

## ABTEILUNG MATERIALPHYSIK

### Veröffentlichungen

2024 | 2023 | 2022 | 2021 | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | älter als 2010

() Liste der Publikationen der Abteilung Materialphysik seit 2010. Die meisten Publikationen sind direkt verlinkt. Wenn Sie Interesse an einer unserer Publikationen haben, sie aber nicht erhalten können, sprechen Sie uns bitte direkt an! ()

#### 2024

- ▶ A. Murad, E. Baron, M. Feneberg, M. Baumann, M. Lehmann, and A. Eremin  
*Polarity in liquid crystals formed self-assembled umbrella-shaped subphthalocyanine mesogens*  
ACS Applied Materials & Interfaces, accepted (2024).
- ▶ A. Mudzakir, P. Liebing, E. Haak, A. Fischer, L. Hilfert, R. Goldhahn, and F.T. Edelmann  
*An unusual phosphide addition reaction of 1,3-dimethyl-1,2,3-benzotriazolium iodide*  
Inorg. Chem. Comm. **161**, 111924 (2024).

#### 2023

- ▶ R. Johnson, P. Liebing, D. P. Musikanth, S. A. Regitz, D. S. Amenta, R. Goldhahn, F. T. Edelmann, and J. W. Gilje  
*Pyrazolypropanoate Complexes of Palladium(II) Chloride*  
Z. Anorg. Allg. Chem. **649**, e202300076 (2023).
- ▶ E. Baron, R. Goldhahn, S. Espinoza, M. Zahradik, M. Rebarz, J. Andreasson, M. Deppe, D.J. As, and M. Feneberg  
*Time-resolved pump-probe spectroscopic ellipsometry of cubic GaN II: Absorption edge shift with gain and temperature effects*  
J. Appl. Phys. **134**, 075703 (2023).
- ▶ E. Baron, R. Goldhahn, S. Espinoza, M. Zahradik, M. Rebarz, J. Andreasson, M. Deppe, D.J. As, and M. Feneberg  
*Time-resolved pump-probe spectroscopic ellipsometry of cubic GaN I: Determination of the dielectric function*  
J. Appl. Phys. **134**, 075702 (2023).
- ▶ N. Harmgarth, P. Liebing, V. Lorenz, F. Engelhardt, L. Hilfert, S. Busse, R. Goldhahn, and F.T. Edelmann  
*Synthesis and Structural Characterization of p-Carboranylaminidine Derivatives*  
Molecules. **28**, 3837 (2023).
- ▶ E. Kluth, A. F. M. Anhar Uddin Bhuiyan, L. Meng, J. Bläsing, H. Zhao, A. Strittmatter, R. Goldhahn, and M. Feneberg  
*Determination of anisotropic optical properties of MOCVD grown m-plane  $\alpha$ -(Al<sub>x</sub>Ga<sub>1-x</sub>)<sub>2</sub>O<sub>3</sub> alloys*  
Japan. J. Appl. Phys. **62**, 051001 (2023).
- ▶ S. Wang, P. Liebing, M. Feneberg, F.M. Sroor, F. Engelhardt, L. Hilfert, S. Busse, E. Kluth, R. Goldhahn, and F.T. Edelmann  
*Synthesis and Structural Characterization of Divalent Transition Metal Alkynylamidinate Complexes*  
Eur. J. Inorg. Chem. **26**, e202300027 (2023).
- ▶ E. Kluth, M.W. Fay, C. Parmenter, J.W. Roberts, E. Smith, C.T. Stoppiello, F.C.-P. Massabuau, R. Goldhahn, and M. Feneberg  
*Redshift and amplitude increase in the dielectric function of corundum-like  $\alpha$ -(Tl<sub>x</sub>Ga<sub>1-x</sub>)<sub>2</sub>O<sub>3</sub>*  
Appl. Phys. Lett. **122**, 092101 (2023).
- ▶ K. Egbo, E. Luna, J. Lähnemann, G. Hoffmann, A. Trampert, J. Grümbel, E. Kluth, M. Feneberg, R. Goldhahn, and O. Bierwagen  
*Epitaxial synthesis of unintentionally-doped p-type SnO (001) via suboxide molecular beam epitaxy*  
J. Appl. Phys. **133**, 045701 (2023).
- ▶ S. Wang, P. Liebing, F. Engelhardt, L. Hilfert, S. Busse, R. Goldhahn, and F. T. Edelmann  
*Synthesis and Complexation Study of New Aminoalkynylamidinate Ligands*

## 2022

- ▶ R. Cuscó, T. Yamaguchi, E. Kluth, R. Goldhahn, and M. Feneberg  
*Optical properties of corundum-structured  $\text{In}_2\text{O}_3$*   
Appl. Phys. Lett. **121**, 062106 (2022).
- ▶ E. Baron, R. Goldhahn, S. Espinoza, M. Zahradnik, M. Rebarz, J. Andreasson, M. Deppe, D.J. As, and M. Feneberg  
*Femtosecond pump-probe absorption edge spectroscopy of cubic GaN*  
cond-mat arxiv:2206.02223 (2022).
- ▶ L.E. Ratcliff, T. Oshima, F. Nippert, B.M. Janzen, E. Kluth, R. Goldhahn, M. Feneberg, P. Mazzolini, O. Bierwagen, C. Wouters, M. Nofal, M. Albrecht, J.E.N. Swallow, L.A.H. Jones, P.K. Thakur, T.-L. Lee, C. Kalha, C. Schlueter, T.D. Veal, J.B. Varley, M.R. Wagner, and A. Regoutz  
*Tackling Disorder in  $\gamma\text{-Ga}_2\text{O}_3$*   
Adv. Mater. **34**, 2204217 (2022).
- ▶ V. Lorenz, P. Lebing, M. Müller, L. Hilfert, M. Feneberg, E. Kluth, M. Kühling, M.R. Buchner, R. Goldhahn, and F.T. Edelmann  
*Small Compound - Big Colors: Synthesis and Structural Investigation of Brightly Colored Alkaline Earth Metal 1,3-Dimethylviolurates*  
Dalton Trans. **51**, 7975 (2022).
- ▶ S. Wu, M. Guttman, N. Lobo-Ploch, F. Gindele, N. Susilo, A. Knauer, T. Kolbe, J. Raß, S. Hagedorn, H.K. Cho, K. Hilbrich, M. Feneberg, R. Goldhahn, S. Einfeldt, T. Wernicke, M. Weyers, and M. Kneissl  
*Enhanced light extraction efficiency of UV LEDs by encapsulation with UV-transparent silicone resin*  
Semicond. Sci. Technol. **37**, 065019 (2022).
- ▶ T. Henksmeier, J.F. Schulz, E. Kluth, M. Feneberg, R. Goldhahn, A.M. Sanchez, M. Voigt, G. Grundmeier, and D. Reuter  
*Remote Epitaxy of  $\text{In}_x\text{Ga}_{1-x}\text{As}(001)$  on Graphene Covered  $\text{GaAs}(001)$  Substrates*  
J. Cryst. Growth **593**, 126756 (2022).
- ▶ A. Papadogianni, C. Wouters, R. Schewski, J. Feldl, J. Lähnemann, T. Nagata, E. Kluth, M. Feneberg, R. Goldhahn, M. Ramsteiner, M. Albrecht, and O. Bierwagen  
*Molecular beam epitaxy of single-crystalline bixbyite ( $\text{In}_{1-x}\text{Ga}_x$ ) $_2\text{O}_3$  films ( $x \leq 0.18$ ): Structural properties and consequences of compositional inhomogeneity*  
Phys. Rev. Mater. **6**, 033604 (2022).
- ▶ V. Gorelov, L. Reining, M. Feneberg, R. Goldhahn, A. Schleife, W.R.L. Lambrecht, and M. Gatti  
*Delocalization of dark and bright excitons in flat-band materials and the optical properties of  $\frac{1}{2}\text{O}_5$*   
npj Comput. Mater. **8**, 94 (2022). (<https://doi.org/10.1038/s41524-022-00754-2>)
- ▶ S. Wang, P. Liebing, F. Engelhart, L. Hilfert, S. Busse, R. Goldhahn, and F.T. Edelmann  
*Synthesis and Structural Characterization of a Series of Homoleptic First-Row Transition Metal Tris(alkynyl-amidates)*  
Z. Anorg. Angew. Chemie **648**, e202200009 (2022). (<https://doi.org/10.1002/zaac.202200009>)
- ▶ J. Grümbel, R. Goldhahn, D.-W. Jeon, and M. Feneberg  
*Anharmonicity of lattice vibrations in thin film  $\alpha\text{-Ga}_2\text{O}_3$  investigated by temperature dependent Raman spectroscopy*  
Appl. Phys. Lett. **120**, 022104 (2022) (<https://doi.org/10.1063/5.0074260>)

## 2021

- ▶ M. Wacker, J. Riedel, H. Walles, M. Scherner, G. Awald, S. Varghese, S. Schürlein, B. Garke, P. Veluswamy, J. Wippermann, and J. Hülsmann  
*Comparative Evaluation on Impacts of Fibronectin, Heparin–Chitosan, and Albumin Coating of Bacterial Nanocellulose Small-Diameter Vascular Grafts on Endothelialization In Vitro*  
Nanomaterials **11**, 1952 (2021) (<https://doi.org/10.3390/nano11081952>)
- ▶ J. Feldl, M. Feneberg, A. Papadogianni, J. Lähnemann, T. Nagata, O. Bierwagen, R. Goldhahn, and M. Ramsteiner  
*Band gap widening and phonon behavior of cubic single-crystalline ( $\text{In,Ga}$ ) $_2\text{O}_3$  alloy films*  
Appl. Phys. Lett. **119**, 042101 (2021). (<https://doi.org/10.1063/5.0056532>)
- ▶ F. Meier, M. Protte, E. Baron, M. Feneberg, R. Goldhahn, D. Reuter, and D.J. As

*Selective Area Growth of cubic Gallium Nitride on Silicon (001) and 3C-Silicon Carbide (001)*

AIP Advances **115**, 075013 (2021). (<https://doi.org/10.1063/5.0053865>)

- ▶ M. Feneberg, F. Romero, R. Goldhahn, T. Wernicke, C. Reich, J. Stellmach, F. Mehnke, A. Knauer, M. Weyers, and M. Kneissl

*Origin of defect luminescence in ultraviolet emitting AlGaN diode structures*

Appl. Phys. Lett. **118**, 202101 (2021). (<https://doi.org/10.1063/5.0047021>)

- ▶ M. Hähsler, H. Nadası, M. Feneberg, S. Marino, F. Giesselmann, S. Behrens, and A. Eremin

*Magnetic Tilting in Nematic Liquid Crystals driven by Self-Assembling*

Advanced Functional Materials **2021**, 2101847 (2021). (<https://doi.org/10.1002/adfm.202101847>)

- ▶ L. Artús, M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>), C. Attacalite, J.H. Edgar, J. Li, R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>), R. Cuscó

*Ellipsometry Study of Hexagonal Boron Nitride using Synchrotron Radiation: Transparency Window in the Far-UVC*

Advanced Photonics Research **2**, 2000101 (2021). (<https://doi.org/10.1002/adpr.202000101>)

- ▶ E. Baron, M. Feneberg, R. Goldhahn, M. Deppe, F. Tacken, and D.J. As

*Optical evidence of many-body effects in the ternary zincblende  $A_xGa_{1-x}N$  alloy system*

J. Phys. D: Appl. Phys. **54**, 025101 (2021). (<https://doi.org/10.1088/1361-6463/abb97a>)

## 2020

- ▶ R. Duraisamy, P. Liebing, N. Harmgarth, L. Hilfert, M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>), R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>), V. Lorenz, F. Engelhardt, and F.T. Edelmann

*Rubidium and Cesium Enediamide Complexes Derived from Bulky 1,4-Diazadienes*

ACS Omega **5**, 19061 (2020). (<http://dx.doi.org/10.1021/acsomega.0c02414>)

- ▶ E. Kluth (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Kluth.html>), M. Wieneke, J. Bläsing, H. Witte, K. Lange (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Studenten/Lange.html>), A. Dadgar, R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>), and M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>)

*The impurity size-effect and phonon deformation potentials in wurtzite GaN*

Semicond. Sci. Technol. **35**(09), 095033 (2020). (<https://doi.org/10.1088/1361-6641/ab9fab>)

- ▶ P. Ning (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Ning.html>), J. Grümbel (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Gr%C3%BCmbel.html>), J. Bläsing, R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>), D.-W. Jeon, and M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>)

*Lattice Vibrations and Optical Properties of  $\alpha$ - $Ga_2O_3$  Films Grown by Halide Vapor Phase Epitaxy*

Semicond. Sci. Technol. **35**(09), 095001 (2020). (<https://doi.org/10.1088/1361-6641/ab97f5>)

- ▶ S. Freytag (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Freytag.html>), M. Winkler (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Winkler.html>), R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>), T. Wernicke, M. Rychetsky, I.L. Koslow, M. Kneissl, D.V. Dinh, B. Corbett, P.J. Parbrook, and M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>)

*Polarization fields in semipolar (20-2-1) and (20-21) InGaN light emitting diodes*

Appl. Phys. Lett. **116**, 062106 (2020). (<https://doi.org/10.1063/1.5134952>)

- ▶ E. Baron (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Baron.html>), R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>), M. Deppe, D.J. As, and M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>)

*Photoluminescence line shape analysis of highly n-type doped zincblende GaN*

Phys. Status Solidi B **257**, 1900522 (2020) (<https://dx.doi.org/10.1002/pssb.201900522>) .

- ▶ Y. Li, J. Liu, N. Xiao, L. Yu, J. Zhang, P. Ning, Z. Zhang, and P. Niu

*Electrical Transport Properties of Gallium Phosphide under High Pressure*

Phys. Status Solidi B **257**, 1900470 (2020).

## 2019

- ▶ P. Liebing, M. Kühling, C. Swanson, M. Feneberg, L. Hilfert, R. Goldhahn, T. Chivers, and F.T. Edelmann

*Catenated and Spirocyclic Polychalcogenides from Potassium Carbonate and Elemental Chalcogens*

Chem. Commun. **55**, 14965 (2019). (<https://dx.doi.org/10.1039/C9CC08347B>)

- ▶ E. Baron, R. Goldhahn, M. Deppe, D.J. As, and M. Feneberg

*Influence of the free-electron concentration on the optical properties of zincblende GaN up to  $10^{20} \text{cm}^{-3}$*

Phys. Rev. Mater. **3**, 104603 (2019). (<https://doi.org/10.1103/PhysRevMaterials.3.104603>)

- ▶ M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>) , J. Bläsing, T. Sekiyama, K. Ota, K. Akaiwa, K. Ichino, and R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>)  
*Anisotropic phonon properties and effective electron mass in alpha-Ga<sub>2</sub>O<sub>3</sub>*  
Editor's Pick, Appl. Phys. Lett. **114**, 142102 (2019). (<https://aip.scitation.org/doi/10.1063/1.5086731>)
- ▶ P. Ning (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Ning.html>) , D. Wang, Y. Li, and P. Niu  
Ultrasonic mist chemical vapor deposition and dielectric properties of cubic pyrochlore bismuth magnesium niobate thin films  
Appl. Phys. Express **12**, 045501 (2019) (<https://doi.org/10.7567/1882-0786/ab0759>)
- ▶ M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>) , C. Lidig (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Studenten/Lidig.html>) , M.E. White, M.Y. Tsai, J.S. Speck, O. Bierwagen, Z. Galazka, and R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>)  
Anisotropic optical properties of highly doped rutile SnO<sub>2</sub>: Valence band contributions to the Burstein-Moss shift  
Editor's Pick, APL Materials **7**, 022508 (2019) (<https://doi.org/10.1063/1.5054351>)

## 2018

- ▶ M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>) , M. Winkler (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Winkler.html>) , K. Lange (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Studenten/Lange.html>) , M. Wieneke, H. Witte, A. Dadgar, and R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>)  
Valence band tomography of wurtzite GaN by spectroscopic ellipsometry  
Appl. Phys. Express **11**, 101001 (2018) (<https://doi.org/10.7567/APEX.11.101001>)
- ▶ M. Kracht, A. Karg, M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>) , J. Bläsing, J. Schörmann, R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>) , and M. Eickhoff  
Anisotropic Optical Properties of Metastable (01-12) alpha-Ga<sub>2</sub>O<sub>3</sub> Grown by Plasma-Assisted Molecular Beam Epitaxy  
Phys. Rev. Appl., **10**, 024047 (2018) (<https://doi.org/10.1103/PhysRevApplied.10.024047>)
- ▶ M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>) , J. Nixdorf (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Studenten/Nixdorf.html>) , M.D. Neumann, N. Esser, L. Artus, R. Cusco, T. Yamaguchi, and R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>)  
Ordinary dielectric function of corundumlike α-Ga<sub>2</sub>O<sub>3</sub> from 40 meV up to 20 eV  
Phys. Rev. Mater. **2**, 044601 (2018)  
(<https://link.aps.org/doi/10.1103/PhysRevMaterials.2.044601>)
- ▶ A. Schleife, M.D. Neumann, N. Esser, Z. Galazka, A. Gottwald, J. Nixdorf (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Studenten/Nixdorf.html>) , R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>) , and M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>)  
Optical properties of In<sub>2</sub>O<sub>3</sub> from experiment and first principles theory: influence of lattice screening  
New J. Phys. **20**, 053016 (2018)  
(<https://doi.org/10.1088/1367-2630/aabeb0>)
- ▶ M. Budde, C. Tschammer, P. Franz, J. Feldl, M. Ramsteiner, R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>) , M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>) , N. Barsan, A. Oprea, and O. Bierwagen  
Structural, optical, and electrical properties of unintentionally doped NiO layers grown on MgO by plasma-assisted molecular beam epitaxy  
J. Appl. Phys. **123**, 195301 (2018)  
(<https://doi.org/10.1063/1.5026738>)
- ▶ M. Šilinskas, B. Kalkofen, R. Balasubramanian, A. Batmanov, E. P. Burte, N. Harmgarth, F. Zörner, F. T. Edelmann, B. Garke (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Alumni/Garke.html>) , and M. Lisker  
Plasma-assisted atomic layer deposition of germanium antimony tellurium compounds  
J. Vac. Sci. Technol. A **36**, 021510 (2018) (<https://doi.org/10.1116/1.5003463>)

## 2017

- ▶ T. Wunderer, Z. Yang, M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>) , M. Batres, M. Teepe, and N. Johnson  
Structural and optical characterization of AlGaIn multiple quantum wells grown on semipolar (20-21) bulk AlN substrate

Appl. Phys. Lett. **111**, 111101 (2017)

(<http://dx.doi.org/10.1063/1.4985156>)

- ▶ A. Segura, L. Artús, R. Cuscó, R. Goldhahn (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Goldhahn.html>) , and M. Feneberg (<https://www.amp.ovgu.de/amp/de/Mitarbeiter/Feneberg.html>)  
Band gap of corundumlike  $\alpha$ -Ga<sub>2</sub>O<sub>3</sub> determined by absorption and ellipsometry  
Phys. Rev. Mater. **1**, 024604 (2017) (<http://journals.aps.org/prmaterials/abstract/10.1103/PhysRevMaterials.1.024604>)

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Stimulated emission via electron-hole plasma recombination in fully strained single InGaN/GaN heterostructures  
Appl. Phys. Lett. **109**, 221106 (2016)
- ▶ P. Streitenberger, D. Zöllner  
Enveloppen-Methode zur Auswertung von Größenverteilungen bei Vergrößerungsprozessen  
In: *Fortschritte in der Metallographie*, Praktische Metallographie Sonderband **50**, 235-240 (2016)
- ▶ D. Zöllner  
Treating grain growth in thin films in three dimensions: A simulation study  
Computational Materials Science **125**, 51-60 (2016)
- ▶ F. Tabataba-Vakili, T. Wunderer, M. Kneissl, Z. Yang, M. Teepe, M. Batres, M. Feneberg, B. Vancil, and N.M. Johnson  
Dominance of radiative recombination from electron-beam-pumped Deep-UV AlGaIn multi-quantum-well heterostructure:  
Appl. Phys. Lett. **109**, 181105 (2016)
- ▶ D. Zöllner and P. Streitenberger  
Triple junction energy and mobility controlled microstructural evolution in 2D and 3D polycrystals  
Proceedings of the 6th International Conference on Recrystallization and Grain Growth, Eds. E.A. Holm et al., Wiley-Verlag, ISBN: 978-1-119-32879-7, (2016), p. 3-8
- ▶ P. Streitenberger and D. Zöllner  
Self-similar Coarsening and the Envelope Theorem  
Proceedings of the 6th International Conference on Recrystallization and Grain Growth, Eds. E.A. Holm et al., Wiley-Verlag, ISBN: 978-1-119-32879-7, (2016), p. 23-28
- ▶ D.O. Demchenko, N. Izyumskaya, M. Feneberg, V. Avrutin, Ü. Özgür, R. Goldhahn, and H. Morkoç  
Optical properties of the organic-inorganic hybrid perovskite CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub>: Theory and experiment  
Phys. Rev. B **94**, 075206 (2016)
- ▶ S. Freytag, M. Feneberg, C. Berger, J. Bläsing, A. Dadgar, G. Callsen, F. Nippert, A. Hoffmann, P. Bokov, and R. Goldhahn  
Unintentional indium incorporation into barriers of InGaIn/GaN multiple quantum wells studied by photoreflectance and photoluminescence excitation spectroscopy  
J. Appl. Phys. **120**, 015703 (2016)
- ▶ D. Zöllner  
Grain microstructural evolution in 2D and 3D polycrystals under triple junction energy and mobility control  
Computational Materials Science **118**, 325-337 (2016)
- ▶ M.D. Neumann, N. Esser, J.-M. Chauveau, R. Goldhahn, and M. Feneberg  
Inversion of absorption anisotropy and bowing of crystal field splitting in wurtzite MgZnO  
Appl. Phys. Lett. **108**, 221105 (2016)
- ▶ Y. Xie, M. Madel, M. Feneberg, B. Neuschl, W. Jie, X. Ma, and K. Thonke  
Oxygen vacancies induced DX center and persistent photoconductivity properties of high quality ZnO nanorods  
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- ▶ P. Streitenberger, D. Zöllner  
Coarsening kinetics and the envelope theorem  
Acta Materialia **111**, 210-219 (2016)
- ▶ M. Feneberg, J. Nixdorf, C. Lidig, R. Goldhahn, Z. Galazka, O. Bierwagen, and J.S. Speck  
Many-electron effects on the dielectric function of cubic In<sub>2</sub>O<sub>3</sub>: Effective electron mass, band nonparabolicity, band gap renormalization, and Burstein-Moss shift  
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Computational Materials Science **113**, 11-20 (2016)

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Zeeman spectroscopy of the internal transition <sup>4</sup>T<sub>1</sub> to <sup>6</sup>A<sub>1</sub> of Fe<sup>3+</sup> ions in wurtzite GaN  
J. Appl. Phys. **118**, 215705 (2015)
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## Kontakt

### **Otto-von-Guericke-Universität**

#### **Magdeburg**

Universitätsplatz 2

39106 Magdeburg

Sekretariat

A. Lidzba

Tel.: 58674

✉ [annette.lidzba@ovgu.de](mailto:annette.lidzba@ovgu.de)

› Sekretariat

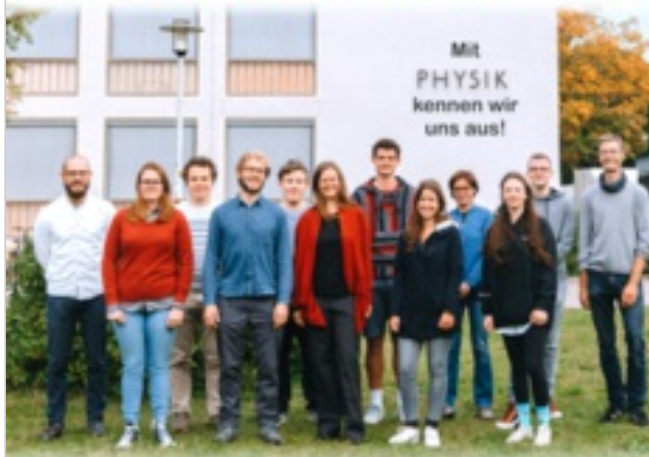
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## Aktuelle Informationen



zum Physikstudium

