

The 4th International Symposium on Frontiers in THz Technology (FTT 2025) and Symposium on Frontier of Terahertz Science XII (S-FTS 2025)

PROGRAM

Oct. 15 (Wed) S-FTS

※()内は座長・太字は表彰対象

9:00-9:10	Opening		安井 武史	徳島大学		S-FTS
9:10-9:40	Invited	I-SFTS-01	Yu Tokizane	Tokushima Univ.	112 Gbps Wireless Transmission at 560 GHz Enabled by Soliton Microcombs	S-FTS
9:40-10:10	Invited	I-SFTS-02	木下 基	産業技術総合研究所	Beyond 5G/6Gを支えるTHz計量標準・校正技術	S-FTS
10:10-10:25	Oral	O-SFTS-01	Kentaro Furusawa	National Institute of Information and Communications Technology	Improving Q factors in low-temperature CVD based SiN microring resonators for microcomb applications	S-FTS
10:25-10:40	Oral	O-SFTS-02	鈴木 亮介	名古屋大学	高次ストークス光を用いた多波長テラヘルツ波パラメトリック発生によるリアルタイム分光	S-FTS
10:40-10:55	Break					15m
10:55-11:10	Oral	O-SFTS-03	安部 魁人	東北大学・理化学研究所	テラヘルツパラメトリック発生サブピコ秒励起におけるパルス幅依存性	S-FTS
11:10-11:25	Oral	O-SFTS-04	三上 修作	千葉大学	テラヘルツ光スキルミオンの発生	S-FTS
11:25-11:40	Oral	O-SFTS-05	藤代 隼人	千葉大学	テラヘルツ光渦の軌道角運動量スペクトル分析用実験光学系の構築	S-FTS
11:40-12:10	Invited	I-SFTS-03	伊藤 弘毅	関西学院大学	テラヘルツ波で見て操る電子強誘電ダイナミクス	S-FTS
12:10-13:30	Lunch					1h20m
13:30-14:00	Invited	I-SFTS-04	木村 謙介	理化学研究所	THz-STM を基盤とした単一分子発光分光法の開発	S-FTS
14:00-14:30	Invited	I-SFTS-05	Akihiro Furube	Tokushima Univ.	Ultrafast Charge Dynamics in Plasmonic Metal-Semiconductor Photocatalysts for Visible/NIR Photocatalysis	S-FTS
14:30-14:45	Oral	O-SFTS-06	岡本 章宏	大阪大学	THz磁場変調エリプソメトリと表面伝導モデルによる半導体薄膜のキャリア評価	S-FTS
14:45-15:00	Oral	O-SFTS-07	米田 悠人	千葉大学・理化学研究所	全方向性テラヘルツ波結合が誘起するフォノンポラリトン発振	S-FTS
15:00-15:15	Break					15m
15:15-15:30	Oral	O-SFTS-08	嶺 颯太	理化学研究所・名古屋大学	単色励起光による波長可変テラヘルツ光源の開発	S-FTS
15:30-15:45	Oral	O-SFTS-09	折谷 岳	千葉大学	テラヘルツ光渦を用いた軌道角運動量二色性イメージング装置	S-FTS
15:45-16:00	Oral	O-SFTS-10	河上 太知	名古屋大学	テラヘルツパラメトリック発生器を用いた遮蔽物越しのシングルピクセルイメージング	S-FTS
16:00-16:30	Invited	I-SFTS-06	芹田 和則	早稲田大学	テラヘルツ点光源顕微鏡が拓く次世代バイオイメージング	S-FTS
16:30-17:00	Invited	I-SFTS-07	Toshihiko Kiwa	Okayama Univ.	A terahertz chemical microscopy ~ Application for Terahertz pathology ~	S-FTS

Oct. 16 (Thu) S-FTS, FTT

9:00-9:30	Award	FTT Award	Peter Siegel	California Institute of Technology	Working at the Speed of Light: Commercializing THz Imaging	FTT
9:30-10:00	Invited	I-SFTS-08	佐藤 正寛	千葉大学	THz光による磁性体・超伝導体・金属の光学応答および物性操作についての理論研究	S-FTS
10:00-10:30	Invited	I-SFTS-09	鶴町 徳昭	香川大学	微小共振器中のメタマテリアルとTHz 波の強結合相互作用	S-FTS
10:30-10:45	Break					15m
10:45-11:15	Invited	I-SFTS-10	四方 潤一	日本大学	負誘電率領域の表面電磁波からのテラヘルツ波発生と周波数制御	S-FTS
11:15-11:45	Invited	I-SFTS-11	中西 俊博	京都大学	バビネの原理の拡張とそれに基づくTHz波制御	S-FTS
11:45-13:00	Lunch					1h
13:00-14:15	Poster		odd numbers			S-FTS & FTT
14:15-15:30	Poster		even numbers			S-FTS & FTT
15:30-15:45	Break					15m
15:45-16:15	Invited	I-FTT-01	Shang-Hua (Steve) Yang	National Tsing Hua University	GeSn THz Optoelectronics	FTT
16:15-16:45	Invited	I-FTT-02	Chao Tang	Tohoku University	Ultrafast THz detection based on low-dimensional Dirac semimetals	FTT
16:45-17:00	Oral	O-FTT-01	Fuma Kawano	Nagoya University	Phase Measurement via Terahertz Parametric Detection	FTT
17:00-17:15	Oral	O-FTT-02	Naoya Kawai	HAMAMATSU PHOTONICS K.K.	Development and Characterization of Terahertz Photomultiplier Tube and Image Intensifier Based on Field Electron Emission	FTT
17:15-17:45	Award	FTT Award	Tadao Nagatsuma	The University of Tokyo / The University of Osaka	The Terahertz Tapestry: Weaving Photonics and Electronics into Tomorrow's Systems	FTT
17:45-18:00	Break					15分
18:00~	Banquet					

Oct. 17 (Fri) FTT

9:00-9:30	Invited	I-FTT-03	Elmer S. Estacio	University of Philippines Diliman	Cost-effective metamaterial-based terahertz photoconductive antenna designs	FTT PJTW Session
9:30-10:00	Invited	I-FTT-04	Alvin Karlo G. Tapia	University of Philippines Los Banos	Terahertz Spectroscopy and Imaging for Non-Destructive Testing of Biological Materials	FTT PJTW Session
10:00-10:15	Oral	O-FTT-03	Jose Mari Sebastian Coronado Arcilla	University of the Philippines - Diliman	Terahertz Detection Signal Enhancement via Integration of Micron-Sized Metal Line Arrays on Photoconductive Antennas	FTT PJTW Session
10:15-10:30	Oral	O-FTT-04	Zixi Zhao	The University of	Observation of Magneto-Plasmonic Behavior in InSb via Magneto-Optical Terahertz Time-Domain	FTT
10:30-10:45	Break					15m
10:45-11:15	Invited	I-FTT-05	Tomoki Hiraoka	Universität Bielefeld	Terahertz control over two-dimensional-material field-effect devices	FTT
11:15-11:45	Invited	I-FTT-06	Kuniaki Konishi	The University of Tokyo	Ultra-broadband near-perfect absorber based on laser-processed moth-eye antireflection structures	FTT
11:45-12:00	Oral	O-FTT-05	Wangxuan Zhao	The University of	Phase Transition Analysis of Calcium Phosphates by Terahertz Spectroscopy	FTT
12:00-12:15	Oral	O-FTT-06	Mitsuki Sasaki	The University of	Characterization of Non-Volatile and Volatile Alcohols Using Terahertz Time-Domain Ellipsometry	FTT
12:15-13:30	Lunch					1h15m
13:30-14:00	Invited	I-FTT-07	Hiromichi Hoshina	RIKEN	Non-thermal biological effect of THz waves: Induction of order-disorder transition of HeLa cell membrane	FTT
14:00-14:30	Invited	I-FTT-08	Yuji Tokunaga	The University of Tokyo	Structural investigation of the effects of sub-terahertz irradiation on aqueous solutions of biomolecules by nuclear magnetic resonance spectroscopy	FTT
14:30-14:45	Oral	O-FTT-07	Miezel Legurpa Talara	Tokushima University	Soliton Combs from Fiber-connected Si ₃ N ₄ Microresonators for Low Phase-noise THz Generation	FTT
14:45-15:00	Oral	O-FTT-08	Akitoshi Niidome	Nagoya University	Measurement of Terahertz Wave Intensity Distribution in the XY-plane Inside a Crystal of an Injection-seeded Terahertz Parametric Generator	FTT
15:00-15:15	Break					15m
15:15-15:30	Oral	O-FTT-09	Yuusuke Yamaguchi	University of Fukui	Development of a 600-GHz Second Harmonic Gyrotron for EMF Exposure Assessment	FTT
15:30-15:45	Oral	O-FTT-10	Yuanhao Zeng	The University of	Phase-Resolved Ammonia Gas Sensing with a Multimode Laser Diode THz-TDS Platform	FTT
15:45-16:15	Invited	I-FTT-09	Weijie Gao	The University of	Terahertz Beam Steering Using Resonant Tunneling Diode	FTT
16:15	Closing		Masahiko Tani	University of Fukui		

Posters (Oct. 16 (Thu)) S-FTS, FTT

11:45-14:45	Poster	P-SFTS-01	宮丸 文章	信州大学	高強度光励起下における低温成長砒化ガリウム薄膜の光励起キャリア寿命測定	S-FTS
11:45-14:45	Poster	P-SFTS-02	酒井 悠連	千葉大学	周波数同調可変なテラヘルツパーフェクト光渦の発生	S-FTS
11:45-14:45	Poster	P-SFTS-03	田淵 啓士朗	兵庫県立大学	共鳴トンネルダイオードテラヘルツコム発振器の周波数制御	S-FTS
11:45-14:45	Poster	P-SFTS-04	林 伸一郎	情報通信研究機構	パラメトリック波長変換を用いたテラヘルツ光位相計測	S-FTS
11:45-14:45	Poster	P-SFTS-05	白坂 啓陽	東北大学	テラヘルツクロスニコル測定における偏光子角度の電場振幅を用いた調整法	S-FTS
11:45-14:45	Poster	P-SFTS-06	小路 悠斗	産業技術総合研究所	テラヘルツ帯における高出力熱型パイロメータの線形性評価法の構築	S-FTS
11:45-14:45	Poster	P-SFTS-07	東島 侑矢	産業技術総合研究所	Sub-THz波絶対電力測定のための大開口カロリメータの開発	S-FTS
11:45-14:45	Poster	P-SFTS-08	Jusi Arvin Lester Cornejo	University of Fukui	Investigating THz Time-Domain Coherent Raman Spectroscopy for Plastic Classification and Identification	S-FTS
11:45-14:45	Poster	P-SFTS-09	阿部 蓮樹	神戸大学	安息香酸およびその誘導体に現れる低振動モードの解析	S-FTS
11:45-14:45	Poster	P-SFTS-10	尾崎 潤羽	静岡大学	p-acetanside単結晶を用いたテラヘルツ周波数帯分子振動解析	S-FTS
11:45-14:45	Poster	P-FTT-01	Tatsunoshin Mori	Tokushima university	Study on optical injection locking using microcomb-driven THz to narrow the linewidth of resonant tunneling	FTT
11:45-14:45	Poster	P-FTT-02	Yudai Matsumura	Tokushima University	THz-to-optical carrier conversion using microresonator-based optical frequency combs	FTT
11:45-14:45	Poster	P-FTT-03	yuki aizawa	Shizuoka University	Preliminary Evaluation of Terahertz (THz) Spectroscopy as a Process Analytical Technology (PAT) Tool in pharmaceutical manufacturing	FTT
11:45-14:45	Poster	P-FTT-04	Ryuki Kashiwagi	University of Tsukuba	Sub-millimeter SiO ₂ Collector for Far-infrared and Terahertz Light: Toward Neutrino Decay Detection	FTT
11:45-14:45	Poster	P-FTT-05	Kiri Maeda	Kagawa University	FDTD analysis of a chiral microcavity in the THz region using double wire-grid circularly polarized light preserving mirror	FTT
11:45-14:45	Poster	P-FTT-06	Hideaki Kitahara	University of Fukui	High-precision measurement of the dielectric loss tangent in the millimeter wave region using terahertz time-domain spectroscopy	FTT
11:45-14:45	Poster	P-FTT-07	Yuma Igo	Kobe University	Characterization of dielectric antennas for enhancing terahertz oscillating magnetic fields	FTT
11:45-14:45	Poster	P-FTT-08	Prajit Kumar Singha	Kobe University	Probing the Effect of Phonons in Charge Transport Characteristics of All Inorganic and Hybrid Perovskite Nanocrystals	FTT
11:45-14:45	Poster	P-FTT-09	Kippei Shoji	Shizuoka University	Temperature-Dependent Low-Frequency Vibrational Modes of Galactitol Crystals	FTT
11:45-14:45	Poster	P-FTT-10	Takashi Furuya	University of Fukui	High-resolution intermediate frequency detection of free induction decay from gas-phase molecules using broadband terahertz pulse excitation	FTT
11:45-14:45	Poster	P-FTT-11	Al Jerome Alcantara Magsino	Kobe University	Probing the terahertz absorption mechanism of edge-oxidized graphene oxide embedded in polyethylene matrix	FTT
11:45-14:45	Poster	P-FTT-12	Yuto Ohmi	Okayama University	Identification and Quantitative Evaluation of Cells Using Terahertz Chemical Microscopy	FTT
11:45-14:45	Poster	P-FTT-13	Masaru Sudo	Ohara Pharmaceutical Co., Ltd	Elucidation of crystal polymorphism in pharmaceutical candidate compound using terahertz spectroscopy	FTT
11:45-14:45	Poster	P-FTT-14	Kohei Yamaguchi	Tokushima Univ.	Measurement of Concave and Convex Samples by 0.3 THz Band Spiral Interferometry	FTT
11:45-14:45	Poster	P-FTT-15	Shiori Matsuda	Institute of Science Tokyo	Proposed experimental system with compact THz devices for IQ demodulation	FTT
11:45-14:45	Poster	P-FTT-16	Victor Isao Iwanaga	Tohoku University	3D-Printed QWPs and Q-Plates for a THz Spectral Drill Cavity	FTT
11:45-14:45	Poster	P-FTT-17	Saroj Tripathi	Shizuoka University	Terahertz Circular Dichroism Spectroscopy of Chiral Microstructures	FTT