ITQW 2019
Infrared Terahertz Quantum Workshop
September 15-20, 2019
Ojai, California, USA

Program and Abstract Catalog
1. Introduction

2. Experimental and Results

3. Conclusions

4. Acknowledgments

Mode Switching of a Dual-color Ferretti Quantum Cascade
Conference Program

All conference presentations sessions will be held in the Anacapa Ballroom rooms 1-4. The industrial exhibit will be held in the Anacapa Ballroom rooms 5-8 on Tuesday-Thursday. The registration table is in the Anacapa Foyer. It will be open at 5-8pm on Sunday, and will open at 8am on Monday-Friday.

Sunday, September 15th

17:00-20:00 Registration Table open in the Anacapa Foyer.

18:00-20:00 Welcome Reception. Beer and wine with light hors d'oeuvres. Location: Anacapa Foyer and Terrace.

Monday, September 16th

08:30 Welcome and Opening Remarks by the conference chairs.

08:45-09:30 Session 1: Plenary Talk – Frank Koppens
Chair: Benjamin Williams

08:45 Frank Koppens
Nano-LED for light with (twisted) 2D materials (Plenary Talk)

09:30-10:30 Session 2: Nanoscopy
Chair: Alexander McLeod

09:30 Tobias Gokus, Stefan Mastel, Alexander Goyadinov and Andreas Huber
THz near-field imaging and spectroscopy with nanoscale spatial resolution
Andrea Ottomantiello, James Keeley, Pierluigi Rubino, Liane H. Li, Edmund H. Linfield, Giles A. Davies, Paul Dean,
09:45 Alessandro Pitanti and Alessandro Tredicucci
Self-mixing optomechanics with nanometer resolution in a Terahertz quantum cascade laser
10:00 Qianchun Weng and Susumu Komiyama
Terahertz nanoscopy of non-equilibrium carrier dynamics: A thermometric approach (Invited)

10:30-10:50 Coffee Break

10:50-12:20 Session 3: THz quantum cascade lasers
Chair: Iwao Hosako

10:50 Lutz Schrottke, Xiang Liu, Benjamin Röben, Klaus Biermann, Till Hagelschuer, Heinz-Wilhelm Hübers and Holger Grahn
High-performance GaAs/AlAs terahertz quantum-cascade lasers
11:05 Yuan Jin, John Reno and Sushil Kumar
Multi-watt terahertz distributed-feedback lasers
11:20 Asaf Albo, Yuri Flores, Qing Hu and John Reno
Advances in Terahertz Quantum Cascade Lasers with Room-Temperature Negative Differential Resistance
11:35 Martin A. Kainz, Aaron Maxwell Andrews, Sebastian Schoenhuber, Benedikt Limbachner, Michael Jaidl, Dominik Theiner, Hermann Detz, Gottfried Strasser, Gerald Bastard and Karl Unterrainer
Mode Switching of a Dual-color Terahertz Quantum Cascade Laser