

## Website update –ER presentation template

### Marie-Curie ER Fellow

Name: Hsiang-Chen Wang

First Name:

Age: 33

Nationality: Taiwan

Position (ER/ESR): ER

Host institution: Vilnius University

Contract duration: 2009~2010 ( 2 months each year).



### Short Education Background (10 lines max.)

2007~ Assoc. prof. at National Chung Cheng University

2001~2006 National Taiwan University, Ph.D.

1999~2001 National Sun Yat-sen University, MS.

1994~1999 National Sun Yat-sen University, BS.

### Research focus and main activities carried out in the scope of the project (10 lines max.)

ER visit was related to experimental time-resolved study of electronic optical nonlinearities and properties of wide bandgap semiconductors, epitaxial layers and heterostructures. The research focus was the complementary application of various temporally and spectrally resolved optical techniques (four-wave mixing, pump-probe differential transmission, photoluminescence spectra and kinetics) for optical diagnostics of WBG semiconductors.

### Publications (please specify when the publication has been issued in the scope of the MANSiC project)

After the research visit to Vilnius university (January- February 2009) and time-resolved spectroscopy measurements performed, a joint presentation for Int. Conf. Nitride Semiconductors -2009 is in progress.

Some of my recent publications in the field of optical spectroscopy are given below:

1. **Hsiang-Chen Wang**, C.C.Yang, Shih-Wei Feng, Bao-ping Zhang, and Yusaburo Segawa, "Ultrafast Exciton Dynamics in a ZnO Thin Film," Japanese Journal of Applied Physics **48**, 022402 (2009).
2. Shih-Wei Feng, Li-Wei Tu, Jen-Inn Chyi and **Hsiang-Chen Wang**, "Luminescence mechanism and carrier dynamic studies of InGaN-based dichromatic light emitting diodes with ultraviolet and blue emissions" Thin Solid Films, Vol. 517, No. 2, pp. 909-915, Nov. 2008.
3. **Hsiang-Chen Wang**, Yen-Cheng Lu, Cheng-Yen Chen, and C. C. Yang, "Ultrafast pump-probe spectroscopy in the UV-blue range with an extremely broad probe spectrum for the carrier relaxation study in an InGaN thin film with indium-rich nano-clusters," Optics Express, Vol. 15, No. 6, pp. 3417-3425, Mar. 2007.
4. **Hsiang-Chen Wang**, Yen-Cheng Lu, Cheng-Yen Chen, Fang-Yi Jen, and C.C.Yang, "Ultrafast Carrier Dynamics in Nano-clustered InGaN," SPIE Proceeding, Vol. 6118-11, 2006. (EI) **(invited)**
5. Chih-Chung Teng, **Hsiang-Chen Wang**, Tsung-Yi Tang, Yen-Cheng Lu, Yung-Chen Cheng, C. C. Yang, Kung-Jen Ma, Wei-Ming Wang, Chi-Wei Hsu, and L. C. Chen, "Depth Dependence of Optical Property beyond the Critical Thickness of an InGaN Film," J. Crystal Growth, Vol. 288, Issue 1, pp. 18-22, Feb. 2006. **(Invited)**
6. **Hsiang-Chen Wang**, Yen-Cheng Lu, Chih-Chung Teng, Yung-Sheng Chen, C. C. Yang, Kung-Jen Ma, Chang-Chi Pan and Jen-Inn Chyi, "Ultrafast Carrier Dynamics in an InGaN Thin Film," J. Applied Physics, Vol. 97, No. 3, pp. 033704-1-4, 2005.