

# Publication List

CHAO-YI FANG

## A、期刊論文

1. “A study of subbands emissions in AlGa<sub>N</sub>/Ga<sub>N</sub> high electron mobility transistor structure using low-temperature photoluminescence spectroscopy”, **C. Y. Fang**, C. F. Lin, Edward Yi Chang and M. S. Feng, *Appl. Phys. Lett.*, **80**, 4558-4560, 2002.
2. “Study of Etching Damages on AlGa<sub>N</sub>, Ga<sub>N</sub> and InGa<sub>N</sub> Caused by Hybrid Inductively Coupled Plasma Etch and Photoenhanced Chemical Wet Etch by Schottky Contact Characterizations”, **Chao-Yi FANG**, Weng- Jung HUANG, Edward Yi CHANG, Chia-Feng LIN, and Ming-Shiann FENG, *Jpn. J. Appl. Phys.* **42**, 4207-4212, 2003
3. “The Characteristics of The TiWN<sub>x</sub> and WN<sub>x</sub> Schottky Diode on Ga<sub>N</sub>”, Cheng-Shih Lee, Edward-Yi Chang, Li Chang, **Chao-Yi FANG**, Yao-Lin Huang and Jian-Sheng Huang, *Jpn. J. Appl. Phys.* **42**, 4193-4196, 2003
4. “The WN<sub>x</sub> T-Gate AlGa<sub>N</sub>/Ga<sub>N</sub> HEMT for High Temperature Applications”, Chao-Yi Fang, Edward Yi Chang, Cheng- Shih. Lee, Yao-Ling Huang, and Shang-Wen Chang, submitted to *IEEE Electron . Dev. Lett.*

## B、研討會論文

1. “An AlGa<sub>N</sub>/Ga<sub>N</sub> HEMT with WN<sub>x</sub> T-gate for High temperature Applications”, Y. L. Huang, **C. Y. Fang**, E. Y. Chang, C. S. Lee, S. H. Chen, H. M. Lee, Y. C. Lien, and C. T. Lee, Proceeding of International Symposia, State-of-the-Art Program on compound Semiconductors XXXVII, Salt Lake City, Volume 2002-14.
2. Study of WN<sub>x</sub>/Ga<sub>N</sub> and TiWN/Ga<sub>N</sub> diodes for high temperature applications”, Cheng-Shih Lee, Edward-Yi Chang, Li Chang, **Chao-Yi Fang**, Yao-Lin Huang and Jian-Sheng Huang, *European Microwave Week*, 2002.
3. “AlGa<sub>N</sub>/Ga<sub>N</sub> HEMT sub-bands study using low temperature photoluminescence”, **C. Y. Fang**, C. F. Lin, Edward Yi Chang and M. S. Feng, *Proceeding of Optics and Photonics Taiwan '01*, P.P. 9-11, 2001
4. “AlGa<sub>N</sub> Schottky Characteristics after Hybrid Photo-enhanced Wet and Inductively coupled Plasma Etch”, W. J. Huang, **C. Y. Fang**, J. S. Wong, C. S. Lee, Edward Yi Chang, and M. S. Feng, *Proceeding of Optics and Photonics Taiwan '01*, P.P. 374-376, 2001
5. “AlGa<sub>N</sub>/Ga<sub>N</sub> HEMT sub-bands study using Low-temperature Photoluminescence”, **C. Y. Fang**, C. F. Lin, Edward Yi Chang and M. S. Feng, 2002<sup>nd</sup> Meeting of the Electrochemical Society, and the 52<sup>nd</sup> Meeting of the

International Society of Electrochemistry, State-of the-Art Program on Compound Semiconductors XXXV, San Francisco, September 2-7, 2001

6. “AlGaN Schottky Characteristics after Hybrid Photo-enhanced Wet and Inductively Coupled Plasma Etch”, *2002<sup>nd</sup> Meeting of the Electrochemical Society, and the 52<sup>nd</sup> Meeting of the International Society of Electrochemistry, State-of the-Art Program on Compound Semiconductors XXXV*
7. “Study of Sustained Blue Band Emission of Mg-doped GaN by Diffusion Method” , *Proceeding of Optics and Photonics Taiwan ’ 99*, 1999.
8. “Low Temperature Reversible Photoluminescence Behavior of Mg-relaged Emission for Mg<sub>3</sub>N<sub>2</sub> Diffused GaN’ , 1999 材料年會。

### C、專利

1. “A Method to Fabricate Light Extraction Layer for High Brightness LED”美國專利申請中。
2. “氮化物發光元件與高功率氮化物發光元件” 台灣專利，申請號 92129342。
3. “氮化物發光元件與高功率氮化物發光元件” 日本專利，特願 2003-428067。
4. “氮化物發光元件與高功率氮化物發光元件” 大陸專利，200310115032.80。

