



**NANYANG
TECHNOLOGICAL
UNIVERSITY**

SINGAPORE

**WIDE-BAND MID-INFRARED QUANTUM DEVICES BASED
ON INTERSUBBAND TRANSITIONS**

RODRIGUEZ MARTINEZ ETIENNE

School of Electrical and Electronic Engineering

Publications

Broadly continuously tunable slot waveguide quantum cascade lasers based on a continuum-to-continuum active region design (published)

Bo Meng, Yong Quan Zeng, Guozhen Liang, Jin Tao, Xiao Nan Hu, Etienne Rodriguez, and Qi Jie Wang

Coherent emission from integrated Talbot-cavity quantum cascade lasers (published)

Bo Meng, Bo Qiang, Etienne Rodriguez, Xiao Nan, Hu, Guozhen Liang, and Qi Jie Wang

Active tunability of the free-spectral range in active-mode locking mid-infrared buried heterostructure quantum cascade lasers (in preparation)

Etienne Rodriguez, Alireza Mottaghizadeh, Djamel Gacemi, Mathieu Jeannin, Zahra Asghari, Qi Jie Wang and Carlo Sirtori

Room temperature, wide-band Quantum Well Infrared Photodetector for microwave optical links at 4.9 μm wavelength (in preparation)

Etienne Rodriguez, Alireza Mottaghizadeh, Mathieu Jeannin, Daniele Palaferri, Azzura Bigioli, Zahra Asghari, Djamel Gacemi, Maria Amanti, Mattias Beck, Jerome Faist, Qi Jie Wang, and Carlo Sirtori

Temperature dependence of the photoconductive gain in Quantum Well Infrared Photodetector at 4.9 μm (in preparation)

Etienne Rodriguez, Alireza Mottaghizadeh, Mathieu Jeannin, Daniele Palaferri, Azzura Bigioli, Zahra Asghari, Djamel Gacemi, Maria Amanti, Mattias Beck, Jerome Faist, Qi Jie Wang, and Carlo Sirtori

Conference:

ITQW 2017: Room temperature, high-frequency mid-infrared quantum well infrared photodetector at 4.7 μm (poster)

Etienne Rodriguez, Alireza Mottaghizadeh, Daniele Palaferri, Maria Amanti, Zahra Asghari, Djamel Gacemi, Azzura Bigioli, Mattias Beck, Jerome Faist, Qi Jie Wang, and Carlo Sirtori

Photonics West 2018: Ultrafast modulation of mid-infrared buried heterostructures quantum cascade lasers (talk)

Carlo Sirtori, A. Mottaghizade, E. Rodriguez, D. Gacemi, D. Palaferri, A. Bigioli, Z. Asghari, Y. Todorov, and A. Vasanel