

## Technische Universität Braunschweig. :

**Ref Person: Andreas WAAG**

### Scientific publications:

Growth kinetics and mass transport mechanisms of GaN columns by selective area metal organic vapor phase epitaxy, Wang, X., Hartmann, J., Mandl, M., (...), Strassburg, M., Waag, A. , 2014 Journal of Applied Physics, 115 (16), 163104

Band engineered epitaxial 3D GaN-InGaN core-shell rod arrays as an advanced photoanode for visible-light-driven water splitting, Authors of Document Caccamo, L., Hartmann, J., Fàbrega, C., (...), Shen, H., Waag, A. , ACS Applied Materials and Interfaces 6 (4), pp. 2235-2240 (2014)

Highly selective SAM-nanowire hybrid NO<sub>2</sub> sensor: Insight into charge transfer dynamics and alignment of frontier molecular orbitals, Authors of Document Hoffmann, M.W.G., Prades, J.D., Mayrhofer, L., (...), Waag, A., Shen, H. , Advanced Functional Materials 24 (5), pp. 595-602 (2014)

Characterisation of 3D-GaN/InGaN core-shell nanostructures by transmission electron microscopy, Authors of Document Griffiths, I., Cherns, D., Wang, X., (...), Strassburg, M., Waag, A. Physica Status Solidi (C) Current Topics in Solid State Physics 11 (3-4), pp. 425-427 (2014).

Modelling of MOCVD reactor: New 3D approach, Raj, E., Lisik, Z., Niedzielski, P., (...), Wang, X., Waag, A., Journal of Physics: Conference Series 494 (1), 012019 (2014).

Oxides for sustainable photovoltaics with earth-abundant materials, Wagner, A., Stahl, M., Ehrhardt, N., (...), Waag, A., Bakin, A., Proceedings of SPIE - The International Society for Optical Engineering, 8987, 898726 (2014)

### Funding from the European Union.

All projects are related to 3D GaN LED technology for better and sustainable material usage.

#### Options:

- FP 7: GECCO (coordinator)

Question 2.2.: Please specify the public funding you have received at national or regional level (if any).

- German Research Society / German Federal Research Ministry
  - “Nanorod Optoelectronics”
  - “School on Contacts in nanosystems”
  - “Growth of GaN”
  - “Wire Control”