

PUBLICATIONS IN JOURNALS

- 1. *Selective-area growth of GaN nanowires on SiO₂-masked Si (111) substrates by molecular beam epitaxy***
J. E. Kruse, L. Lymperakis, S. Eftychis, A. Adikimenakis, G. Doundoulakis, K. Tsagaraki, M. Androulidaki, A. Olziersky, P. Dimitrakis, V. Ioannou-Sougleridis, P. Normand, T. Koukoura, Th. Kehagias, Ph. Komninou, G. Konstantinidis, and A. Georgakilas
JOURNAL OF APPLIED PHYSICS 119, 224305 (2016)
- 2. *Multimodal microscopy test standard for scanning microwave, electron, force and optical microscopy***
Olaf C. Haenssler, M. F. Wiegand, A. Kostopoulos, G. Doundoulakis, E. Aperathitis, S. Fatikow, G. Kiriakidis
JOURNAL OF MICRO-BIO ROBOTICS 14, 51 (2018)

PUBLICATIONS IN PROCEEDINGS OF INTERNATIONAL CONFERENCES

- 1. *Spontaneous growth of III-V semiconductor nanopillars by molecular beam epitaxy for nanoelectronic, photonic and sensor applications (invited)***
A. Georgakilas, A. Adikimenakis, S. Eftychis, J. Kruse, K. Tsagaraki, M. Androulidaki, E. Iliopoulos, Z. Hatzopoulos, P. Tzanetakis, Ph. Komninou, T. Koukoura, Th. Kehagias, G. P. Dimitrakopoulos, J. Kioseoglou, A. Lotsari, Th. Karakostas, G. Konstantinidis, G. Doundoulakis, K. Zekentes, P. Dimitrakis, V. Ioannou-Sougleridis, A. Olziersky, P. Normand
4th IC4N-2013, Workshop on Nanowires and Nanostructures: Fabrication, Characterization, Applications, Corfu, Greece, 16-20 June, 2013
- 2. *A study on the fabrication of devices and the characterization of GaN nanowires and the GaN/Si heterojunction***
G. Doundoulakis, A. Bairamis, E. Tsikritsaki, A. Stavrinidis, Ch. Zervos, G. Konstantinidis, M. Kayampaki, S. Eftychis, J. Kruse, A. Adikimenakis and A. Georgakilas
38th WOCSDISE proceedings, Workshop on Compound Semiconductor Devices and Integrated Circuits, 15-18 June 2014, Delphi, Greece, pp. 129-130 (book of extended abstracts)
- 3. *Nanopatterning of Si (111) substrates for selective growth of III-nitride nanowires by plasma-assisted molecular beam epitaxy***
P. Dimitrakis, A. Olziersky, V. Ioannou-Sougleridis, P. Normand, J. E. Kruse, S. Eftychis, G. Doundoulakis, K. Tsagaraki, M. Androulidaki, G. Konstantinidis, A. Georgakilas
38th WOCSDISE proceedings, Workshop on Compound Semiconductor Devices and

Integrated Circuits, 15-18 June 2014, Delphi, Greece, pp. 131-132 (book of extended abstracts)

4. ***Importance of substrate temperature in one-step or two-step process of spontaneous GaN nanowire growth by plasma-assisted molecular beam epitaxy***
S. Eftychis, J. Kruse, L. Lymperakis, K. Tsagaraki, G. Doundoulakis, M. Androulidaki, T. Koukoula, Th. Kehagias, Ph. Komninou and A. Georgakilas
38th WOCSDISE proceedings, Workshop on Compound Semiconductor Devices and Integrated Circuits, 15-18 June 2014, Delphi, Greece, pp. 173-174 (book of extended abstracts)
5. ***Importance of substrate temperature in one-step or two-step process of spontaneous GaN nanowire growth by plasma-assisted molecular beam epitaxy***
S. Eftychis, J. Kruse, L. Lymperakis, K. Tsagaraki, G. Doundoulakis, M. Androulidaki, T. Koukoula, Th. Kehagias, Ph. Komninou and A. Georgakilas
38th WOCSDISE, Workshop on Compound Semiconductor Devices and Integrated Circuits, 15-18 June 2014, Delphi, Greece
6. **Selective Growth of GaN Nanopillars on patterned Si (111) substrates**
J.E. Kruse, S. Eftychis, G. Doundoulakis, K. Tsagaraki, M. Androulidaki, A. Olziersky, P. Normand and A. Georgakilas
IWN 2014, International Workshop on Nitride Semiconductors, 24-29 August 2014, Wroclaw, Poland
7. ***The effect of substrate temperature on the nucleation and the growth of GaN nanopillars on Si (111) substrates***
S. Eftychis, J. Kruse, K. Tsagaraki, M. Androulidaki, A. Adikimenakis, G. Doundoulakis and A. Georgakilas
IWN 2014, International Workshop on Nitride Semiconductors, 24-29 August 2014, Wroclaw, Poland
8. ***Electrical characterization of individual GaN Nanopillars synthesized by Plasma assisted Molecular Beam Epitaxy***
G. Doundoulakis, A. Stavrinidis, S. Eftychis, J. Kruse, M. Androulidaki, K. Tsagaraki, M. Kayambaki, G. Konstantinidis, P. Normand, K. Zekentes and A. Georgakilas
ICNS-11, International Conference on Nitride Semiconductors, 30 August - 4 September 2015, Pekino, China
9. **Test standard for Light, Electron and Microwave Microscopy to enable robotic processes**
O. C. Haenssler, A. Kostopoulos, G. Doundoulakis, E. Aperathitis, S. Fatikow, G. Kiriakidis
MARSS 2017, International Conference on Manipulation, Automation and Robotics at Small Scales, 2017, Montreal, Canada

10. Evaluation and understanding of size effects on the conductivity of spontaneously grown GaN nanowires

G. Doundoulakis , A. Stavrinidis, S. Eftychis, M. Androulidaki, K. Tsagaraki, M. Kayambaki, G. Konstantinidis and A. Georgakilas

EUROMAT 2017, European Congress and Exhibition on Advanced Materials and Processes, Thessaloniki, 17-22 Sept. 2017, Greece