

Passivation of lanthanide surface sites in ultrasmall NaYF₄:Eu³⁺ nanocrystals

M. Bański, M. Afzaal, A. Podhorodecki, J. Misiewicz, Paul O'Brien
J. Nanoparticles Research **14**, 1228 (2012)

Dynamics of localized excitons in Ga_{0.69}In_{0.31}N_{0.015}As_{0.985}/GaAs quantum well: Experimental studies and Monte-Carlo simulations

M. Baranowski, R. Kudrawiec, M. Latkowska, M. Syperek, J. Misiewicz, J. A. Gupta
Appl. Phys. Lett. **100**, 202105 (2012)

Carrier dynamics in type-II GaAsSb/GaAs quantum wells

M. Baranowski, M. Syperek, R. Kudrawiec, J. Misiewicz, J. A. Gupta, X. Wu, R. Wang
J. Phys.: Condens. Matter **24**, 185801 (2012)
 Virt. J. Ultrafast Sci. / Volume 10 / Issue 3 / CONDENSED MATTER PHYSICS

Monte Carlo Simulations of the Influence of Localization Centres on Carrier Dynamics in GaInNAs Quantum Wells

M. Baranowski, R. Kudrawiec, M. Latkowska, M. Syperek, J. Misiewicz
Acta Physica Polonica A **122** 1022 (2012)

Single photon emission in the red spectral range from a GaAs-based self-assembled quantum dot

Ł. Dusanowski, A. Golnik, M. Syperek, M. Nawrocki, G. Sęk, J. Misiewicz,
 T. W. Schlereth, C. Schneider, S. Höfling, M. Kamp, A. Forchel
Appl. Phys. Lett. **101** 103108 (2012)

Multiexcitonic emission from single elongated InGaAs/GaAs quantum dots

Ł. Dusanowski, G. Sęk, A. Musiał, P. Podemski, J. Misiewicz, A. Löffler, S. Höfling,
 S. Reitzenstein, A. Forchel
J. Appl. Phys. **111**, 063522 (2012)

High magnetic field spin splitting of excitons in asymmetric GaAs quantum wells

J. Jadczak, M. Kubisa, K. Ryczko, L. Bryja, M. Potemski
Phys. Rev. B **86**, 245401 (2012)

Increasing the optical transition oscillator strength in GaSb-based type II quantum wells

F. Janiak, G. Sęk, M. Motyka, K. Ryczko, J. Misiewicz, A. Bauer, S. Höfling, M. Kamp, A. Forchel

Appl. Phys. Lett. **100** 231908 (2012)

Correlations between the band structure, activation energies of electron traps, and photoluminescence in n-type GaNAs layers

R. Kudrawiec, M. Latkowska, M. Welna, J. Misiewicz, M. Shafi, R. H. Mari, M. Henini, W. Walukiewicz

Appl. Phys. Lett. **101** 082109 (2012)

Contactless electroreflectance studies of Fermi level position on c-plane GaN surface grown by molecular beam epitaxy and metalorganic vapor phase epitaxy

R. Kudrawiec, M. Gładysiewicz, L. Janicki, J. Misiewicz, G. Cywiński, C. Cheze, P. Wolny, P. Prystawko, C. Skierbiszewski

Appl. Phys. Lett. **100** 181603 (2012)

Influence of non-radiative recombination on photoluminescence decay time in GaInNAs quantum wells with Ga- and In-rich environments of nitrogen atoms

R. Kudrawiec, M. Syperek, M. Latkowska, J. Misiewicz, V.-M. Korpijärvi, P. Laukkanen, J. Pakarinen, M. Dumitrescu, M. Guina, M. Pessa

J. Appl. Phys. **111** 063514 (2012)

Unusual broadening of E_0 and $E_0 + \Delta_{SO}$ transitions in GaAsBi studied by electromodulation spectroscopy

R. Kudrawiec, J. Kopaczek, P. Sitarek, J. Misiewicz, M. Henini, S. V. Novikov

J. Appl. Phys. **111** 066103 (2012)

Temperature dependence of E_0 and $E_0 + \Delta_{SO}$ transitions in $\text{In}_{0.53}\text{Ga}_{0.47}\text{Bi}_x\text{As}_{1-x}$ alloys studied by photoreflectance

R. Kudrawiec, J. Kopaczek, J. Misiewicz, W. Walukiewicz, J. P. Petropoulos, Y. Zhong, P. B. Dongmo, J. M. O. Zide

J. Appl. Phys. **112** 113508 (2012)

Contactless electroreflectance study of the Fermi level pinning on GaSb surface in n-type and p-type GaSb Van Hoof structures

R. Kudrawiec, H. P. Nair, M. Latkowska, J. Misiewicz, S. R. Bank, W. Walukiewicz

J. Appl. Phys. **112** 123513 (2012)

Contactless electroreflectance spectroscopy of optical transitions in low dimensional semiconductor structures

J. Misiewicz, R. Kudrawiec

Opto-Electronics Review **20** 101 (2012)

Type II quantum wells on GaSb substrate designed for laser-based gas sensing applications in a broad range of mid infrared

M. Motyka, K. Ryczko, G. Sęk, F. Janiak, J. Misiewicz, A. Bauer, S. Höfling, A. Forchel

Optical Materials **34**, 1107 (2012)

Temperature dependence of the energy gap and spin-orbit splitting in a narrow-gap InGaAsSb solid solution

M. Motyka, F. Janiak, G. Sęk, J. Misiewicz, K.D. Moiseev

Appl. Phys. Lett. **100** 211906 (2012)

Carrier trapping and luminescence polarization in quantum dashes

A. Musiał, P. Kaczmarkiewicz, G. Sęk, P. Podemski, P. Machnikowski, J. Misiewicz, S. Hein, S. Höfling, A. Forchel

Phys. Rev. B **85**, 035314 (2012)

Height-driven linear polarization of the surface emission from quantum dashes

A. Musiał, P. Podemski, G. Sęk, P. Kaczmarkiewicz, J. Andrzejewski, P. Machnikowski, J. Misiewicz, S. Hein, A. Somers, S. Höfling, J. P. Reithmaier, A. Forchel

Semicond. Sci. Technol. **27**, 105022 (2012)

The Multicolor light emitters based on energy exchange between Tb and Eu ions co-doped into ultrasmall b-NaYF₄ nanocrystals

A. Podhorodecki, M. Banski, J. Misiewicz, M. Afzaal, P. O'Brien, D. Cha, X. Wang

J. Materials Chemistry **22**, 5356 (2012)

Green emission from barium strontium titanate introduced into nanoporous substrate

A. Podhorodecki, N.V. Gaponenko, M. Banski, M.V. Rudenko, L.S. Khoroshko, A. Sieradzki, J. Misiewicz

Optical Materials **34**, 1570 (2012)

Green light emission from terbium doped silicon rich silicon oxide films obtained by plasma enhanced chemical vapor deposition

A. Podhorodecki, G. Zatoryb, J. Misiewicz, J. Wojcik, P. R. J. Wilson, P. Mascher
Nanotechnology **23**, 475707 (2012)

Designing, Synthesis and Optical Properties of Ultrasmall b-NaYF₄ Nanocrystals Doped by Lanthanides Ions for Bio-Medical Applications

A. Podhorodecki
ECS Trans. **45**, 191 (2012)

Green light emission from terbium doped silicon rich silicon oxide films obtained by Plasma Enhanced Chemical Vapor Deposition

A. Podhorodecki, G. Zatoryb, J. Misiewicz, J. Wojcik, P. R. J. Wilson, P. Mascher
Nanotechnology **23**, 475707 (2012)

Steady state and femtosecond spectroscopy of Perylimide Red dye in porous and sol-gel glasses

R. Reisfeld, V. Levchenko, Ts. Saraidarov, E. Rysiakiewicz-Pasek, M. Baranowski, A. Podhorodecki, J. Misiewicz, T. Antropova
Chemical Physics Letters **171**, 546 (2012)

Electronic structure and optical properties of 1.55 μm emitting InAs/InGaAsP quantum dash tunnel injection structures

W Rudno-Rudziński, G Sęk, J Andrzejewski, J Misiewicz, F Lelarge, B Rousseau
Semiconductor Science and Technology **27**, 105015 (2012)

The article has been selected by the editors of Semiconductor Science and Technology for inclusion in the exclusive 2012 Highlights collection

On the oscillator strength in dilute nitride quantum wells on GaAs

K. Ryczko, G. Sęk, J. Misiewicz, F. Langer, S. Höfling, M. Kamp
J. Appl. Phys. **111**, 123503 (2012)

Carrier loss mechanisms in type II quantum wells for the active region of GaSb-based mid-infrared interband cascade lasers

G. Sęk, F. Janiak, M. Motyka, K. Ryczko, J. Misiewicz, A. Bauer, S. Höfling, A. Forchel
Optical Materials **33**, 1817 (2012)

On the mechanisms of energy transfer between quantum well and quantum dashes

G. Sęk, R. Kudrawiec, P. Podemski, J. Misiewicz, A. Somers, S. Höfling,
J. P. Reithmaier, M. Kamp, A. Forchel
J. Appl. Phys. **112**, 033520 (2012)

Influence of electronic coupling on the radiative lifetime in the (In,Ga)As/GaAs quantum dot–quantum well system

M. Sypererek, J. Andrzejewski, W. Rudno-Rudziński, G. Sęk, J. Misiewicz,
E. M. Pavelescu, C. Gilfert, J. P. Reithmaier
Phys. Rev. B **85**, 125311 (2012)
Virt. J. Ultrafast Sci. / Volume 11 / Issue 4 / CONDENSED MATTER PHYSICS

Electron and hole spins in InP/(Ga,In)P self-assembled quantum dots

M. Sypererek, D. R. Yakovlev, I. A. Yugova, J. Misiewicz, M. Jetter, M. Schulz,
P. Michler, M. Bayer
Phys. Rev. B **86**, 125320 (2012)

Transparency of GaN substrates in the mid-infrared spectral range

M. Wełna, R. Kudrawiec, M. Motyka, R. Kucharski, M. Zając, M. Rudziński,
J. Misiewicz, R. Doradziński, R. Dwiliński
Crystal Research and Technology **47**, 347 (2012)

Growth-Temperature Dependence of Wetting Layer Formation in High Density InGaAs/GaAs Quantum Dot Structures Grown by Droplet Epitaxy

V. Zuerbig, N. Bugaew, J. P. Reithmaier, M. Kozub, A. Musiał, G. Sęk, J. Misiewicz
Jpn. J. Appl. Phys. **51**, 085501 (2012)