

## LIST OF PUBLICATIONS AND CONFERENCE PRESENTATIONS

**Valentin V. Nikolaev**

Department of Physics, University of Exeter  
 Stocker Road, Exeter, UK  
 EX4 4QL

Phone: +44-(0)1392-264198  
 Fax: +44-(0)1392-264111  
 E-mail: [V.Nikolaev@exeter.ac.uk](mailto:V.Nikolaev@exeter.ac.uk)

<http://newton.ex.ac.uk/people/nikolaev/>

## Journal Publications

1. V.V. Nikolaev and M.E. Portnoi, "Statistical Mechanics of Screened Spatially Indirect Excitons".  
*Physica Status Solidi (a)* **190**, 655 (2002)
2. V.V. Nikolaev and M.E. Portnoi, "Optical Nonlinearities in a Microcavity with InGaN Quantum Wells: Self-Assembled Quantum Dots Approach"  
*Physica Status Solidi (a)* **190**, 193 (2002)
3. V.V. Nikolaev and M.E. Portnoi, "Ionization Degree of Electron –Hole Plasma in GaN/AlGaIn Quantum Wells"  
*Physica Status Solidi (a)* **190**, 113 (2002)
4. V.V. Nikolaev, M.A. Kaliteevski, D. Cassagne, J.-P. Albert and C.M. Sotomayor-Torres, "Spontaneous Light Emission from a Spherical Microcavity with a Quantum Dot"  
*Physica Status Solidi (a)* **190**, 199 (2002)
5. M. A. Kaliteevski, S. Brand, R. A. Abram, V. V. Nikolaev, M. V. Maximov, C. M. Sotomayor Torres and A. V. Kavokin, "Electromagnetic Theory of the Coupling of Zero-Dimensional Exciton and Photon States:a Quantum Dot in a Spherical Microcavity"  
*Physical Review B* **64**, 115305 (2001)
6. M. A. Kaliteevski, V. V. Nikolaev, R. A. Abram and S. Brand, "Bandgap Structure of Optical Fibonacci Lattices after Light Diffraction"  
*Optics and Spectroscopy* **91**, 109 (2001)
7. M.A. Kaliteevski, S. Brand, R.A. Abram and V.V. Nikolaev, "Optical Eigenmodes of a Multilayered Spherical Microcavity"  
*Journal of Modern Optics* **48**, 1503 (2001)
8. M.V. Maximov, L.V. Asryan, Yu.M. Shernyakov, A.F. Tsasulnikov, I.N. Kayander, V.V. Nikolaev, A.R. Kovsh, S.S. Mikhrin, V.M. Ustinov, A.E. Zhukov and Zh.I. Alferov, "Gain and Threshold Characteristics of Longwavelength Lasers based on InAs/GaAs Quantum Dots formed by Activated Alloy Phase Separation"  
*IEEE Journal of Quantum Electronics* **37**, 676-683 (2001)
9. V.V. Nikolaev, M.E. Portnoi and I. Eliashevich, "Photon Recycling White Light Emitting Diode based on InGaIn Multiple Quantum Well Heterostructure",  
*Physica Status Solidi (a)* **183**, 177 (2001)

10. R.A. Abram, S. Brand, M.A. Kaliteevski and V.V. Nikolaev, "Optical Eigenmodes of a Spherical Microcavity"  
*Physica Status Solidi (a)* **183**, 183 (2001)
11. M.A. Kaliteevskii, V.V. Nikolaev, "Analogues of the Brewster Effect and Total Internal Reflection for Cylindrical Waves"  
*Technical Physics* **45**, 865 (2000)
12. M.A. Kaliteevski, V.V. Nikolaev and R.A. Abram, "Calculation of the Mode Structure of Multilayer Optical Fibers based on Transfer Matrices for Cylindrical Waves"  
*Optics and Spectroscopy* **88**, 792 (2000).
13. M.A. Kaliteevski, S. Brand, R.A. Abram, V.V. Nikolaev, M.V. Maximov, N.N. Ledentsov, C.M.S. Torres and A.V. Kavokin, "Exciton polaritons in a cylindrical microcavity with an embedded quantum wire"  
*Physical Review B* **61**, 13791 (2000)
14. M.A. Kaliteevski, R.A. Abram and V.V. Nikolaev, "Optical eigenmodes of a cylindrical microcavity"  
*Journal of Modern Optics* **47**, 677 (2000)
15. Yu.A. Vlasov, M.A. Kaliteevski and V.V. Nikolaev, "Different regimes of light localization in a disordered photonic crystal"  
*Physical Review B* **60**, 1555 (1999)
16. M.A. Kaliteevski, R.A. Abram, V.V. Nikolaev and G.S. Sokolovski, "Bragg reflectors for cylindrical waves"  
*Journal of Modern Optics* **46**, 875 (1999)
17. S.V. Fedorov, M.A. Kaliteevski, N.V. Lukovskaya and V.V. Nikolaev, "Transfer matrix method for media with quadratic optical nonlinearity"  
*Technical Physics* **44**, 456 (1999)
18. V.V. Nikolaev, G.A. Sokolovskii and M.A. Kaliteevskii, "Bragg reflectors for cylindrical waves"  
*Semiconductors* **33**, 147 (1999)

Two papers on the electron-hole correlations in single and double quantum wells are currently in preparation

Valentin V. Nikolaev  
E-mail: [V.Nikolaev@exeter.ac.uk](mailto:V.Nikolaev@exeter.ac.uk)

School of Physics, University of Exeter  
Stocker Road, Exeter, EX4 4QL, UK

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## Conference Presentations

- 2001** International Workshop on “**Physics of Light-Matter Coupling in Nitrides (PLMCN-1)**”, Rome, Italy, September 26-29// (3 poster presentations)  
Seventh International Conference on Optics and Excitons in Confined Systems (**OECS7**), Montpellier, France, September 3-7 // (2 poster presentations)
- 2000** Condensed Matter & Materials Physics Conference (**CMMP 2000**), Bristol, UK, December 19-21  
International Workshop on Light-Matter Coupling in Nitrides, St.-Nectaire, France, October 8-12// (2 poster presentations)  
25th International Conference on the Physics of Semiconductors (**ICPS25**), Osaka, Japan, September 17-22
- 1999** 7th International Symposium “**Nanostructures: Physics and Technology**”, St.-Petersburg, Russia, June 14-18