

3. Publications

- Awad, M., M. Nagel, H. Kurz, J. Herfort, and K. Ploog,
Characterization of low temperature GaAs antenna array terahertz emitters,
Appl. Phys. Lett. **91**, 181124, 3 pages (2007).
- Batista, P. D., M. Gustafsson, M. M. de Lima, Jr., M. Beck, V. I. Talyanskii, R. Hey,
P. V. Santos, M. P. Delsing, and J. Rarity,
Acousto-electric single-photon detector,
Proc. SPIE **6583**, 658304, 13 pages (2007).
- Beck, M., M. M. de Lima, Jr., R. Hey, and P. V. Santos,
Acoustic phonons for coherent photon control in semiconductor structures,
J. Phys.: Conf. Ser. **92**, 012006-1–012006-6 (2007).
- Beck, M., M. M. de Lima, Jr., and P. V. Santos,
Optoelektronik im Mikrobereich: Akustische Oberflächenwellen schalten Lichtstrahlen,
Physik in unserer Zeit **38**, 59–60 (2007).
- Beck, M., M. M. de Lima, Jr., E. Wiebicke, W. Seidel, R. Hey, and P. V. Santos,
Acousto-optical multiple interference switches,
Appl. Phys. Lett. **91**, 061118, 3 pages (2007).
- Behn, U., P. Misra, H. T. Grahn, B. Imer, S. Nakamura, S. P. DenBaars, J. S. Speck, and
S. Namakura,
Polarization anisotropy in nonpolar oriented GaN films studied by polarized photoreflectance
spectroscopy,
Phys. Status Solidi A **204**, 299–303 (2007).
- Bellani, V., M. Amado, E. Diez, C. Koerdt, M. Potemski, and R. Hey,
Resonant Rayleigh scattering in ordered and disordered semiconductor superlattices,
Phys. Rev. B **76**, 075349, 7 pages (2007).
- Bhattacharyya, J., S. Ghosh, B. M. Arora, O. Brandt, and H. T. Grahn,
Optical polarization properties of *M*-plane GaN films investigated by transmittance anisotropy
spectroscopy,
Appl. Phys. Lett. **91**, 251913, 3 pages (2007).
- Blum, R.-P., H. Niehus, C. Hucho, R. Fortrie, M. V. Ganduglia- Pirovano, J. Sauer,
S. Shaikhutdinov, and H.-J. Freund,
Surface metal-insulator transition on a vanadium pentoxide (001) single crystal,
Phys. Rev. Lett. **99**, 226103, 4 pages (2007).
- Bougrioua, Z., P. Gibart, E. Calleja, U. Jahn, A. Trampert, J. Ristic, M. Utrera, and G. Nataf,
Growth of freestanding GaN using pillar-epitaxial lateral overgrowth from GaN nanocolumns,
J. Cryst. Growth **309**, 113–120 (2007).

Braun, W., and K. H. Ploog,
Semiconductor surface and interface dynamics studied in real time by synchrotron x-ray diffraction,
AIP Conf. Proc. **916**, 93–114 (2007).

Braun, W., A. Trampert, V. M. Kaganer, B. Jenichen, D. K. Satapathy, and K. H. Ploog,
Endotaxy of MnSb into GaSb,
J. Cryst. Growth **301–302**, 50–53 (2007).

Bryksin, V. V., and P. Kleinert,
Coupled spin-charge drift-diffusion approach for a two-dimensional electron gas with Rashba spin-orbit coupling,
Phys. Rev. B **75**, 205317, 7 pages (2007).

Bryksin, V. V., and P. Kleinert,
Coupled spin-charge drift-diffusion equations for the Rashba model subject to an in-plane electric field,
Phys. Rev. B **76**, 075340, 6 pages (2007).

Calleja, E., J. Ristić, S. Fernández-Garrido, L. Cerutti, M. A. Sánchez-García, J. Grandal, A. Trampert, U. Jahn, G. Sánchez, A. Griol, and B. Sánchez,
Growth, morphology, and structural properties of group-III-nitride nanocolumns and nanodisks,
Phys. Status Solidi B **244**, 2816–2837 (2007).

Calleja, J. M., S. Lazić, J. Sanchez-Páramo, F. Agulló-Rueda, L. Cerutti, J. Ristić, S. Fernández-Garrido, M. A. Sánchez-García, J. Grandal, E. Calleja, A. Trampert, and U. Jahn,
Inelastic light scattering spectroscopy of semiconductor nitride nanocolumns,
Phys. Status Solidi B **244**, 2838–2846 (2007).

Couto, O. D. D., F. Iikawa, J. A. H. Stotz, R. Hey, and P. V. Santos,
Coherent spin transport by acoustic fields in GaAs quantum wells,
Phys. Status Solidi C **3**, 4307–4312 (2007).

Couto, Jr., O. D. D., F. Iikawa, J. Rudolph, R. Hey, and P. V. Santos,
Anisotropic spin transport in (110) GaAs quantum wells,
Phys. Rev. Lett. **98**, 036603, 4 pages (2007).

Couto, Jr., O. D. D., F. Iikawa, J. Rudolph, R. Hey, P. V. Santos, and K. H. Ploog,
Long-range spin transport in (110) GaAs quantum wells,
AIP Conf. Proc. **893**, 1273–1274 (2007).

Däweritz, L., and C. Herrmann,
Self-organization and finite size effects in epitaxial ferromagnetic MnAs films on GaAs,
Phys. Status Solidi B **244**, 2936–2943 (2007).

Deguffroy, N., V. Tasco, A. N. Baranov, B. Satpati, A. Trampert, M. Dunaevski, A. Titkov, F. Genty, and E. Tournié,
Investigations of InSb-based quantum dots grown by molecular-beam epitaxy,
Phys. Status Solidi C **4**, 1743–1746 (2007).

Deguffroy, N., V. Tasco, A. N. Baranov, E. Tournié, B. Satpati, A. Trampert, M. S. Dunaevskii, A. Titkov, and M. Ramonda,
Molecular-beam epitaxy of InSb/GaSb quantum dots,
J. Appl. Phys. **101**, 124309, 7 pages (2007).

Deguffroy, N., V. Tasco, A. Gassenq, L. Cerutti, A. Trampert, A. N. Baranov, and E. Tournié,
InAs/GaSb short-period superlattice injection lasers operating in 2.5 μm – 3.5 μm
mid-infrared wavelength range,
Electron. Lett. **43**, 1285–1286 (2007).

de Lima, Jr., M. M., M. van der Poel, P. V. Santos, and J. M. Hvam,
Coherent modulation of microcavity-polaritons by acoustic phonons,
AIP Conf. Proc. **893**, 1121–1122 (2007).

Deng, H., G. S. Solomon, R. Hey, K. H. Ploog, and Y. Yamamoto,
Spatial coherence of a polariton condensate,
Phys. Rev. Lett. **99**, 126403, 4 pages (2007).

Echtermeyer, T. J., M. C. Lemme, J. Bolten, M. Baus, M. Ramsteiner, and H. Kurz,
Graphene field-effect devices,
Eur. Phys. J. Special Topics **148**, 19–26 (2007).

Engel-Herbert, R., T. Hesjedal, and D. M. Schaadt,
Three-dimensional magnetic flux-closure domain patterns in MnAs thin films on GaAs(001),
J. Appl. Phys. **101**, 09K103, 3 pages (2007).

Engel-Herbert, R., T. Hesjedal, and D. M. Schaadt,
Three-dimensional micromagnetic domain structure of MnAs films on GaAs(001):
Experimental imaging and simulations,
Phys. Rev. B **75**, 094430, 10 pages (2007).

Engel-Herbert, R., Y. Takagaki, and T. Hesjedal,
Growth of carbon nanotubes on GaAs,
Mater. Lett. **61**, 46311–46314 (2007).

Faugeras, C., G. Martinez, A. Riedel, R. Hey, K.-J. Friedland, and Yu. Bychkov,
Evidence for magnetoplasmon character of the cyclotron resonance response of a
two-dimensional electron gas,
Phys. Rev. B **75**, 035334, 5 pages (2007).

Flissikowski, T., P. Misra, O. Brandt, and H. T. Grahn,
Fast time behavior of the polarization filtering in anisotropically strained *M*-plane GaN films,
Phys. Status Solidi C **4**, 175–178 (2007).

Friedland, K.-J., R. Hey, H. Kostial, A. Riedel, and K. H. Ploog,
Measurement of ballistic transport at nonuniform magnetic fields in cross junctions of a curved
two-dimensional electron gas,
Phys. Rev. B **75**, 045347, 4 pages (2007).

- Fujiwara, K., U. Jahn, H. T. Grahn, and K. H. Ploog,
Observation of very efficient cold exciton emission due to the first excited subband state in GaAs/Al_xGa_{1-x}As quantum wells,
AIP Conf. Proc. **893**, 429–430 (2007).
- Fujiwara, K., A. Satake, L. Schrottke, R. Hey, and H. T. Grahn,
Vertical transport in all-binary GaAs/AlAs short-period superlattices and carrier trapping and detrapping dynamics by different quantum wells,
Phys. Status Solidi B **244**, 2926–2935 (2007).
- Gaal, P., W. Kuehn, K. Reimann, M. Woerner, T. Elsaesser, and R. Hey,
Internal motions of a quasiparticle governing its ultrafast nonlinear response,
Nature **450**, 1210–1213 (2007).
- Ghosh, S., C. Rivera, J. L. Pau, E. Muñoz, O. Brandt, and H. T. Grahn,
Very narrow-band ultraviolet photodetection based on strained *M*-plane GaN films,
Appl. Phys. Lett. **90**, 091110, 3 pages (2007).
- Giehler, M., H. Kostial, R. Hey, and H. T. Grahn,
Suppression of longitudinal modes in two-sectioned, coupled-cavity GaAs/(Al,Ga)As terahertz quantum-cascade lasers,
Appl. Phys. Lett. **91**, 161102, 3 pages (2007).
- Grahn, H. T.,
Optical polarization anisotropies in GaN films for different nonpolar orientations,
Phys. Status Solidi B **244**, 1839–1847 (2007).
- Grahn, H. T., R. Koch, and A. Trampert (Eds.),
Frontiers in molecular-beam epitaxy toward novel devices, Festschrift in honour of Klaus H. Ploog,
Phys. Status Solidi B **244**, 2679–3014 (2007).
- Grandal, J., M. A. Sánchez-García, E. Calleja, E. Luna, and A. Trampert,
Accommodation mechanism of InN nanocolumns grown on Si(111) substrates by molecular beam epitaxy,
Appl. Phys. Lett. **91**, 021902, 3 pages (2007).
- Hashimoto, M., J. Herfort, A. Trampert, and K. H. Ploog,
Growth, interface structure and magnetic properties of Heusler alloy Co₂FeSi/GaAs(001) hybrid structures,
J. Cryst. Growth **301–302**, 592–596 (2007).
- Hashimoto, M., J. Herfort, A. Trampert, H.-P. Schönherr, and K. H. Ploog,
Growth temperature dependent interfacial reaction of Heusler-alloy Co₂FeSi/GaAs(001) hybrid structures,
J. Phys. D **40**, 1631–1634 (2007).

Hashimoto, M., A. Trampert, J. Herfort, and K. H. Ploog,
Atomic ordering and interlayer diffusion of Co_2FeSi films grown on GaAs(001) studied by transmission electron microscopy,
J. Vac. Sci. Technol. B **25**, 1453–1459 (2007).

Herfort, J., P. K. Muduli, K.-J. Friedland, H.-P. Schönherr, and K. H. Ploog,
Magnetic anisotropy in Heusler alloy Fe_3Si films on GaAs(113)A,
J. Magn. Magn. Mater. **310**, 2288–2230 (2007).

Hesjedal, T., R. Engel-Herbert, D. M. Schaadt, and K. H. Ploog,
Micromagnetic properties of epitaxial MnAs films on GaAs surfaces,
Phys. Status Solidi C **4**, 1763–1766 (2007).

Hey, R., A. Trampert, U. Jahn, O. D. D. Couto, Jr., and P. Santos,
Growth of (In,Ga)As/(Al,Ga)As quantum wells on GaAs(110) by MBE,
J. Cryst. Growth **301–302**, 158–162 (2007).

Ishikawa, F., A. Trampert, and K. H. Ploog,
Low substrate temperature and low As-pressure growth concept for the molecular beam epitaxy growth of $1.55 \mu\text{m}$ (Ga,In)(N,As) multiple quantum wells,
J. Cryst. Growth **301–302**, 529–533 (2007).

Jachmann, F., and C. Hucho,
Transport of magnetic vortices by surface acoustic waves,
Solid State Commun. **142**, 212–216 (2007).

Jahn, U., D.-S. Jiang, K. H. Ploog, X. Wang, D. Zhao, and H. Yang,
Correlation between optical and structural properties of (Al,Ga)N layers grown by MOCVD,
Phys. Status Solidi A **204**, 294–298 (2007).

Jahn, U., J. Ristić, and E. Calleja,
Cathodoluminescence spectroscopy and imaging of GaN/(Al,Ga)N nanocolumns containing quantum disks,
Appl. Phys. Lett. **90**, 161117, 3 pages (2007).

Jenichen, B., V. M. Kaganer, W. Braun, J. Herfort, R. Shayduk, and K. H. Ploog,
Layer-by-layer growth of thin epitaxial Fe_3Si films on GaAs(001),
Thin Solid Films **515**, 5611–5614 (2007).

Jenichen, B., V. M. Kaganer, Y. Takagaki, C. Herrmann, K. H. Ploog, E. Dudzik, and R. Feyerherm,
First order phase transition in MnAs nanodisks,
Phys. Status Solidi A **204**, 2772–2777 (2007).

Kaganer, V. M.,
Crystal truncation rods in kinematical and dynamical x-ray diffraction theories,
Phys. Rev. B **75**, 245425, 6 pages (2007).

Kaganer, V. M., W. Braun, and K. K. Sabelfeld,
Ostwald ripening of faceted two-dimensional islands,
Phys. Rev. B **76**, 075415, 11 pages (2007).

Kaganer, V. M., A. Shalimov, J. Bak-Misiuk, and K. H. Ploog,
X-ray diffraction peaks from misfit dislocations in double- and triple-crystal diffractometry,
Phys. Status Solidi A **204**, 2561–2566 (2007).

Khaderbad, M. A., S. Dhar, L. Pérez, K. H. Ploog, A. Melnikov, and A. D. Wieck,
Effect of annealing on the magnetic properties of Gd focused ion beam implanted GaN,
Appl. Phys. Lett. **91**, 072514, 3 pages (2007).

Kleinert, P., and V. V. Bryksin,
Oscillation of spin accumulation in a two-dimensional hole gas under a perpendicular
magnetic field,
J. Phys.: Condens. Matter **19**, 476205, 7 pages (2007).

Kleinert, P., and V. V. Bryksin,
Spin accumulation and spin-coherent excitations in a strongly confined two-dimensional hole
gas,
Phys. Rev. B **76**, 073314, 4 pages (2007).

Kleinert, P., and V. V. Bryksin,
Spin polarization in biased Rashba-Dresselhaus two-dimensional electron systems,
Phys. Rev. B **76**, 205326, 6 pages (2007).

Kleinert, P., and V. V. Bryksin,
Theory of the spin-Hall effect revisited,
Phys. Status Solidi C **3**, 4322–4325 (2007).

Kudrawiec, R., M. Gladysiewicz, J. Misiewicz, F. Ishikawa, and K. H. Ploog,
Ground and excited state transitions in as-grown $\text{Ga}_{0.64}\text{In}_{0.36}\text{N}_{0.046}\text{As}_{0.954}$ quantum wells
studied by contactless electroreflectance,
Appl. Phys. Lett. **90**, 041916, 3 pages (2007).

Lagoute, J., C. Nacci, and S. Fölsch,
Doping of monatomic Cu chains with single Co atoms,
Phys. Rev. Lett. **98**, 146804, 4 pages (2007).

Lazić, S., J. M. Calleja, F. Agulló-Rueda, M. A. Sánchez-García, J. Grandal, E. Calleja, and
A. Trampert,
Coupled longitudinal optical phonon-plasmon modes in InN nanocolumns,
AIP Conf. Proc. **893**, 287–288 (2007).

Lazić, S., E. Gallardo, J. M. Calleja, F. Agulló-Rueda, J. Grandal, M. A. Sánchez-García,
E. Calleja, E. Luna, and A. Trampert,
Phonon-plasmon coupling in electron surface accumulation layers in InN nanocolumns,
Phys. Rev. B **76**, 205319, 6 pages (2007).

Luna, E., A. Trampert, E.-M. Pavelescu, and M. Pessa,
Nitrogen-enhanced indium segregation in (Ga,In)(N,As)/GaAs multiple quantum wells grown by molecular-beam epitaxy,
New J. Phys. **9**, 405–415 (2007).

Łusakowski, J., R. Buczko, M. Sakowicz, K. J. Friedland, R. Hey, and K. Ploog,
Interband polarization spectroscopy to test the spherical model of a shallow acceptor in δ -doped heterostructures,
J. Phys.: Condens. Matter **19**, 236205, 11 pages (2007).

Łusakowski, J., K.-J. Friedland, and K. Ploog,
The Stark effect on a bound hole in δ -acceptor doped GaAs/Al_xGa_{1-x}As heterostructures,
Solid State Commun. **142**, 299–301 (2007).

Macià, F., A. Hernández-Mínguez, G. Abril, J. M. Hernandez, A. García-Santiago, J. Tejada, F. Parisi, and P. V. Santos,
Observation of phonon-induced magnetic deflagration in manganites,
Phys. Rev. B **76**, 174424, 8 pages (2007).

Mendez, E. E., A. K. M. Newaz, W. Song, B. Nielsen, R. Hey, H. Kostial, and H. T. Grahn,
Can shot-noise measurements distinguish between coherent and sequential tunneling?,
AIP Conf. Proc. **893**, 533–534 (2007).

Miguel-Sánchez, J., A. Guzmán, U. Jahn, A. Trampert, J. M. Ulloa, E. Muñoz, and A. Hierro,
Role of ionized nitrogen species in the optical and structural properties of GaInNAs/GaAs quantum wells grown by plasma-assisted molecular beam epitaxy,
J. Appl. Phys. **101**, 103526, 6 pages (2007).

Misra, P., O. Brandt, H. T. Grahn, H. Teisseyre, M. Siekacz, C. Skierbiszewski, and B. Łucznik,
Complete in-plane polarization anisotropy of the A exciton in unstrained A-plane GaN films,
Appl. Phys. Lett. **91**, 141903, 3 pages (2007).

Ney, A., T. Kammermeier, E. Manuel, V. Ney, S. Dhar, K. H. Ploog, F. Wilhelm, and A. Rogalev,
Element specific investigations of the structural and magnetic properties of Gd:GaN,
Appl. Phys. Lett. **90**, 252515, 3 pages (2007).

Nötzel, R., S. Anantathanasarn, P. J. van Veldhoven, Y. Barbarin, E. A. J. M. Bente, M. K. Smit, N. I. Cade, H. Kamada, B. Satpati, and A. Trampert,
1.55- μ m range InAs/InP (100) quantum dot telecom devices,
Proc. SPIE **6779**, 677904, 10 pages (2007).

Pedrós, J., Y. Takagaki, T. Ive, M. Ramsteiner, O. Brandt, U. Jahn, K. H. Ploog, and F. Calle,
Exciton impact-ionization dynamics modulated by surface acoustic waves in GaN,
Phys. Rev. B **75**, 115305, 8 pages (2007).

Piot, B. A., D. K. Maude, K. J. Friedland, R. Hey, K. H. Ploog, Z. R. Wasilewski, M. Henini, R. Airey, G. Hill, A. I. Toropov, U. Gennser, A. Cavanna, and D. Maily, Magnetic-field-induced Stoner transition in a quantum Hall ferromagnet at high filling factors, *AIP Conf. Proc.* **893**, 651–652 (2007).

Piot, B. A., D. K. Maude, M. Henini, Z. R. Wasilewski, J. A. Gupta, K. J. Friedland, R. Hey, K. H. Ploog, U. Gennser, A. Cavanna, D. Maily, R. Airey, and G. Hill, Influence of the single-particle Zeeman energy on the quantum Hall ferromagnet at high filling factors, *Phys. Rev. B* **75**, 155332, 4 pages (2007).

Pletea, M., W. Brückner, H. Wendrock, J. Thomas, R. Kaltofen, and R. Koch, *In situ* stress evolution during sputter deposition of Cu/Co bilayers and multilayers, *J. Appl. Phys.* **101**, 073511, 7 pages (2007).

Ploog, K. H., Recent progress in nanostructure fabrication using MBE, *J. Cryst. Growth* **301–302**, 10–15 (2007).

Ploog, K. H., A. Trampert, O. Brandt, and V. F. Sapega, Structural, optical, and magnetic properties of (Ga,Mn)As/AlAs multiple quantum well structures, *J. Vac. Sci. Technol. B* **25**, 1460–1466 (2007).

Qurashi, U. S., N. A. Naz, M. Naeem Khan, N. Zafar, M. Zafar Iqbal, P. Krispin, and R. Hey, Deep levels in GaAs/Al_{0.78}Ga_{0.22}As heterostructures, *Physica B* **401–402**, 266–269 (2007).

Rivera, C., U. Jahn, T. Flissikowski, J. L. Pau, E. Muñoz, and H. T. Grahn, Strain-confinement mechanism in mesoscopic quantum disks based on piezoelectric materials, *Phys. Rev. B* **75**, 045316, 10 pages (2007).

Rivera, C., P. Misra, J. L. Pau, E. Muñoz, O. Brandt, H. T. Grahn, and K. H. Ploog, Electrical and optical characterization of *M*-plane GaN films grown on LiAlO₂ substrates, *Phys. Status Solidi C* **4**, 2548–2551 (2007).

Rivera, C., P. Misra, J. L. Pau, E. Muñoz, O. Brandt, H. T. Grahn, and K. H. Ploog, Intrinsic photoluminescence of *M*-plane GaN films on LiAlO₂ substrates, *J. Appl. Phys.* **101**, 053527, 6 pages (2007).

Rivera, C., P. Misra, J. L. Pau, E. Muñoz, O. Brandt, H. T. Grahn, and K. H. Ploog, Strained *M*-plane GaN for polarization-sensitive applications, in *Proceedings of the 6th Spanish Conference on Electronic Devices, San Lorenzo de El Escorial, Madrid, Spain, Jan. 30th to Feb. 02nd*, (IEEE, Piscataway, 2007), pp. 250–253.

Rivera, C., P. Misra, J. L. Pau, E. Muñoz, O. Brandt, H. T. Grahn, and K. H. Ploog, *M*-plane GaN-based dichroic photodetectors, *Phys. Status Solidi C* **4**, 86–89 (2007).

- Rivera, C., E. Muñoz, O. Brandt, and H. T. Grahn,
Detection of the optical polarization angle with bandpass characteristics based on *M*-plane GaN photodetectors,
Appl. Phys. Lett. **91**, 203514, 3 pages (2007).
- Rudolph, J., R. Hey, and P. V. Santos,
Exciton transport by surface acoustic waves,
Superlattices Microstruct. **41**, 293–296 (2007).
- Rudolph, J., R. Hey, and P. V. Santos,
Long-range exciton transport by dynamic strain fields in a GaAs quantum well,
Phys. Rev. Lett. **99**, 047602, 4 pages (2007).
- Santos, T. S., J. S. Lee, P. Migdal, I. C. Lekshmi, B. Satpati, and J. S. Moodera,
Room-temperature tunnel magnetoresistance and spin-polarized tunneling through an organic semiconductor barrier,
Phys. Rev. Lett. **98**, 016601, 4 pages (2007).
- Sapega, V. F., O. Brandt, M. Ramsteiner, K. H. Ploog, I. E. Panaiotti, and N. S. Averkiev,
Hole spin polarization in GaAs:Mn/AlAs multiple quantum wells,
Phys. Rev. B **75**, 113310, 4 pages (2007).
- Sapega, V. F., M. Ramsteiner, O. Brandt, L. Däweritz, and K. H. Ploog,
Hot-electron photoluminescence of para- and ferromagnetic (Ga,Mn)As layers,
AIP Conf. Proc. **893**, 1209–1210 (2007).
- Satpati, B., J. Rodriguez, A. Trampert, E. Tournié, A. Joullié, and P. Christol,
Interface analysis of InAs/GaSb superlattice grown by MBE,
J. Cryst. Growth **301–302**, 889–892 (2007).
- Schaadt, D. M., O. Brandt, S. Ghosh, T. Flissikowski, U. Jahn, and H. T. Grahn,
Polarization-dependent beam switch based on an *M*-plane GaN/AlN distributed Bragg reflector,
Appl. Phys. Lett. **90**, 231117, 3 pages (2007).
- Schaadt, D. M., O. Brandt, A. Trampert, H.-P. Schönherr, and K. H. Ploog,
Epitaxial growth of 6H-AlN on *M*-plane 6H-SiC by molecular beam epitaxy,
J. Cryst. Growth **300**, 127–129 (2007).
- Schaadt, D. M., R. Engel-Herbert, and T. Hesjedal,
Effects of anisotropic exchange on the micromagnetic domain structures,
Phys. Status Solidi B **244**, 1271–1279 (2007).
- Schreiber, L., D. Duda, B. Beschoten, G. Güntherodt, H.-P. Schönherr, and J. Herfort,
Anisotropic electron spin lifetime in (In,Ga)As/GaAs (110) quantum wells,
Phys. Rev. B **75**, 193304, 4 pages (2007).
- Schreiber, L., D. Duda, B. Beschoten, G. Güntherodt, H.-P. Schönherr, and J. Herfort,
Spin lifetime of (In,Ga)As/GaAs (110) quantum wells,
Phys. Status Solidi B **244**, 2960–2970 (2007).

- Schrottke, L., M. Giehler, and H. T. Grahn,
Intra-miniband gain in a super-superlattice structure with alternating electric-field domains,
J. Appl. Phys. **101**, 036101, 3 pages (2007).
- Schrottke, L., M. Giehler, R. Hey, and H. T. Grahn,
Quantum-cascade lasers operating at low electric field strengths,
AIP Conf. Proc. **893**, 1447–1448 (2007).
- Shalimov, A., J. Bak-Misiuk, V. M. Kaganer, M. Calamiotou, and A. Georgakilas,
Strain nonuniformity in GaAs heteroepitaxial films on Si (001) studied by x-ray diffraction,
J. Appl. Phys. **101**, 013517, 6 pages (2007).
- Sogawa, T., H. Gotoh, Y. Hirayama, T. Saku, S. Miyashita, P. V. Santos, and K. H. Ploog,
Dimensionality control in GaAs quantum wells dynamically modulated by surface acoustic waves,
AIP Conf. Proc. **893**, 527–528 (2007).
- Sogawa, T., H. Gotoh, Y. Hirayama, P. V. Santos, and K. H. Ploog,
Dimensional oscillation in GaAs/AlAs quantum wells by two-dimensional standing surface acoustic waves,
Appl. Phys. Lett. **91**, 141917, 3 pages (2007).
- Sogawa, T., H. Sanada, H. Gotoh, H. Yamaguchi, S. Miyashita, and P. V. Santos,
Photoluminescence dynamics of GaAs/AlAs quantum wells modulated by surface acoustic waves,
Jpn. J. Appl. Phys., Part 2 **46**, L758–L760 (2007).
- Stotz, J. A. H., P. V. Santos, R. Hey, and K. H. Ploog,
Electron spin dynamics during transport using moving quantum dots,
AIP Conf. Proc. **893**, 1351–1352 (2007).
- Takagaki, Y., and E. Chilla,
Relocation effect and polarization mixing of surface acoustic waves in AlN-GaN bilayers on Al₂O₃(0001) substrates,
J. Appl. Phys. **101**, 113534, 5 pages (2007).
- Takagaki, Y., L. Däweritz, and K. H. Ploog,
Abrupt changes in the temperature coefficient of resistivity induced by the phase transitions in MnAs films on GaAs,
Phys. Rev. B **75**, 035213, 4 pages (2007).
- Takagaki, Y., and K.-J. Friedland,
Magnetotransport properties in (1 $\bar{1}$ 00)- and (0001)-oriented MnAs films on GaAs substrates,
J. Appl. Phys. **101**, 113916, 7 pages (2007).
- Takagaki, Y., J. Herfort, and K.-J. Friedland,
Extremely strong domain-wall pinning and spontaneous demagnetization in MnAs(0001) films on GaAs(111)B,
Phys. Rev. B **76**, 184409, 6 pages (2007).

- Takagaki, Y., C. Herrmann, E. Wiebicke, J. Herfort, and B. Jenichen, Distribution of type-*B* minority domains in a type-*A* MnAs thin layer on GaAs(001), *J. Appl. Phys.* **101**, 123914, 4 pages (2007).
- Talyanskii, V. I., J. A. H. Stotz, and P. V. Santos, An acoustoelectric single photon detector, *Semicond. Sci. Technol.* **22**, 209–213 (2007).
- Tasco, V., N. Deguffroy, A. Baranov, E. Tournié, B. Satpati, A. Trampert, M. Dunaevski, and A. Titkov, High-density InSb-based quantum dots emitting in the mid-infrared, *J. Cryst. Growth* **301–302**, 713–717 (2007).
- Tinkham, B. P., W. Braun, V. M. Kaganer, D. K. Satapathy, B. Jenichen, and K. H. Ploog, Nucleation, coarsening, and kinetic scaling of two-dimensional islands on GaSb(001), *Surf. Sci.* **601**, 814–821 (2007).
- Tournié, E., and A. Trampert, MBE growth and interface formation of compound semiconductor heterostructures for optoelectronics, *Phys. Status Solidi B* **244**, 2683–2696 (2007).
- Vorob'ev, A. B., K.-J. Friedland, H. Kostial, R. Hey, U. Jahn, E. Wiebicke, Ju. S. Yukecheva, and V. Ya. Prinz, Giant asymmetry of the longitudinal magnetoresistance in high-mobility two-dimensional electron gas on a cylindrical surface, *Phys. Rev. B* **75**, 205309, 6 pages (2007).
- Wang, X. L., D. G. Zhao, U. Jahn, K. Ploog, D. S. Jiang, H. Yang, and J. W. Liang, The effects of LT AlN buffer thickness on the optical properties of AlGa_N grown by MOCVD and Al composition inhomogeneity analysis, *J. Phys. D* **40**, 1113–1117 (2007).
- Wang, X. L., D. G. Zhao, D. S. Jiang, H. Yang, J. W. Liang, U. Jahn, and K. Ploog, Al compositional inhomogeneity of AlGa_N epilayer with a high Al composition grown by metal-organic chemical vapour deposition, *J. Phys.: Condens. Matter* **19**, 176005, 6 pages (2007).
- Watahiki, T., B. P. Tinkham, B. Jenichen, W. Braun, and K. H. Ploog, Growth of praseodymium oxide and silicate for high-*k* dielectrics by molecular beam epitaxy, *J. Cryst. Growth* **301–302**, 381–385 (2007).
- Wirthmann, A., B. D. McCombe, D. Heitmann, S. Holland, K.-J. Friedland, and C.-M. Hu, Far-infrared-induced magnetoresistance oscillations in GaAs/Al_xGa_{1-x}As-based two-dimensional electron systems, *Phys. Rev. B* **76**, 195315, 5 pages (2007).