

SUMMARY

- 2 Book chapters
- 2 Awards
- 37 Publications in refereed journals
- 9 Refereed conference publications
- 19 Invited talks at international conferences, workshops, and symposia
- 10 Invited talks at universities and scientific institutes
- 181 Contributions to conferences, workshops, and at universities
- 17 h-index

BOOK CHAPTERS

- [2] N. Owschimikow, B. Herzog, B. Lingnau, K. Lüdge, **A. Lenz**, H. Eisele, M. Dähne, T. Niermann, M. Lehmann, A. Schliwa, A. Strittmatter and U.W. Pohl
Submonolayer Quantum Dots
in SEMICONDUCTOR NANOPHOTONICS, Springer Series in Solid-State Sciences
M. Kneissl, A. Knorr, S. Reitzenstein, A. Hoffmann (Eds.), ISBN: 978-3-030-35655-2
(Print) 978-3-030-35656-9 (Online), 2020
- [1] **A. Lenz** and H. Eisele
Self-organized Formation and XSTM-Characterization of GaSb/GaAs Quantum Rings
in PHYSICS OF QUANTUM RINGS, Springer-Series: NanoScience and Technology
Fomin, Vladimir M. (Ed.), ISBN: 978-3-642-39196-5 (Print) 978-3-642-39197-2 (Online),
2014

AWARDS

- [2] Poster Award (2011), title: *Atomic structure of InAs/GaAs submonolayer depositions*,
3rd International Workshop on Epitaxial Growth and Fundamental Properties of
Semiconductor Nanostructures, SemiconNano, Traunkirchen, Austria
- [1] Student Award (2008), title: *Limits of In(Ga)As/GaAs quantum dot growth*,
The 5th International Conference on Semiconductor Quantum Dots, Gyeongju, Korea

PUBLICATIONS in REFEREED JOURNALS

- [37] **A. Lenz**, O. Supplie, E. Lenz, P. Kleinschmidt, and T. Hannappel, *Interface of GaP/Si(001) and antiphase boundary facet-type determination*, J. Appl. Phys. **125**, 045304 (2019).
- [36] P. Farin, M. Marquardt, W. Martyanov, J. Belz, A. Beyer, K. Volz and **A. Lenz**, *Three-dimensional structure of antiphase domains in GaP on Si(001)*, J. Phys.: Condens. Matter **31**, 144001 (2019).

- [35] H. Eisele, J. Schuppang, M. Schnedler, M. Duchamp, C. Nenstiel, V. Portz, T. Kure, M. Bügler, **A. Lenz**, M. Dähne, A. Hoffmann, S. Gwo, S. Choi, J.S. Speck, R.E. Dunin-Borkowski, and Ph. Ebert, *Intrinsic electronic properties of high-quality wurtzite InN*, Phys. Rev. B **94**, 245201 (2016).
- [34] C. Prohl, H. Döscher, P. Kleinschmidt, T. Hannappel, and **A. Lenz**, *Cross-sectional scanning tunneling microscopy of antiphase boundaries in epitaxially grown GaP layers on Si(001)*, J. Vac. Sci. Technol. A **34**, 031102 (2016).
- [33] C.S. Schulze, X. Huang, C. Prohl, V. Füllert, S. Rybank, S.J. Maddox, S.D. March, S.R. Bank, M.L. Lee, and **A. Lenz**, *Atomic structure and stoichiometry of In(Ga)As/GaAs quantum dots grown on an exact-oriented GaP/Si(001) substrate*, Appl. Phys. Lett. **108**, 143101 (2016).
- [32] S. Harrison, M.P Young, P.D. Hodgson, R.J. Young, M. Hayne, L. Danos, A. Schliwa, A. Strittmatter, **A. Lenz**, H. Eisele, U.W. Pohl, and D. Bimberg, *Heterodimensional charge-carrier confinement in stacked submonolayer InAs in GaAs*, Phys. Rev. B **93**, 085302 (2016).
- [31] D. Quandt, J.-H. Schulze, A. Schliwa, Z. Diemer, C. Prohl, **A. Lenz**, H. Eisele, A. Strittmatter, U.W. Pohl, M. Gschrey, S. Rodt, S. Reitzenstein, and D. Bimberg, M. Lehmann, M. Weyland, *Strong charge carrier localization in InAs/GaAs submonolayer stacks prepared by Sb-assisted metalorganic vapor-phase epitaxy*, Phys. Rev. B **91**, 235418 (2015).
- [30] C. Prohl, **A. Lenz**, D. Roy, J. Schuppang, G. Stracke, A. Strittmatter, U.W. Pohl, D. Bimberg, H. Eisele, and M. Dähne, *Structural characterization of In_{0.25}Ga_{0.75}As/GaAs/GaP quantum dots on the atomic scale*, Appl. Phys. Lett. **102**, 123102 (2013).
- [29] **A. Lenz**, E. Tournié, J. Schuppang, M. Dähne, and H. Eisele, *Atomic structure of tensile-strained GaAs/GaSb(001) nanostructures*, Appl. Phys. Lett. **102**, 102105 (2013).
- [28] A. Sabitova, Ph. Ebert, **A. Lenz**, S. Schaafhausen, L. Ivanova, M. Dähne, A. Hoffmann, R.E. Dunin-Borkowski, A. Förster, B. Grandidier, and H. Eisele, *Intrinsic bandgap of cleaved ZnO (11-20) surfaces*, Appl. Phys. Lett. **102**, 021608 (2013).
- [27] G. Stracke, A. Glacki, T. Nowozin, L. Bonato, S. Rodt, C. Prohl, **A. Lenz**, H. Eisele, A. Schliwa, A. Strittmatter, U.W. Pohl, and D. Bimberg, *Growth of In_{0.25}Ga_{0.75}As quantum dots on GaP utilizing a GaAs interlayer*, Appl. Phys. Lett. **101**, 223110 (2012).
- [26] **A. Lenz**, H. Eisele, J. Becker, J.-H. Schulze, T.D. Germann, F. Luckert, K. Pötschke, E. Lenz, L. Ivanova, A. Strittmatter, D. Bimberg, U.W. Pohl, and M. Dähne, *Atomic structure and optical properties of InAs submonolayer depositions in GaAs*, J. Vac. Sci. Technol. B **29**, 04D104 (2011).
- [25] Ph. Ebert, S. Schaafhausen, **A. Lenz**, A. Sabitova, L. Ivanova, M. Dähne, Y.-L. Hong, S. Gwo, and H. Eisele, *Direct measurement of the band gap and Fermi level position at InN(11-20)*, Appl. Phys. Lett. **98**, 062103 (2011).
- [24] L. Ivanova, H. Eisele, M.P. Vaughan, Ph. Ebert, **A. Lenz**, R. Timm, O. Schumann, L. Geelhaar, M. Dähne, S. Fahy, H. Riechert, and E.P. O'Reilly, *Direct measurement and analysis of the conduction band density of states in diluted GaAsN alloys*, Phys. Rev. B **82**, 161201(R) (2010).

- [23] R. Timm, H. Eisele, **A. Lenz**, L. Ivanova, V. Voßebürger, T. Warming, D. Bimberg, I. Farrer, D.A. Ritchie, and M. Dähne, *Confined states of individual type-II GaSb/GaAs quantum dots studied by cross-sectional scanning tunneling spectroscopy*, Nano Lett. **10**, 3972 (2010).
- [22] F. Genz, **A. Lenz**, H. Eisele, L. Ivanova, R. Timm, U.W. Pohl, D. Franke, H. Künzel, and M. Dähne *InAs nanostructures on InGaAsP/InP(001): Interaction of InAs quantum dash formation with InGaAsP decomposition*, J. Vac. Sci. Technol. B **28**, C5E1 (2010).
- [21] **A. Lenz**, H. Eisele, J. Becker, L. Ivanova, E. Lenz, F. Luckert, K. Pötschke, A. Strittmatter, U.W. Pohl, D. Bimberg, and M. Dähne, *Atomic structure of buried InAs submonolayer depositions in GaAs*, Appl. Phys. Express **3**, 105602 (2010).
- [20] L. Ivanova, H. Eisele, **A. Lenz**, R. Timm, M. Dähne, O. Schumann, L. Geelhaar, and H. Riechert, *Effect of Nitrogen on the InAs/GaAs quantum dot shape*, phys. stat. sol.(c) **7**, 355 (2010); Erratum, phys. stat. sol. (c) **7**, 2793 (2010).
- [19] **A. Lenz**, F. Genz, H. Eisele, L. Ivanova, R. Timm, D. Franke, H. Künzel, U.W. Pohl, and M. Dähne, *Formation of InAs/InGaAsP Quantum-Dashes on InP(001)*, Appl. Phys. Lett. **95**, 203105 (2009).
- [18] R. Timm, R.M. Feenstra, H. Eisele, **A. Lenz**, L. Ivanova, E. Lenz, and M. Dähne, *Contrast Mechanisms in Cross-Sectional Scanning Tunneling Microscopy of GaSb/GaAs type-II Nanostructures*, J. Appl. Phys. **105**, 093718 (2009).
- [17] **A. Lenz**, H. Eisele, R. Timm, L. Ivanova, R.L. Sellin, H.-Y. Liu, M. Hopkinson, U.W. Pohl, D. Bimberg, and M. Dähne, *Limits of In(Ga)As/GaAs quantum dot growth*, phys. stat. sol. (b) **246**, 717 (2009).
- [16] R. Timm, H. Eisele, **A. Lenz**, L. Ivanova, G. Balakrishnan, D.L. Huffaker, and M. Dähne, *Self-organized formation of GaSb/GaAs quantum rings*, Phys. Rev. Lett. **101**, 256101 (2008).
- [15] H. Eisele, **A. Lenz**, R. Heitz, R. Timm, M. Dähne, Y. Temko, T. Suzuki, and K. Jacobi, *Change of InAs/GaAs Quantum Dot Structure during Capping*, J. Appl. Phys. **104**, 124301 (2008).
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- [13] L. Ivanova, H. Eisele, **A. Lenz**, R. Timm, M. Dähne, O. Schumann, L. Geelhaar, and H. Riechert, *Nitrogen-induced intermixing of InAsN quantum dots with the GaAs matrix*, Appl. Phys. Lett. **92**, 203101 (2008).
- [12] **A. Lenz**, H. Eisele, R. Timm, L. Ivanova, H.-Y. Liu, M. Hopkinson, U.W. Pohl, and M. Dähne, *Structure of InAs quantum dots-in-a-well nanostructures*, Physica E **40**, 1988 (2008).
- [11] F. Hopfer, A. Mutig, G. Fiol, M. Kuntz, V. Shchukin, V.A. Haisler, T. Warming, E. Stock, S.S. Mikhlin, I.L. Krestnikov, D.A. Livshits, A.R. Kovsh, C. Bornholdt, **A. Lenz**, H. Eisele, M. Dähne, N.N. Ledentsov, and D. Bimberg, *20 Gb/s 85°C Error Free Operation of VCSELs Based on Submonolayer Deposition of Quantum Dots*, IEEE J. Select. Topics in Quantum Elec. **13**, 1302 (2007).

- [10] **A. Lenz**, R. Timm, H. Eisele, L. Ivanova, D. Martin, V. Vossebürger, A. Rastelli, O.G. Schmidt, and M. Dähne, *Structural investigation of hierarchically selfassembled GaAs/AlGaAs quantum dots*, phys. stat. sol. (b) **243**, 3976 (2006).
- [9] R. Timm, **A. Lenz**, H. Eisele, L. Ivanova, K. Pötschke, U.W. Pohl, D. Bimberg, G. Balakrishnan, D.L. Huffaker, and M. Dähne, *Onset of GaSb/GaAs quantum dot formation*, phys. stat. sol. (c) **3**, 3971 (2006).
- [8] R. Timm, **A. Lenz**, H. Eisele, T.-Y. Kim, F. Streicher, K. Pötschke, U.W. Pohl, D. Bimberg, and M. Dähne, *Structure of InAs/GaAs Quantum Dots grown with Sb surfactant*, Physica E **32**, 25 (2006).
- [7] O. Schumann, S. Birner, M. Baudach, L. Geelhaar, H. Eisele, L. Ivanova, R. Timm, **A. Lenz**, S.K. Becker, M. Povolotskyi, M. Dähne, G. Abstreiter, and H. Riechert, *Effects of strain and confinement on the emission wavelength of InAs quantum dots due to a GaAs_{1-x}N_x capping layer*, Phys. Rev. B **71**, 245316 (2005).
- [6] R. Timm, J. Grabowski, H. Eisele, **A. Lenz**, S.K. Becker, L. Müller-Kirsch, K. Pötschke, U.W. Pohl, D. Bimberg, and M. Dähne, *Formation and atomic structure of GaSb nanostructures in GaAs studied by cross-sectional scanning tunneling microscopy*, Physica E **26**, 231 (2005); H. Eisele, R. Timm, and M. Dähne, Erratum, Physica E **41**, 1886 (2009).
- [5] R. Timm, H. Eisele, **A. Lenz**, S.K. Becker, J. Grabowski, T.-Y. Kim, L. Müller-Kirsch, K. Pötschke, U.W. Pohl, D. Bimberg, and M. Dähne, *Structure and intermixing of GaSb/GaAs quantum dots*, Appl. Phys. Lett. **85**, 5890 (2004).
- [4] **A. Lenz**, H. Eisele, R. Timm, S.K. Becker, R.L. Sellin, U.W. Pohl, D. Bimberg, and M. Dähne, *Nanovoids in InGaAs/GaAs quantum dots observed by cross-sectional scanning tunneling microscopy*, Appl. Phys. Lett. **85**, 3848 (2004).
- [3] H. Eisele, R. Timm, **A. Lenz**, Ch. Hennig, M. Ternes, S.K. Becker, and M. Dähne, *Segregation effects during GaAs overgrowth of InAs and InGaAs quantum dots studied by cross-sectional scanning tunneling microscopy*, phys. stat. sol. (c) **0**, 1129 (2003).
- [2] H. Eisele, **A. Lenz**, Ch. Hennig, R. Timm, M. Ternes, and M. Dähne, *Atomic Structure of InAs and InGaAs Quantum Dots Determined by Cross-Sectional Scanning Tunneling Microscopy*, J. Cryst. Growth **248**, 322 (2003).
- [1] **A. Lenz**, R. Timm, H. Eisele, Ch. Hennig, S.K. Becker, R.L. Sellin, U.W. Pohl, D. Bimberg, and M. Dähne, *Reversed truncated cone composition distribution of In_{0.8}Ga_{0.2}As quantum dots overgrown by an In_{0.1}Ga_{0.9}As layer in a GaAs matrix*, Appl. Phys. Lett. **81**, 5150 (2002).

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- [9] P. Farin, M. Marquardt, W. Martyanov, J. Belz, A. Beyer, K. Volz, and **A. Lenz**, *Detailed identification of the progression of antiphase boundaries in GaP/Si(001)*, ECS Transactions **93**, 93 (2019).
- [8] **A. Lenz**, H. Eisele, F. Genz, L. Ivanova, R. Timm, D. Franke, H. Künzel, U.W. Pohl, and M. Dähne, *Formation of InAs/InGaAsP quantum dashes*, Proceedings of the 30th International Conference on the Physics of Semiconductors, AIP Conf. Proc. **1399**, 249 (2011).

- [7] **A. Lenz**, H. Eisele, F. Genz, L. Ivanova, R. Timm, D. Franke, H. Künzel, U.W. Pohl, and M. Dähne, *Atomic ordering and decomposition of lattice matched $In_xGa_{1-x}As_yP_{1-y}$ on $InP(001)$* , VDE Proceedings of the 23rd International Conference on Indium Phosphide and Related Materials, 62 (2011).
- [6] N.N. Ledentsov, F. Hopfer, A. Mutig, V.A. Shchukin, A.V. Savel'ev, G. Fiol, M. Kuntz, V.A. Haisler, T. Warming, E. Stock, S.S. Mikhrin, A.R. Kovsh, C. Bornholdt, **A. Lenz**, H. Eisele, M. Dähne, N.D. Zakharov, P. Werner, and D. Bimberg, *Novel concepts for ultrahigh-speed quantum-dot VCSELs and edge emitters*, Proceedings of the SPIE **6468**, 64681O (2007).
- [5] R. Timm, **A. Lenz**, J. Grabowski, H. Eisele, K. Pötschke, U.W. Pohl, D. Bimberg, and M. Dähne, *Formation and Atomic Structure of GaSb Quantum Dots in GaAs Studied by Cross-Sectional Scanning Tunneling Microscopy*, Proceedings of the 11th European Workshop on MOVPE, 39 (2005).
- [4] **A. Lenz**, H. Eisele, R. Timm, S.K. Becker, R.L. Sellin, U.W. Pohl, D. Bimberg, and M. Dähne, *Limits of InGaAs/GaAs quantum dot growth studied by cross-sectional scanning tunneling microscopy*, Proceedings of the 11th European Workshop on MOVPE, 31 (2005).
- [3] R. Timm, **A. Lenz**, J. Grabowski, H. Eisele, and M. Dähne, *A cross-sectional scanning tunneling microscopy study of GaSb/GaAs nanostructures*, Proceedings of the 14th Conference on Microscopy of Semiconducting Materials, Springer Proceedings in Physics **107**, 479 (2005).
- [2] S.K. Becker, J. Grabowski, T.-Y. Kim, L. Amsel, F. Bechtel, N. Tschirner, I. Mantouvalou, **A. Lenz**, R. Timm, K. Hodeck, F. Streicher, G. Pruskil, H. Eisele, and M. Dähne, *Low budget UHV STM built by physics students for use in a laboratory exercise course*, Proceedings of 12th International Conference on Scanning Tunneling Microscopy/Spectroscopy and Related Techniques, AIP Conf. Proc. **696**, 216 (2003).
- [1] H. Eisele, **A. Lenz**, R. Timm, Ch. Hennig, M. Ternes, F. Heinrichsdorff, A. Krost, R.L. Sellin, U.W. Pohl, D. Bimberg, T. Wehnert, E. Steimetz, W. Richter, and M. Dähne, *Atomic Structure of InAs and InGaAs Quantum Dots Studied by Cross-Sectional Scanning Tunneling Microscopy*, Proceedings of the 24th International Conference on the Physics of Semiconductors, IoP Conf. Series **171**, P199 (2003).

INVITED TALKS at INTERNATIONAL CONFERENCES, WORKSHOPS, and SYMPOSIA

- [19] **A. Lenz**
GaP layers grown on Si(001): How cross-section scanning tunneling microscopy allows for accessing the atomic structures,
19th International Conference on Crystal Growth and Epitaxy (ICCGE-19),
Keystone (USA), July 28th – August 2nd, 2019.
- [18] **A. Lenz**
Characterization of the GaP/Si interface and of antiphase domains in GaP for integration of III-V- on Si,
6th International Workshop on Epitaxial Growth and Fundamental Properties of Semiconductor Nanostructures 2017,
Como (Italy), September 25th – 28th, 2017.
- [17] **A. Lenz**
Cross-sectional scanning tunneling microscopy and -spectroscopy of antiphase boundaries in GaP layers grown on Si(001),
Energy, Materials and Nanotechnology Meeting on Surface and Interface
Jeju (Korea), May 22nd – 26th, 2017.
- [16] M. Marquardt, A. Beyer, K. Volz, and **A. Lenz**
Structural and electrical properties of antiphase domains in GaP layers grown on Si(001) for integration in optoelectronics,
SPIE Photonics West,
San Francisco (USA), January 28th – February 2nd, 2017.
- [15] **D. Quandt**, J.-H. Schulze, A. Schliwa, M. Gschrey, S. Rodt, Z. Diemer, C. Prohl, **A. Lenz**, H. Eisele, J. Bläsing, U. W. Pohl, S. Reitzenstein, D. Bimberg, A. Strittmatter
Sb-assisted MOVCD growth of InAs/GaAs submonolayers,
Energy, Materials and Nanotechnology Meeting on Epitaxy
Budapest (Hungary), September 4th – 8th, 2016.
- [14] **A. Lenz**
Scanning tunneling microscopy and -spectroscopy of III-V layers on GaP/Si(001) substrates,
5th International Workshop on Epitaxial Growth and Fundamental Properties of Semiconductor Nanostructures 2015,
Hsinchu (Taiwan), September 6th – 11th, 2015.
- [13] **A. Lenz**
Self-organized formation and XSTM characterization of GaSb/GaAs quantum rings,
DPG-Spring Meeting,
Dresden (Germany), March 30th – April 4th, 2014.
- [12] **A. Lenz**
Atomic structure and electronic properties of GaSb/GaAs(001) quantum rings,
2013 EMN Open Access Week, Energy, Materials and Nanotechnology
Chengdu (China), October 21st – 27th, 2013.

- [11] **A. Lenz**
Cross-sectional STM on III-V semiconductor nanostructures,
 4th International Workshop on Epitaxial Growth and Fundamental Properties of
 Semiconductor Nanostructures
 Lake Arrowhead (USA), September 29th – October 4th, 2013.
- [10] H. Eisele, **A. Lenz**, Ph. Ebert, N. Liu, C. Prohl, M. Dähne, and C.-K. Shih
*Details of the mass transfer during growth and capping of In(Ga)As/GaAs
 quantum dots*,
 40th International Symposium on Compound Semiconductors (CSWeek),
 Kobe (Japan), May 19th – 23rd, 2013.
- [9] H. Eisele, **A. Lenz**, and E. Tournié
Tensile-strained III-V semiconductor nanostructures at the atomic scale,
 Conference on Crystal Growth (3CG),
 Orlando (USA), December 11th – 14th, 2012.
- [8] **A. Lenz**
*High-Speed High-Temperature Stable Vertical-Cavity Surface-Emitting Lasers
 Studied by Cross-Sectional Scanning Tunneling Microscopy*,
 2nd Annual Nano-S&T-2012,
 Qingdao (China), October 26th – 28th, 2012.
- [7] **A. Lenz**, and H. Eisele
Atomic structure and stoichiometry of InGaAs/GaAs quantum dots on GaP(001),
 Energy, Materials and Nanotechnology (EMN Open Access Week)
 Chengdu (China), October 22nd – 26th, 2012.
- [6] **A. Lenz**, H. Eisele, J. Schuppang, A. Gassenq, T. Talierco, E. Tournié, and
 M. Dähne
*Comparison of GaAs/GaSb(001) and GaSb/GaAs(001) nanostructures at the
 atomic scale*,
 39th International Symposium on Compound Semiconductors (CSWeek),
 Santa Barbara, USA, August 26th – 30th, 2012.
- [5] **A. Lenz**,
*Atomic imaging of binary and quaternary semiconductor nanostructures by cross-
 sectional STM*,
 DPG-Spring Meeting,
 Berlin (Germany), March 25th – 30th, 2012.
- [4] H. Eisele, **A. Lenz**, J. Becker, K. Zak, L. Ivanova, E. Lenz, M. Dähne,
 J.-H. Schulze, T.D. Germann, A. Strittmatter, U.W. Pohl, and D. Bimberg
*Atomic structure of submonolayer InAs/GaAs depositions for high-speed direct
 electro-optical data transmission in VCSELs*,
 SPIE Photonics West,
 San Francisco (USA), January 21st – 26th, 2012.
- [3] Ph. Ebert, S. Schaafhausen, **A. Lenz**, A. Sabitova, L. Ivanova, M. Dähne,
 Y.-L. Hong, S. Gwo, and H. Eisele,
Absence of electron accumulation at InN(11-20) cleavage surfaces,
 E-MRS 2011 Spring Meeting,
 Nice (France), May 8th – 13th, 2011.

- [2] H. Eisele, **A. Lenz**, J. Becker, E. Lenz, F. Luckert, H.-J. Schulze, T.D. Germann, K. Pötschke, L. Ivanova, M. Dähne, A. Strittmatter, U.W. Pohl, and D. Bimberg, *Atomic structure of submonolayer grown InAs/GaAs quantum dots* Villa Conferences on Energy, Materials and Nanotechnology (VICAN) Las Vegas (USA), April 21st – 25th, 2011.
- [1] H. Eisele, **A. Lenz**, J. Becker, L. Ivanova, M. Dähne, E. Lenz, A. Strittmatter, U.W. Pohl, and D. Bimberg, *Atomic structure of submonolayer grown InAs/GaAs quantum dots*, 38th Conference on the Physics and Chemistry of Surfaces and Interfaces, San Diego (USA), January 16th – 20th, 2011.

INVITED TALKS at UNIVERSITIES and SCIENTIFIC INSTITUTES

- [10] **A. Lenz**, *GaP layers on Si(001) for optoelectronics: How cross-section scanning tunnelling microscopy allows access to the resulting structures*, Center for High Technology Materials (CHTM), Albuquerque (USA), January 17th, 2019.
- [9] **A. Lenz**, *Atomic structure and electronic properties of anti-phase boundaries in GaP layers grown on Si(001)*, 1st Workshop on Electronic Materials: Growth and Characterization at the Atomic Scale, University of California Santa Barbara Santa Barbara (USA), January 21st – 22nd, 2016.
- [8] **A. Lenz**, *Scanning tunneling microscopy of III-V layers for integration on silicon substrates*, Seminar of the GRK 1782, Philipps-Universität Marburg Marburg (Germany), October 28th, 2015.
- [7] **A. Lenz**, *Cross-sectional scanning tunneling microscopy and -spectroscopy of III-V layers on GaP/Si(001)*, Universität Wien (Austria), April 14th, 2015.
- [6] **A. Lenz**, *Cross-sectional scanning tunneling microscopy: studying compressively and tensile strained III-V semiconductor nanostructures*, Electrical Engineering Seminar, Yale University New Haven (USA), September 15th, 2014.
- [5] **A. Lenz** and H. Eisele, *Cross-sectional scanning tunneling microscopy for atomically resolved analysis of novel semiconductor nanostructures*, UCLA Visitor Seminar, Los Angeles (USA), September 20th, 2013.

- [4] **A. Lenz**,
Tensile-strained GaAs/GaSb nanostructures studied by cross-sectional scanning tunneling microscopy,
Center for High Technology Materials (CHTM),
Albuquerque (USA), August 23rd, 2012.
- [3] **A. Lenz**,
Characterization of tensile-strained GaAs/GaSb nanostructures studied by cross-sectional scanning tunneling microscopy,
Université Montpellier 2,
Montpellier (France), April 24th, 2012.
- [2] **A. Lenz**,
Characterization of nanostructures using cross-sectional scanning tunneling microscopy,
Sfb 787 Seminar,
Gaal-Müritz (Germany), May 14th, 2012.
- [1] **A. Lenz** and **E. Lenz**,
Structural investigation of III-V semiconductor heterostructures and magic clusters on Si(111)-(7x7),
La Trobe University - Department of Physics,
Melbourne (Australia), September 29th, 2009.