



Journées de GDR NanoTeraMIR

June 9-10, 2021

TOPICS

THS	THz spectroscopy	THA	THz applications
MIS	MIR spectroscopy	MSD	MIR sources and devices
MTM	MIR and THz materials	THD	THz devices
STC	Strong coupling	IMP	Integrated MIR photonics

June 9th

1:30 – 1:45 PM	WELCOME		
1:45 – 2:00 PM	THS-1	358783	Absorption modulation with semiconductor plasmonic microstructures from 1.1 to 2.5 THz Fernando Gonzalez-Posada Flores <i>et al.</i>
2:00 – 2:15 PM	THS-2	359175	H ₂ S photoacoustic detection with an integrated THz gas sensor for food quality control Elias Akiki <i>et al.</i>
2:15 – 2:30 PM	THS-3	358686	Long-pathlength spectroscopy in Atmospheric Simulation Chamber, from near-infrared to terahertz Jean Decker <i>et al.</i>
2:30 – 2:45 PM	THS-4	359270	Study of Functional Metal Oxides Thin Films using Infrared Synchrotron Radiation Rebecca Cervasio <i>et al.</i>
2:45 – 3:00 PM	THS-5	359801	Non-destructive evaluation of ceramic porosity using terahertz time-domain spectroscopy Davit Hakobyan <i>et al.</i>
3:00 – 3:15 PM	BREAK		
3:15 – 3:30 PM	MIS-1	325109	MIR and THz Spectroscopy with 10 nm spatial resolution Philip Schäfer <i>et al.</i>
3:30 – 3:45 PM	MIS-2	359554	Multimodal vibrational infrared spectroscopy from 1.1 to 6.5 μm with Aluminum Bowties Melissa Najem <i>et al.</i>
3:45 – 4:00 PM	MIS-3	359539	Thermal radiation of a single pair of subwavelength antennas Loubnan Abou Hamdan <i>et al.</i>
4:00 – 4:15 PM	BREAK		
4:15 – 4:30 PM	MTM-1	359277	Cd _{1-y} Zn _y Te ternary alloys: from thermodynamic computations to stoichiometric growth conditions Sara Modri
4:30 – 4:45 PM	MTM-2	359617	Large HgTe nanocrystals for THz technology Thibault Apretna <i>et al.</i>
4:45 – 5:00 PM	MTM-3	359518	Vertical multilayer structures based on porous silicon layers for mid-infrared applications Sofiane Meziani <i>et al.</i>
5:00 – 5:15 PM	STC-1	359720	Quantum cascade detectors operating in the strong light-matter coupling regime Mathurin Lagrée <i>et al.</i>
5:15 – 5:30 PM	BREAK		
5:30 – 5:45 PM	THA-1	358827	Coating Thickness Mapping Extraction by Time-Domain Terahertz Spectroscopy Quentin Cassar <i>et al.</i>
5:45 – 6:00 PM	THA-2	358825	Terahertz refractive index-based morphological dilation: A strategy towards improving breast conserving surgery Quentin Cassar <i>et al.</i>
6:00 – 6:15 PM	THA-3	359245	THz acquisition and rendering with augmented reality Jean-Paul Guillet <i>et al.</i>
6:15 – 6:30 PM	THA-4	35895	THz imaging of injection-mold weld lines in ABS thermoplastic Min Zhai <i>et al.</i>
6:30 – 6:45 PM	THA-5	35973	Accounting for the pellet's porosity in THz-TDS measurements of powder oxides Jaume Calvo-de la Rosa <i>et al.</i>
6:45 – 7:00 PM	CLOSING		
7:00 – 7:15 PM			

June 10th

WELCOME			
MSD-1	357317	Electroluminescence from HgTe quantum dots and its Use for Active Imaging Emmanuel Lhuillier <i>et al.</i>	
MSD-2	359254	Gate tunable colloidal nanocrystal-based infrared sensor Tung Dang Huu <i>et al.</i>	
MSD-3	359405	Highly sensitive heterodyne detection with stabilized QCL laser Mohammedreza Saemian <i>et al.</i>	
MSD-4	359261	Hot Carrier Semiconductor Plasmonic Mid-infrared Photodetector Andrew Haky <i>et al.</i>	
MSD-5	359524	Mid-infrared frequency comb for QCL stabilisation and detectors assessment at 9μm Djamal Gacemi <i>et al.</i>	
BREAK			
MSD-6	359528	Optimizing patch antenna arrays for MIR quantum detectors Etienne Rodriguez <i>et al.</i>	
MSD-7	359638	Room temperature, high speed, mid-infrared Stark-shift modulator on InP Thomas Bonazzi <i>et al.</i>	
MSD-8	359556	Strong Anti-correlation in a Quantum Cascade Laser Frequency Comb Baptiste Chomet <i>et al.</i>	
BREAK			
THD-1	359065	280-GHz Radiation Source Driven by a 1064-nm Dual-Frequency Laser Alaeddine Abbes <i>et al.</i>	
THD-2	359164	Low Optical Power-Driven THz Modulator Julien Guise <i>et al.</i>	
THD-3	359372	Polarization control of emitted THz waves using spintronic emitters with anisotropic magnetic layers & birefringence characterization of Quartz Geoffrey Lezler <i>et al.</i>	
THD-4	359276	Magneto-electric control of polarization in spintronic terahertz emitters Yannick Dusch <i>et al.</i>	
BREAK			
THD-5	359231	Terahertz optomechanical resonators with bi-material structures Jiawen Liu <i>et al.</i>	
THD-6	359678	Design and characterisation of Photoswitches for picosecond electric pulses generation at very low Cyril Berner <i>et al.</i>	
THD-7	359496	Photon-assisted tunneling in hBN encapsulated graphene quantum dot under coherent THz illumination Simon Messelot <i>et al.</i>	
IMP-1	359273	High bitrate Free-Space Optical communication at 9 μm wavelength using Unipolar Devices operating at room-temperature Hamza Dely <i>et al.</i>	
IMP-2	359267	On-chip two-octaves supercontinuum generation in mid-IR sige waveguides Naticha Koopai <i>et al.</i>	
IMP-3	355117	Sub wavelength resonator coupled to colloidal nanocrystal array for short wave infrared sensing with near unity absorption Audrey Chu <i>et al.</i>	
CLOSING			