

## A2.8 (Kalt / Hetterich)

- [A2.8:1] \* D. Litvinov, D. Gerthsen, A. Rosenauer, M. Schowalter, T. Passow, P. Feinäugle, and M. Hetterich, *Transmission electron microscopy investigation of segregation and critical floating-layer content of indium for island formation in  $In_xGa_{1-x}As$* , Phys. Rev. B **74**, 165306 (2006)
- [A2.8:2] \* D. Litvinov, D. Gerthsen, A. Rosenauer, T. Passow, M. Grün, C. Klingshirn, and M. Hetterich, *In distribution in  $InGaAs$  quantum wells and quantum islands*, Microscopy of Semiconducting Materials, Proc. 14th conference (MSM XIV), Oxford, UK, 2005, Springer Proceedings in Physics **107**, 275, Eds.: A.G. Cullis, J.L. Hutchison (2006)
- [A2.8:3] \* J. Brückner, J. Silbereisen, D. Daub, U. Geyer, G. Bastian, B. Daniel, and M. Hetterich, *Optical and acoustical ridge waveguides based on piezoelectric semiconductors for novel integrated acoustooptic components*, Proc. Photonics Europe 2006, Integrated Optics, Silicon Photonics, and Photonic Integrated Circuits, G.C. Righini (Ed.), Proc. SPIE **6183**, 618309 (2006)
- [A2.8:4] \* T. Passow, S. Li, D. Litvinov, W. Löffler, J. Fallert, B. Daniel, J. Lupaca-Schomber, J. Kvietková, D. Gerthsen, H. Kalt, and M. Hetterich, *Investigation of  $InAs$  quantum dot growth for electrical spin injection devices*, 4th Int. Conf. on Quantum Dots (QD2006), Chamonix-Mont Blanc, France, phys. stat. sol. (c) **3**, 3943 (2006)
- [A2.8:5] \* F.M. Weber, M. Karl, J. Lupaca-Schomber, W. Löffler, S. Li, T. Passow, J. Hawecker, D. Gerthsen, H. Kalt, and M. Hetterich, *Optical modes in pyramidal  $GaAs$  microcavities*, Appl. Phys. Lett. **90**, 161104 (2007); featured in: Nature Photonics **1**, 317 (2007), News & Views
- [A2.8:6] \* T. Passow, S. Li, P. Feinäugle, T. Vallaitis, J. Leuthold, D. Litvinov, D. Gerthsen, and M. Hetterich, *Systematic investigation into the influence of growth conditions on  $InAs/GaAs$  quantum dot properties*, J. Appl. Phys. **102**, 073511 (2007)
- [A2.8:7] \* M. Karl, S. Li, T. Passow, W. Löffler, H. Kalt, and M. Hetterich, *Localized and delocalized modes in coupled optical micropillar cavities*, Optics Express **15**, 8191 (2007)
- [A2.8:8] \* D. Litvinov, D. Gerthsen, A. Rosenauer, M. Schowalter, T. Passow, and M. Hetterich, *The role of segregation in  $InGaAs$  heteroepitaxy*, THERMEC' 2006 (Int. Conf. on Processing & Manufacturing of Advanced Materials), Vancouver, Canada, 2006, Mat. Sci. Forum **539–543**, 3540 (2007)
- [A2.8:9] \* M. Karl, W. Löffler, J. Lupaca-Schomber, T. Passow, S. Li, J. Hawecker, F. Pérez-Willard, D. Gerthsen, H. Kalt, C. Klingshirn, and M. Hetterich, *Single and coupled microcavities –  $AlAs/GaAs$  DBR pillars and  $GaAs$  pyramids*, Proc. 28th Int. Conf. on the Physics of Semiconductors, Vienna, Austria, 2006, AIP Conf. Proc. **893**, 1133 (2007)
- [A2.8:10] \* M. Karl, T. Beck, S. Li, H. Kalt, and M. Hetterich, *Q-factor and density of optical modes in pyramidal and cone-shaped  $GaAs$  microcavities*, Appl. Phys. Lett. **92**, 231105 (2008)
- [A2.8:11] \* D. Litvinov, H. Blank, R. Schneider, D. Gerthsen, T. Vallaitis, J. Leuthold, T. Passow, A. Grau, H. Kalt, C. Klingshirn, and M. Hetterich, *Influence of  $InGaAs$  cap layers with different  $In$  concentration on the properties of  $InGaAs$  quantum dots*, J. Appl. Phys. **103**, 083532 (2008)
- [A2.8:12] \* M. Karl, F.M. Weber, J. Lupaca-Schomber, S. Li, T. Passow, W. Löffler, H. Kalt, and M. Hetterich, *GaAs pyramids on GaAs/AlAs Bragg reflectors as alternative microcavities*, 7th Int. Conf. on the Physics of Light-Matter Coupling in

Nanostructures (PLMCN7), Havana, Cuba, 2007, Superlattices and Microstructures **43**, 635 (2008)

- [A2.8:13] \* D. Litvinov, M. Schowalter, A. Rosenauer, B. Daniel, J. Fallert, W. Löffler, H. Kalt, and M. Hetterich, *Determination of critical thickness for defect formation of CdSe / ZnSe heterostructures by transmission electron microscopy and photoluminescence spectroscopy*, phys. stat. sol. (a) **205**, 2892 (2008)
- [A2.8:14] ‡ M.F. Saenger, M. Hetterich, T. Hofmann, R.D. Kirby, D.J. Sellmyer, and M. Schubert, *Dielectric and magnetic birefringence in low-chlorine-doped n-type Zn<sub>1-x</sub>Mn<sub>x</sub>Se*, 4th Int. Conf. on Spectroscopic Ellipsometry (ICSE 4), Stockholm, Sweden, 2007, phys. stat. sol. (c) **5**, 1007 (2008)
- [A2.8:15] \* M. Karl, B. Kettner, S. Burger, F. Schmidt, H. Kalt, and M. Hetterich, *Dependencies of micro-pillar cavity quality factors calculated with finite element methods*, Optics Express **17**, 1144 (2009)
- [A2.8:16] \* M. Karl, D. Rülke, T. Beck, D.Z. Hu, D.M. Schaadt, H. Kalt, and M. Hetterich, *Reversed pyramids as novel optical micro-cavities*, 9th Int. Conf. on the Physics of Light-Matter Coupling in Nanostructures (PLMCN9), Lecce, Italy, 2009, Superlattices and Microstructures **47**, 83 (2010)
- [A2.8:17] \* M. Karl, T. Beck, S. Li, D.Z. Hu, D.M. Schaadt, H. Kalt, and M. Hetterich, *GaAs micro-pyramids serving as optical micro-cavities*, 29th Int. Conf. on the Physics of Semiconductors (ICPS), Rio de Janeiro, Brazil, 2008, AIP Conf. Proc. **1199**, 369 (2010)
- [A2.8:18] \* D. Gerthsen, H. Blank, D. Litvinov, R. Schneider, A. Rosenauer, T. Passow, A. Grau, P. Feinäugle, H. Kalt, C. Klingshirn, and M. Hetterich, *On the incorporation of indium in InAs-based quantum structures*, Microscopy of Semiconducting Materials (MSM XVI), Oxford, UK, 2009, Journal of Physics: Conference Series **209**, 012006 (2010)
- [A2.8:19] \*‡ K. Müller, M. Schowalter, A. Rosenauer, D. Hu, D.M. Schaadt, M. Hetterich, P. Gilet, O. Rubel, R. Fritz, and K. Volz, *Atomic scale annealing effects on In<sub>x</sub>Ga<sub>1-x</sub>As<sub>1-y</sub> studied by TEM three-beam imaging*, Phys. Rev. B **84**, 045316 (2011)
- [A2.8:20] \*‡ M. Helfrich, D.Z. Hu, J. Hendrickson, M. Gehl, D. Rülke, R. Gröger, D. Litvinov, S. Linden, M. Wegener, D. Gerthsen, T. Schimmel, M. Hetterich, H. Kalt, G. Khitrova, H.M. Gibbs, and D.M. Schaadt, *Growth and annealing of InAs quantum dots on pre-structured GaAs substrates*, J. Crystal Growth **323**, 187 (2011)
- [A2.8:21] \* D. Rülke, M. Karl, D.Z. Hu, D.M. Schaadt, H. Kalt, and M. Hetterich, *Optical microcavities fabricated by DBR overgrowth of pyramidal-shaped GaAs mesas*, J. Crystal Growth **324**, 259 (2011)
- [A2.8:22] \*‡ K. Müller, M. Schowalter, O. Rubel, D.Z. Hu, D.M. Schaadt, M. Hetterich, P. Gilet, R. Fritz, K. Volz, and A. Rosenauer, *TEM 3-beam study of annealing effects in InGaNAs using ab-initio structure factors for strain-relaxed supercells*, Journal of Physics: Conference Series **326**, 012026 (2011)