. Hubei Key Laboratory of Optical Information and Pattern Recognition, Wuhan Institute of Technology, China

Topic 2: Ultrafast strong laser and application

UX2023-0908-1

Towards the next generation Ti:sapphire ultrafast oscillator

Ming Yang

viulase GmbH

UX2023-1005-2

Measurement technologies of laser parameters in picosecond-petawatt laser system

Shunxing Tang, Yajing Guo, Xiuqing Jiang

SIOM

UX2023-1007-9

Generation of nonclassical light states via high harmonic generation from coherent atomic state superpositions

Marcelo Ciappina

Guangdong Technion-Israel Institute of Technology

UX2023-1007-19

Control of the Geometric Phase and Nonequivalence Between Geometric-Phase Definitions in the Adiabatic Limit

Xiaosong Zhu¹, Peixiang Lu^{1*}, Manfred Lein^{2*}

1. Huazhong University of Science and Technology; 2. Leibniz University Hannover

UX2023-1008-12

High-efficiency thin-plate compression of high-power laser pulse

Xuhui Jiao

Shanghai Normal University

UX2023-1011-1

High efficiency, ultra-broadband ns-OPCPA with high temporal contrast based on dual-crystal scheme

Haidong Chen

Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences

UX2023-1018-8

Coherent beam combining of two all-fiber chirped pulse amplifiers delivering high average power ultrafast laser

Tao Wang

College of Advanced Interdisciplinary Studies, National University of Defense Technology

UX2023-1018-10

1.9- μm laser emission from hydrogen-filled hollow-core fiber by vibrational stimulated Raman scattering

Muhammad Abdullah, Jingmin Liu, Junjie Jiang, Xu Chen, Mingjie Yao, Yu Xia

Beihang University

UX2023-1018-11

Beyond 100-GHz high-repetition rate pulse formation in a fiber cavity

Jingmin Liu, Xu Chen, Junjie Jiang, Muhammad Abdullah, Yao Mingjie, Xia Yu

Beihang University



Topic 3: Ultrafast terahertz photonics

UX2023-1006-9

A strong-field THz light source based on coherent transition radiation at the Shanghai soft X-ray free-electron laser facility

Yin kang^{1,2}, Zhikai Zhou³, Kaiqing Zhang^{4*}

1. Shanghai Institute of Applied Physics, Chinese Academy of Sciences; 2. University of Chinese Academy of Sciences; 3. ShanghaiTech University, School of Physical Science and Technology; 4. Shanghai Advanced Research Institute, Chinese Academy of Sciences

UX2023-1007-15

Real-time observation of the buildup of polaron in α -FAPbI₃

YueXingyu^{1,2}, ZhangZeyu^{2,1*}, DuJuan^{2,1*}

1. State Key Laboratory of High Field Laser Physics and CAS Center for Excellence in Ultra-intense Laser Science, Shanghai Institute of Optics and Fine Mechanics (SIOM), Chinese Academy of Sciences (CAS); 2. School of Physics and Optoelectronic Engineering, Hangzhou Institute for Advanced Study, University of Chinese Academy of Sciences

UX2023-1007-20

THz wave enhanced acoustic emission from laser-induced air and water plasma

Bodong Yang, Guoyang Wang, Cunlin Zhang, Liangliang Zhang
Capital Normal University

UX2023-1011-2

Terahertz-driven hardening of the soft mode in strontium titanate at room temperature

Hao Chen
Institute of physics

Topic 4: Ultrafast imaging and spectroscopy

UX2023-0906-2

Anisotropic Charge Carrier and Coherent Acoustic Phonon Dynamics of Black Phosphorus

Shengjie Meng¹, Bo Gao^{2*}

1. Harbin Institute of Technology; 2. Harbin Institute of Technology

UX2023-0912-1

Direct visualization of dark exciton condensates in moiré superlattices

Huan Liu
Tsinghua University

UX2023-0928-1

Ultrafast quasiparticle dynamics and collective excitations in CsV₃Sb₅

XingWei Zheng, Liang Cheng, Jingbo Qi
University of Electronic Science and Technology of China

UX2023-1006-5

High-Channel Spectral-Temporal Active Recording (H-STAR)

Yizhao Meng¹, Yi Liu¹, Fei Yin², Yu Lu¹, Lin Kai¹, Caiyi Chen¹, Qing Yang¹, Feng Chen^{3*}

1. Xi'an Jiaotong University; 2. Xi'an Inst Optics & Precision Mech CAS; 3. Xian Jiaotong University

UX2023-1007-18

Ultrafast three-dimensional microscopy based on interferometry image the dynamics of laser-induced periodic surface structures

Qianyi Wei, Jielei Ni, Yuquan Zhang, Xiaocong Yuan, Changjun Min
Nanophotonics Research Center, Institute of Microscale Optoelectronics & State Key Laboratory of Radio Frequency Heterogeneous Integration, Shenzhen University

UX2023-1007-21

Distortion Corrected Nanosecond Multiframe Imaging of Irreversible Dynamics in Four-Dimensional Transmission Electron Microscopy

Yenan Meng, Dongping Zhong
Shanghai Jiao Tong University

UltrafastX

The 2nd International Conference on UltrafastX
and 3rd Youth Forum on Ultrafast Science

UX2023-1008-4

Broadband Up-conversion Long-wavelength Mid-infrared Time-stretch Spectroscopy

Linzhen He, Han Wu, Houkun Liang
Sichuan university

UX2023-1008-16

Sampling Mid-infrared Waveforms in Time and Space

Yangyang Liu^{1*}, Shima Gholam-Mirzaei², Michael Chini³
1.Huazhong University of Science and Technology;2.National Research Council of Canada and University of Ottawa;3.
University of Central Florida

UX2023-1018-6

Observation of competing order in infinite-layer nickelates NdNiO₂

Kai Hu, Jingbo Qi
University of electronic science and technology of china

UX2023-1018-9

Studies of Yoked Super-fluorescence Using Time-Resolved Spectroscopy

Kai Wang
School of Physics and Astronomy, Sun Yat-sen University

Topic 5: Ultrafast chemical physics and dynamics

UX2023-0916-1

Ultrafast carrier dynamics of two-dimensional transition metal dichalcogenides

Nie Zhaogang
Liaocheng University

UX2023-0920-1

Highly Efficient Anisotropic Nonlinear Optical Properties of Advanced Materials

Zhihui Chen
Central South University

UX2023-1004-3

Fingerprint of Rabi dynamics in photoelectron angular distributions

Yi-Jia Mao, Bo-Ren Shen, Hong-Bin Yao, Zhao-Han Zhang, Yang Li, Feng He
Shanghai Jiao Tong University;2.Xinjiang Institute of Engineering

UX2023-1004-4

Optical Control of Crossing the Conical Intersection in β -Carotene

Na Liu, Yifei Zhang, Kangwei Niu, Dongping Zhong
Shanghai Jiao Tong University

UX2023-1004-5

Ultrafast dynamics and active-site control of DNA repair by class II photolyase

Luyao Yan¹, Xiaodan Cao¹, Na Liu¹, Kangwei Niu¹, Faming Lu^{1*}, Dongping Zhong^{1,2*}
1.Shanghai Jiao Tong University;2.The Ohio State University

UX2023-1006-1

Rabi flopping in strong-field dissociation of molecules

Chenxi Hu
Shanghai Jiao Tong University

UX2023-1006-3

Anisotropy acoustic deformation potential characterization through coherent acoustic phonon dynamics in black phosphorus

Xin Meng, Feng He
Harbin Institute of Technology



UX2023-1006-4

Light-activated ferroelectric transition in layer dependent Bi₂O₂Se films

He Feng

Harbin Institute of Technology Shenzhen

UX2023-1007-4

Dynamics and mechanism of pyrimidine dimer repair by photolyase in higher species

Kangwei Niu, Na Liu, Luyao Yan, Xiaodan Cao, Faming Lu, Dongping Zhong

Shanghai Jiao Tong University

UX2023-1007-22

Hot electron scattering in Al-doped ZnO

Conglong Chen

Shanghai Jiao Tong University

UX2023-1008-3

Ab Initio Molecular Dynamics Simulation Study on Singlet Fission Systems

Yuxiang Bu

Shandong University

UX2023-1008-9

Transverse momentum resolved angular streaking after tunneling ionization

Dianxiang Ren, Sizuo Luo, Dajun Ding

Institute of Atomic and Molecular Physics, Jilin University, China

UX2023-1008-10

Probing the multiexcitonic dynamics in CsPbI₃ nanocrystals across the temperature-induced reversible phase transitions

Siyu Liu

Nankai University

UX2023-1008-13

Optical coherent control of ultrafast protein electron transfer

Yifei Zhang¹, Na Liu¹, Kangwei Niu¹, Dongping Zhong^{1,2*}

1.Center for Ultrafast Science and Technology, Shanghai Jiao Tong University; 2.Department of Physics, Ohio State University, Columbus; Department of Chemistry and Biochemistry, Ohio State University, Columbus; Programs of Biophysics, Chemical Physics, and Biochemistry, Ohio State University, Columbus

UX2023-1008-14

Terahertz Modulated Near-bandgap Harmonics from Bulk MgO

Xu Sun, Dongwen Zhang, Zengxiu Zhao

Department of Physics, National University of Defense Technology

UX2023-1008-19

Study of the excited state intramolecular proton transfer dynamics of 1,4-DHAQ

Zhengrong Wei

Hubei University

UX2023-1008-22

Jamming unauthorized radio channels with ultrafast response time

Mikhail Belkin, Leonid Zhukov, Alexander Sigov

MIREA University

UX2023-1016-1

Vibrational coherence and phase modulation in 2,4-difluoroanisole

Ling Cao, Yanmei Wang, Song Zhang

Innovation Academy for Precision Measurement Science and Technology, CAS

UX2023-1018-1

Visible light-induced hole transfer in single-nanoplate Cu_{1.81}S-CdS heterostructures

Wang Chang, Xiao Si, He Jun

Hunan Key Laboratory of Nanophotonics and Devices, School of Physics and Electronics, Central South University, China

Topic 6: Ultrafast particle science, technology and application

UX2023-1006-2

Enhanced and Collimated THz Radiation Study of the Interaction between Relativistic Femtosecond Laser and Waveguide Target

Xiaona Ban¹, Yanlei Yang¹, Feng Wan², Chong Lv¹
1.China Institute of Atomic Energy;2.Xi'an Jiaotong University

UX2023-1007-3

Concept design and beam dynamics of 1.4-cell SRF gun for UED/UEM

Jialian Zhang¹, Hong Qi¹, Zhengzheng Liu¹, Jian Wang¹, Jinfeng Yang², Zhihong Zheng³, Kuanjun Fan^{1*}
1.School of Electrical and Electronic Engineering, Huazhong University of Science and Technology;2.The Institute of Scientific and Industrial Research, Osaka University, 8-1 Mihogaoka, Ibaraki;3.Mevion Medical Equipment Co., Ltd

UX2023-1007-6

Space charge effects on longitudinal profile diagnostics of ultrafast electron beams based on Smith-Purcell radiation

Shuangxin Li¹, Jiapeng Li¹, Yang Yu¹, Zhengzheng Liu¹, Chengyin Tsai¹, Shuochun Yu¹, Oleg Meshkov², Kuanjun Fan¹
1.School of Electrical and Electronic Engineering, Huazhong University of Science and Technology;2.Budker Institute of Nuclear Physics, Siberian Branch, Russian Academy of Sciences (BINP SB RAS)

UX2023-1007-10

Dark current and its effects analysis in a 1.4-cell RF photocathode gun at HUST UED

Shuochun Yu¹, Jialian Zhang¹, Jiapeng Li¹, Shuangxin Li¹, Zhengzheng Liu¹, Chengying Tsai¹, Jinfeng Yang², Kuanjun Fan^{1*}
1.Huazhong University of Science and Technology;2.Osaka University

UX2023-1007-14

Super-Resolution Quasi-Parallel-Fabrication of Nanostructured Microsphere arrays via Femtosecond-pulsed Laser with angular modulation

Mengyuan W, Yinzhou Yan
Beijing University of Technology

UX2023-1008-11

Bright and ultrashort MeV-class electron beam generation with density-tailored plasma in a laser-wakefield accelerator

Zhongtao Xiang
Shanghai Normal University

Ultrafast Science

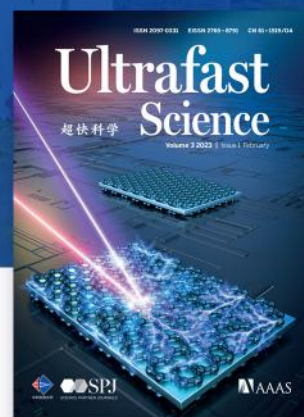
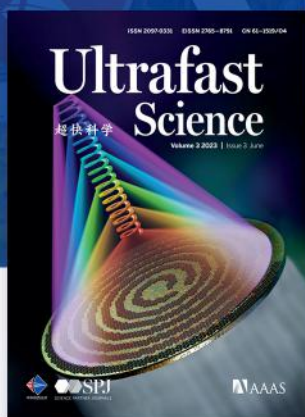
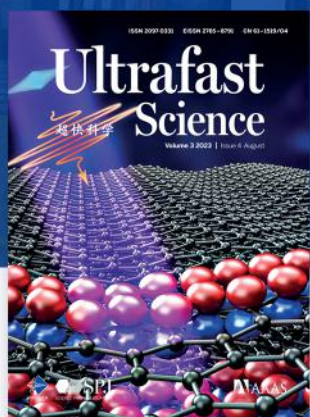
A SCIENCE PARTNER JOURNAL

Ultrafast Science is a *Science Partner Journal* distributed by the American Association for the Advancement of Science (AAAS) in collaboration with Xi'an Institute of Optics and Precision Mechanics, Chinese Academy of Sciences(CAS).



Now Ultrafast Science is indexed in: *Scopus, Inspec, DOAJ, ADS, CNKI Scholar*. Topics include but are not limited to:

- ▶ Attosecond physics, attosecond light source
- ▶ Ultrafast imaging, ultrafast spectroscopy
- ▶ Ultrafast diagnosis, ultrafast materials and detector
- ▶ Ultrafast laser and application, ultrafast electronics
- ▶ Ultrafast terahertz photonics, ultrafast chemical physics etc



Editor-in-Chief



Qihuang Gong
Peking University



Wei Zhao
XIOPM, CAS

Executive Editor-in-Chief



Franz X. Kärtner
DESY



Katsumi Midorikawa
RIKEN



Zhiyi Wei
Institute of Physics, CAS

• Facebook
@SPJournals

• Twitter
@UltrafastSci; @SPJournals

• Email
usjournal@opt.ac.cn

• Website
spj.science.org