

List of Publications

April, 1999 - March, 2004

Journal paper

1. H. Bang, J. Sawahata, G. Piao, M. Tsunemi, H. Yanagihara, E. Kita, K. Akimoto
“Magnetic properties of rare earth doped GaN.”
physica status solidi (c) 0 2874 (2003)
2. Hyungjin Bang, Guanxi Piao, Junji Sawahata, Zhiqian Li, Katsuhiro Akimoto, and Masaharu Nomura
“Growth and characterization of Er doped GaN.”
physica status solidi (c) 0 430 (2002)
3. Hyungjin BANG, Shinichi MORISHIMA, Zhiqiang Li, Katsuhiro AKIMOTO, Masaharu NOMURA, AND Eiichi YAGI
“MBE growth of Eu or Tb doped GaN and its optical properties.”
Journal of Crystal Growth 237-239 1027 (2002)
4. Hyungjin BANG , Shinichi MORISHIMA , Ziqiang Li, Katsuhiro AKIMOTO
“Incorporation site of Tb in GaN studied by Rutherford-backscattering ion channeling measurements and X-ray absorption fine structure analysis.”
Journal of Physics: condensed matter 13 10837 (2001)
5. Hyungjin BANG, Shinichi MORISHIMA, Zhiqiang Li, Katsuhiro AKIMOTO, Masaharu NOMURA, AND Eiichi YAGI
“Comparative Study on the Optical Properties of Eu:GaN with Tb:GaN.”
physica status solidi (b) 228 319 (2001)

6. A. Uedono, H. Bang, K. Horibe, S. Morishima, and K. Akimoto
“Defects in Eu- and Tb-doped GaN probed using a monoenergetic positron beam.”
Journal of Applied Physics 93 5181 (2003)
7. Zhiqiang Li, Hyungjin Bang, Guanxi Piao, Junji Sawahata and Katsuhiko Akimoto
“Growth of Eu-doped GaN by Gas Source Molecular Beam Epitaxy and its Optical Properties.”
Journal of Crystal Growth 240 382 (2002)
8. Zhiqian Li, Hyungjin Bang, Guanxi Piao, Junji Sawahata, Katsuhiko Akimoto, Hiroyuki Kinoshita, Kenich Watanabe
“Substrate roughness dependence of structural and optical properties of Eu-doped GaN grown by gas source molecular beam epitaxy.”
Journal of Crystal Growth 234 25 (2002)
9. Masanori Tanaka, Shinichi Morishima, Hyungjin Bang, Jeung Sun Ahn, Takashi Sekiguchi, Katsuhiko Akimoto
“Low-energy charge-transfer state and optical properties of Eu³⁺-doped GaN.”
physica status solidi (c) 0 2150 (2003)
10. T.Maruyama, S.Morishima, H.Bang, K.Akimoto and Y.Nanishi
“Valence transition of Eu ions in GaN near the surface.”
Journal of Crystal Growth 237-239 1167 (2002)
11. Masahiko Hashimoto, Akira Yanase, Ryo Asano, Hiroyuki Tanaka, Hyungjin Bang, Katsuhiko Akimoto, and Hajime Asahi
“Magnetic Properties of Eu-Doped GaN Grown by Molecular Beam Epitaxy.”
Japanese Journal of Applied Physics. Vol. 42 L1112 (2003)
12. M. Hashimoto, A. Yanase, R. Asano, H. Tanaka, and H. Asahi, H. Bang, and K. Akimoto
“Magnetic behavior of europium doped GaN: Experimental and theoretical studies.”
physica status solidi (c) 0 2864 (2003)

Conference papers

1. Hyungjin Bang, Junji Sawahata, Masato Tsunemi, Jongwon Seo, Hideto Yanagihara, Eiji Kita, and Katsuhiko Akimoto
“Structural and magnetic properties of Er doped GaN”

- Extended Abstracts of International Symposium on Compound Semiconductors, San Diego, USA (2003) P.114
2. H. Bang, J. Sawahata, G. Piao, M. Tsunemi, H. Yanagihara, E. Kita, K. Akimoto
“Magnetic properties of rare earth doped GaN”
Technical Digest of the 5th International Conference of Nitride Semiconductors, Nara, Japan (2003) P.450
 3. H. Bang, J. Sawahata, G. Piao, M. Tsunemi, K. Akimoto, H. Yanagihara, and E. Kita
“Magnetic properties of RE doped GaN”
Proceedings of the First Asia-Pacific Workshop on Widegap Semiconductors Hyogo, Japan (2003)
 4. Hyungjin Bang, Guanxi Piao, Junji Sawahata, Zhiqian Li, Katsuhiko Akimoto, and Masaharu Nomura
“Growth and characterization of Er doped GaN”
Abstracts of the International Workshop on Nitride Semiconductors, Aachen, Germany (2002) P.165
 5. Hyungjin BANG, Shinichi MORISHIMA, Zhiqiang Li, Katsuhiko AKIMOTO, Masaharu NOMURA, AND Eiichi YAGI,
“MBE growth of Eu or Tb doped GaN and its optical properties.”
Abstracts of 13th International Conference on Crystal Growth, Kyoto, Japan (2001) P.420
 6. Hyungjin BANG, Shinichi MORISHIMA, Zhiqiang Li, Katsuhiko AKIMOTO, Masaharu NOMURA, AND Eiichi YAGI,
“Comparative Study on the Optical Properties of Eu:GaN with Tb:GaN.”
Abstract of the 4th International Conference on Nitride Semiconductors Denver, USA (2001) P.67
 7. Hyungjin BANG, Shinichi MORISHIMA, Katsuhiko AKIMOTO, Masaharu NOMURA.
“Growth and characterization of Tb doped GaN”
Proceedings of International Workshop on Nitride Semiconductors, Nagoya, Japan, IPAP Conf. Series 1, 494 (2000)
 8. T. Maruyama, H. Bang, S. Morishima, K. Akimoto, Y. Nanishi
“4f configurations of Eu and Tb ions in GaN”
Institute of Physics conference series 170 731 (2002)

9. Shinichi MORISHIMA, Hyungjin BANG, Yoshinori HAGIO, Takahiro MARUYAMA, Katsuhiko AKIMOTO and Masaharu NOMURA
“Concentration quenching of Eu related luminescence in Eu-doped GaN studied by EXAFS analysis”
Proceedings of International Workshop on Nitride Semiconductors, Nagoya, Japan, IPAP Conf. Series 1, 490 (2000)
10. Masanori Tanaka, Shinichi Morishima, Hyungjin Bang, Jeung Sun Ahn, Takashi Sekiguchi, Katsuhiko Akimoto
“Low-energy charge-transfer state and optical properties of Eu³⁺-doped GaN”
Technical Digest of the 5th International Conference of Nitride Semiconductors, Nara, Japan (2003) P.456
11. T.Maruyama, S.Morishima, H.Bang, K.Akimoto and Y.Nanishi:
“Valence transition of Eu ions in GaN near the surface”
Abstracts of 13th International Conference on Crystal Growth, Kyoto, Japan (2001) P.524
12. M. Hashimoto, A. Yanase, R. Asano, H. Tanaka, and H. Asahi, H. Bang, and K. Akimoto
“Magnetic behavior of europium doped GaN: Experimental and theoretical studies”
Technical Digest of the 5th International Conference of Nitride Semiconductors, Nara, Japan (2003) P.454