

- Poster Session / Technical Demonstration -

- P-01 Sympathetic cooling of Th^{3+} for a nuclear clock
Atsushi Yamaguchi^{1,2}, Keita Okamura^{1,2}, Yutaro Nakada^{1,2}, Yudai Shigekawa³, Hiromitsu Haba⁴,
Michiharu Wada⁵, Hidetoshi Katori^{1,2}
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³The University of Tsukuba, ⁴RIKEN Nishina Center for Accelerator-Based Science, ⁵KEK
- P-02 Fourier-Limited Spectroscopy via Longitudinal Excitation for a Zero-Dead-Time Optical Lattice Clock
Koki Nishida^{1,2}, Ryoto Takeuchi^{1,2}, Shigenori Tsuji³, Shoichi Okaba^{1,2}, Hidetoshi Katori^{1,2}
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- P-03 Recent Progress Toward Constructing a 2- μm Ho-Doped Thin-Disk Laser System
Hiroki Kawase, Natsuki Kanda, Yasuo Nabekawa, Eiji J. Takahashi
Extreme Photonics Research Team, RIKEN RAP
- P-04 Investigation of holographic structures in strong-field ionization by subcycle pulses
Rambabu Rajpoot, Eiji J. Takahashi
Extreme Photonics Research Team, RIKEN RAP
- P-05 Development of submicron focusing system for soft X-ray attosecond pulses and the demonstration
Kotaro Imasaka¹, Natsuki Kanda¹, Dianhong Dong¹, Bing Xue¹, Satoru Egawa^{2,3}, Takuya Hosobata²,
Yutaka Yamagata², Eiji J. Takahashi¹
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- P-06 Sub-shot-noise absorption spectroscopy enabled by entangled photon pairs
Korenobu Matsuzaki^{1,2}, Tahei Tahara^{1,2}
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- P-07 Insight into the relaxation pathways of poly(3-hexylthiophene) in the excited-state through transient two-dimensional electronic spectroscopy
Garima Bhutani¹, Korenobu Matsuzaki^{1,2}, Tahei Tahara^{1,2}
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- P-08 Interferometric Two-dimensional Heterodyne-Detected Vibrational Sum-frequency Generation (2D HD-VSFG) Spectroscopy for Liquid Interface Study with Sub-100 fs Time Resolution
Woongmo Sung¹, Satoshi Nihonyanagi^{1,2}, Tahei Tahara^{1,2}
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- P-09 Scattering-asymmetry control with ultrafast electron wave-packet shaping
Yuya Morimoto^{1,2,3}, Lars Bojer Madsen⁴
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²Pionnering Research Institute, RIKEN, ³Univ. of Tokyo, ⁴Aarhus University
- P-10 Fucci Technology: Past, Present, and Future of Visualizing Cell Cycle Dynamics
Asako Sakaue-Sawan^{1,2}, Atsushi Miyawaki^{1,2}
¹RIKEN RAPBiotechnological Optics Research Team,
²RIKEN CBS Laboratory for Cell Function Dynamics
- P-11 A highly photostable and bright green fluorescent protein
Masahiko Hirano^{1,2}, Ryoko Ando², Satoshi Shimozone², Mayu Sugiyama², Hiroshi Kurokawa²,
Hiroshi Hama², Atsushi Miyawaki^{1,2}
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- P-12 Construction of a new system to measure THz-induced photoluminescence in semiconducting single-walled carbon nanotubes

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- P-13 Integration of single-defect carbon nanotube photon sources into waveguide circuits for quantum applications

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- P-14 Hybrid Photonic integration for on-chip functionality

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- P-15 Fluctuational electrodynamics in active media

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- P-16 Surface-plasmon enhanced angular photonic spin Hall effect

Cherrie May Olaya¹, Norihiko Hayazawa¹, Maria Herminia Balgos², Takuo Tanaka¹

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- P-17 SHINE: Simple High-dynamic-range Image Normalization and Enhancement

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- P-18 High-speed super-resolution imaging of membrane traffic in living cells

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- P-19 A Framework for Analysis of Microstructure of Steel Using Large-Scale Serial Sectioning Images

Takashi Michikawa¹, Hiroto Shimazu^{1,2}, Tetsuya Nakamura^{1,3}, Norio Yamashita¹, Zhe Sun^{1,4},

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- P-20 Femtosecond laser fabricated Tesla structured glass microfluidics integrated with SERS substrate for gas sensing

Shi Bai, Kazunari Ozasa, Shota Kawabata, Koji Sugioka

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- P-21 GHz-Burst Femtosecond Laser Ablation of Silicon at 515 nm Wavelength

Ashkan Momeni Bidzard, Shota Kawabata, Kotaro Obata, Koji Sugioka

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- P-22 Construction of Digital Twin of Laser Processing

Shuntaro Tani

Digital Twin for Light-Matter Interaction RIKEN ECL Research Team, RIKEN RAP

- P-23 Development of high-peak-power THz-wave parametric source at 0.3 THz towards electron acceleration

Yuma Takida, Hiroaki Minamide

Tera-Photonics Research Team, RIKEN RAP

- P-24 Research on non-destructive THz-SS-OCT based on backward terahertz-wave parametric oscillator
Alexander De Los Reyes¹, Joselito Muldera¹, Yuma Takida¹, Keisuke Kajikawa¹, Deepika Yadav¹, Yuehong Xu¹, Manabu Sato², Chiko Otani³, Hiroaki Minamide¹
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- P-25 Development of High-Sensitivity Omnidirectional THz-wave Detection toward THz-Chip Device
Yuto Yoneda^{1,2}, Hiroaki Minamide^{1,2}
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- P-26 Terahertz and Raman spectroscopy on oligosaccharides as models of starch spectra
Shunsaku Nakajima¹
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- P-27 Development of millimeter-wave integrated circuit technology for wide-field multi-color observations
Shinsuke Uno¹, Shuhei Inoue², Kazuki Watanabe^{3,4}, Taiki Sato⁵, Tatsuya Takekoshi⁶, Tai Oshima^{3,4}
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- P-28 Real-time analysis of THz pulses using a lithium niobate crystal
Sota Mine^{1,2}, Joel Edouard Nkeck³, Kodo Kawase², François Blanchard³, Kosuke Murate², Chiko Otani¹
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- P-29 Progress in high-power THz-QCL using thick (23 μm) GaAs/AlGaAs QC layers
Takayuki Ishida¹, Tsung-Tse Lin^{2,1}, Koki Yabe^{1,3}, Yuki Tsuda⁵, Yosuke Suzuki⁵, Keita Miyagawa⁵, Koichi Akiyama⁵, Li Wang⁴, Sachie Fujikawa^{1,3}, Hiroyuki Yaguchi³, Hideki Hirayama¹
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- P-30 Novel quantum scheme in GaN/AlGaIn THz-QCL for achieving high optical gain
Koki Yabe^{1,2}, Airu Takahashi^{1,2}, Akira Kaneko^{1,2}, Yuki Tsuda³, Yosuke Suzuki³, Keita Miyagawa³, Koichi Akiyama³, Sachie Fujikawa^{2,1}, Hiroyuki Yaguchi², Hideki Hirayama¹
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- P-31 Simultaneous two-photon photostimulation and Ca²⁺ imaging with a single-wavelength excitation
Keisuke Isobe^{1,2}, Masayuki Sakamoto², Itaru Imayoshi², Atsushi Miyawaki^{1,3}, Katsumi Midorikawa¹, Koichiro Tanaka¹
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- P-32 Development of fundamental technologies for a compact and precise terahertz molecular clock
Tomoki Hiraoka^{1,2}, Kohei Eguchi², Toki Tanaka², Koichiro Tanaka^{1,2}
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- P-33 From Classical to Quantum Light: Advances in Entangled Photon Generation and Perovskite Investigations
Henrik B. Lassen^{1,2}, Shinya Takahashi², Haruya Hirota², Toshiharu Teranishi², Yoshihiko Kanemitsu², Yasuhiro Yamada³, Koichiro Tanaka^{1,2}
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- P-34 Advanced diode-pumped solid-state and fiber lasers: the fundamentals for high energy, high quality, and high-performance
Norihiro Saito, Kentaro Miyata, Akihiro Tanabashi, Tatsuya Shinozaki, Norihiro Matsuyama, Takayo Ogawa, Satoshi Wada
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- P-35 Development of Optical Systems for Space Applications
Takayo Ogawa, Tatsuya Shinozaki, Kentaro Nishigori, Noriko Kurose, Katsuhiko Tsuno, Hiroshi Kasuga, Hideaki Yamane, Tomohiro Tsukihana, Yutaka Nagata, Norihiro Saito, Yutaka Yamagata, Satoshi Wada
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- P-36 Pushing the Limits: Toward Real-Time Two-Photon Imaging of the Whole Mouse Brain
Yasuhiro Maeda¹, Kento Nishigori¹, Takayo Ogawa¹, Hideo Yokota², Masanori Murayama³, Satoshi Wada¹
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- P-37 Development of Agarose Gel Microcapsules for Spheroid Cell Cultures
Hiroyoshi Aoki¹, Aya Nozaki², Kota Imai², Yutaka Yamagata¹
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- P-38 Current status of RIKEN Accelerator-driven compact Neutron Systems RANS & RANS-II
Takaoki Takanashi¹, Tomohiro Kobayashi¹, Yasuki Okuno¹, Maki Mizuta¹, Tomonori Fukuchi^{1,2},
Yasuo Wakabayashi^{1,2}, Sohei Imajo¹, Hiroki Kusano¹, Abdul Muneem¹, Shota Ikeda^{1,3}, Masato Takamura^{1,2},
Takao Hashiguchi¹, Sho Otsuka¹, Yoshinori Nakayama¹, Yuji Kawamura¹,
Yujiro Ikeda^{1,2}, Yoshie Otake¹
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Tomohiro Kobayashi¹, Shota Ikeda^{1,2}, Sohei Imajo¹, Hiroki Kusano¹, Tomonori Fukuchi^{1,3}, Maki Mizuta¹,
Yasuki Okuno¹, Takaoki Takanashi¹, Yasuo Wakabayashi^{1,3}, Teruaki Enoto^{1,4}, Takeru Ohgo¹, Sho Otsuka¹,
Hidetoshi Murakami^{1,3}, Hiroyuki Kanesawa³, Masato Takamura^{1,3}, Noriyosu Hayashizaki²,
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- P-40 Development of novel Neutron Measurement Technology for Ensuring Safety and Extending the Service Life of Social Infrastructure
Sohei Imajo¹, Tomonori Fukuchi^{1,2}, Maki Mizuta¹, Hiroki Kusano¹, Tomohiro Kobayashi¹,
Yasuo Wakabayashi^{1,2}, Takaoki Takanashi¹, Yasuki Okuno¹, Teruaki Enoto^{1,3},
Shota Ikeda^{1,4}, Sho Otsuka¹, Yujiro Ikeda^{1,2}, Yoshie Otake¹
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- P-41 Label-free mid-infrared photothermal microscopy for single-cell thermal biology
Keiichiro Toda¹, Masaharu Takarada², Genki Ishigane³, Hiroyuki Shimada¹, Venkata Ramaiah Badarla¹,
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- P-42 Three-dimensional laser cooling of positronium using a chirped pulse train
Naoki Miyamoto¹, Kenji Shu^{1,2,3}, Kosuke Yoshioka^{1,3}
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- P-43 Ultrabroadband Near-Perfect Absorber from THz to DUV Based on Carbon-Coated Moth-Eye Structure: Design and Characterization
Yuki Hakamada¹, Maria Cojocari², Mizuho Matoba¹, Shotaro Kawano¹, Haruyuki Sakurai¹,
Kuniaki Konishi¹, Daniil Pashnev³, Surya Revanth Ayyagari³, Vytautas Janonis³, Andrzej Urbanowicz³,
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Aleksandr Saushin², Georgy Fedorov², Yuri Svirko², Polina Kuzhir²
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- P-44 Optical control of Multi-Valley States in tin sulfide monolayer
Arqum Hashmi¹, M. Umar Farooq², Mizuki Tani³, Kazuhiro Yabana⁴, Tomohito Otobe³,
Kenichi L. Ishikawa¹
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- P-45 Cryogenic Levitodynamics
Sosuke Inui^{1,2}, Daiki Araki¹, Yuma Iwata¹, Yosuke Minowa¹
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- P-46 Visualization of Individual Dislocations in Synthetic Diamonds

Kensuke Matsumoto¹, Yuki Katsuno¹, Ryo Ikebe¹, Soh Teramoto¹, Jan Isberg², Nobuko Naka¹
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P-47 Exploration for Lunar Water Resource and Cislunar Science Using Cosmic Neutrons

Yuya Omata¹, Teruaki Enoto¹, Naoki Tsuji¹, Miwa Tsurumi¹, Kazuya Nakayama¹, Shunya Ito¹,
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Chigusa Okano¹, Chikaho Sano², Chihiro Horie², Yujiro Eto³, Hiroaki Takaku⁴, Kazuki Niwa⁵,
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P-49 Perovskite Optoelectronics

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T-01 Examples of equipment development by Advanced Manufacturing Support Team

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T-02 Diamond Fly-Cutting of Cadmium Zinc Telluride for High-Dispersion Mid-Infrared Immersion Gratings

Takuya Hosobata¹, Yuan Li², Shunsuke Baba³, Noboru Ebizuka¹, Yasuhiro Hirahara²,
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T-03 Aerial Display of Prism Array with Low Ghosting and High Throughput

Noboru Ebizuka, Takuya Hosobata, Yoshiyuki Takizawa, Masahiro Takeda, Yutaka Yamagata
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T-04 Development of Palm-Size High-Brightness Terahertz Wave Light Source - A Pathway to Various Non-Destructive Testing Targets in Practical Use

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T-05 Feature-aware 3D Mesh Decimation

Shin Yoshizawa and Hideo Yokota
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T-06 We fabricate your bone

Yuki Tsujimura¹, Shintaro Oyama^{1,2}, Masaki Watanabe³, Toshiharu Kobayashi^{1,4}, Kenji Yamazawa^{5,6},
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