

# **Publikationsbericht 2007**

**Institut für Experimentelle Physik**



**Otto-von-Guericke-Universität Magdeburg**

**Fakultät für Naturwissenschaften**

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Jun.-Prof. Dr. rer. nat. habil. Marcus Hauser

Dr. rer. nat. Peter Veit

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Jun.-Prof. Dr. rer. nat. habil. Marcus Hauser

Prof. Dr. rer. nat. habil. Ralf Stannarius

Prof. Dr. rer. nat. habil. Oliver Speck

## 3. Veröffentlichungen

### *Originalartikel in begutachteten internationalen Zeitschriften*

**Aksenov, Victor; Stannarius, Ralf; Tammer, Michael; Kölsch, Patrick; Kremer, Friedrich; Rössle, Martin; Zentel, Rudolf**

FTIR spectroscopy of smectic elastomer films under lateral strain

In: Liquid crystals. - London: Taylor & Francis, Bd. 34.2007, 1, S. 87-94; [Link unter URL](#)

[Imp.fact.: 1.417]

**Ball, Tonio; Rahm, Benjamin; Eickhoff, Simon B. ; Schulze-Bonhage, Andreas; Speck, Oliver; Mutschler, Isabella**

Response properties of human amygdala subregions - evidence based on functional MRI combined with probabilistic anatomical maps

In: Public Library of Science: PLoS one. - Lawrence, Kan. : PLoS, Bd. 2.2007, 3, insges. 9 S.; [Abstract unter URL](#).

**Bertram, Frank; Christen, Jürgen; Dadgar, Armin; Krost, Alois**

Complex excitonic recombination kinetics in ZnO - capture, relaxation, and recombination from steady state

In: Applied physics letters. - Melville, NY: AIP, Bd. 90.2007, 4, S. 041917, insges. 3 S.; [Link unter URL](#)

[Imp.fact.: 4.127]

**Bohley, Christian; Stannarius, Ralf**

Colloidal inclusions in smectic films with spontaneous bend

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[Imp.fact.: 2.373]

**Dadgar, Armin; Schulze, Fabian; Wienecke, M. ; Gadanecz, A. ; Bläsing, Jürgen; Veit, Peter; Hempel, Thomas; Diez, Annette; Christen, Jürgen; Krost, Alois**

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**Gadanecz, Aniko; Bläsing, Jürgen; Dadgar, Armin; Hums, Christoph; Krost, Alois**

Thermal stability of metal organic vapor phase epitaxy grown AlInN

In: Applied physics letters. - Melville, NY: AIP, Bd. 90.2007, 22, S. 221906-1-221906-3; [Link unter URL](#)

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**Goldhahn, Rüdiger; Winzer, Andreas T. ; Dadgar, Armin; Krost, Alois; Weidemann, O. ; Eickhoff, M.**

Modulation spectroscopy of AlGaN/GaN heterostructures - the influence of electron-hole interaction

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**Graubner, S. ; Neumann, C. ; Krost, Alois; Bläsing, Jürgen; Meyer, B. K.**

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Preparation of ZnO substrates for epitaxy - structural, surface, and electrical properties

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**Heinze, Sören; Krtschil, André; Bläsing, Jürgen; Hempel, Thomas; Veit, Peter; Dadgar, Armin; Christen, Jürgen; Krost, Alois**

Homoepitaxial growth of ZnO by metalorganic vapor phase epitaxy in two-dimensional growth mode

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**Hennig, Juergen; Zhong, Kai; Speck, Oliver**

MR-encephalography - fast multi-channel monitoring of brain physiology with magnetic resonance  
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**Krtschil, Andre; Dadgar, Armin; Diez, Annette; Krost, Alois**  
Electrical characterization of defect states in local conductivity domains in ZnO:N,As layers  
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**Lohrmann, C.; Bartholomä, J.-P.; Foeldi, E.; Speck, Oliver; Langer, M.**  
Magnetic resonance lymphangiography in Kippel-Trénaunay syndrome  
In: The British journal of radiology. - London: British Institute of Radiology, Bd. 80.2007, 956, S. 188-192; [Link unter URL](#)  
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New high capacity getter for vacuum insulated mobile LH 2 storage tank systems  
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A rapid sound-action association effect in human insular cortex  
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**Neumann, C. ; Lautenschläger, S. ; Graubner, S. ; Sann, J. ; Volbers, N. ; Meyer, B. K. ; Bläsing, Jürgen; Krost, Alois; Bertram, Frank; Christen, Jürgen**

Homoepitaxy of ZnO - from the substrates to doping

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**Postels, B. ; Wehmann, H.-H. ; Bakin, A. ; Kreye, M. ; Fuhrmann, D. ; Bläsing, Jürgen; Hangleiter, A. ; Krost, Alois; Waag, A.**

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**Schulze, Fabian; Dadgar, Armin; Bertram, Frank; Bläsing, Jürgen; Diez, Annette; Veit, Peter; Clos, Rainer; Christen, Jürgen; Krost, Alois**

Blue light emitting diodes on Si(001) grown by MOVPE

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**Schulze, Fabian; Kisel, Olga; Dadgar, Armin; Krtschil, André; Bläsing, Jürgen; Kunze, M. ; Daumiller, I. ; Hempel, Thomas; Diez, Annette; Clos, Rainer; Christen, Jürgen; Krost, Alois**

Crystallographic and electric properties of MOVPE-grown AlGaN/GaN-based FETs on Si(001) substrates

In: *Journal of crystal growth.* - Amsterdam: North-Holland Publ. Co., Bd. 299.2007, 2, S. 399-403; [Link unter URL](#)

[Imp.fact.: 1.681]

**Sebestikova, Lenka; Hernoncourt, J. D. ; Hauser, Marcus; Müller, Stefan C. ; DeWit, A.**

Flow-field development during finger splitting at an esothermic chemical reaction front

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**Shaer, A. El; Bakin, A. ; Mofor, A. Che; Bläsing, Jürgen; Krost, Alois; Stoimenos, J. ; Pécz, B. ; Kreye, M. ; Waag, A.**

H<sub>2</sub>O 2-molecular beam epitaxy of high quality ZnO

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[Imp.fact.: 1.990]

**Speck, Oliver; Stadler, J. ; Zaitsev, M.**

High resolution single-shot EPI at 7T

In: *Magnetic resonance materials in physics, biology and medicine.* - Heidelberg: Springer, insges. 14 S.;

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**Stannarius, Ralf; Eremin, Alexey; Tamba, M.-G. ; Pelzl, G. ; Weissflog, W.**

Field-induced texture transitions in a bent-core nematic liquid crystal

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**Stannarius, Ralf; Heuer, Jana**

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**Tamba, M.-G. ; Weissflog, W. ; Eremin, Alexey; Heuer, Jana; Stannarius, Ralf**

Electro-optic characterization of a nematic phase formed by bent core mesogens

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[Imp.fact.: 2.503]

**Tripathy, S. ; Lin, V. K. X. ; Teo, S. L. ; Dadgar, Armin; Diez, Annette; Bläsing, Jürgen; Krost, Alois**

InGaN/GaN light emitting diodes on nanoscale silicon on insulator

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**Zhao, Jun-Liang; Li, Xian-Min; Krtschil, André; Krost, Alois; Yu, Wei-Dong; Zhang, Yi-Wen; Gu, Yan-Fei; Gao, Xiang-Dong**

Study on anomalous high p-type conductivity in ZnO films on silicon substrate prepared by ultrasonic spray pyrolysis

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**Zhong, Kai; Leupold, Jochen; Hennig, Juergen; Speck, Oliver**

Systematic investigation of balanced steady-state free precession for functional MRI in the human visual cortex at 3 Tesla

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[Imp.fact.: 3.427]

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**Heinze, Sören; Dadgar, Armin; Bertram, Frank; Krtschil, André; Bläsing, Jürgen; Witte, Hartmut; Tiefenau, S. ; Hempel, Thomas; Diez, Annette; Christen, Jürgen; Krost, Alois**

Metalorganic vapor phase epitaxy of ZnO - towards p-type conductivity

In: Zinc oxide materials and devices II. - Bellingham, Wash. : SPIE, insges. 15 S.; Proceedings of SPIE; 6474, 2007

**Lautenschläger, S. ; Neumann, C. ; Graubner, S. ; Sann, J. ; Eylert, F. ; Volbers, N. ; Meyer, B. K. ;**

**Bläsing, Jürgen; Krost, Alois; Bertram, Frank; Christen, Jürgen**

Thin film growth of ZnO and its relation to substrate properties

In: Zinc oxide materials and devices II. - Bellingham, Wash. : SPIE, insges. 9 S.; Proceedings of SPIE; 6474, 2007

**Streitenberger, Peter; Zöllner, Dana**

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**Zöllner, Dana; Streitenberger, Peter**

Monte Carlo potts model simulation and statistical theory of 3D grain growth

In: Recrystallization and grain growth III; Pt. 1: - Uetikon-Zürich [u.a.]: Trans Tech Publ., S. 1219-1224; Materials science forum; 558/559,1; unter URL: [Link unter URL](#), 2007

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[Imp.fact.: 0.399]

#### ***Wissenschaftliche Monografien***

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### **Buchbeiträge**

**Clos, Rainer; Radoch, Stephan; Schreppel, Ulrich; Veit, Peter; Jivishov, V. ; Denkena, B.**

Size effect at chip formation in 100Cr6

In: International Conference on New Forming Technology <2, 2007, Bremen>: Proceedings of the 2nd ICNFT: 2nd International Conference on New Forming Technology. - Bremen: BIAS Verl., S. 511-519  
[International Conference on New Forming Technology; 2 (Bremen): 2007.09.20-21]

**Denkena, B. ; Clos, Rainer; Veit, Peter; Jivishov, V. ; Meyer, R.**

Influence of the cutting edge geometry on the chip formation in machining

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[Metallographie-Tagung; 41 (Bremen): 2007.09.19-21]