

Presentations at Conferences personally given by V.N. Astratov (44)

- 1. Talk: ICTON'12, Special Section on Photonic Atoms and Molecules, Coventry, U.K., July 1-5, 2012**
“Super-Resolution Imaging by High-Index Microspheres Immersed in a Liquid” (with A. Darafsheh and M.A. Fiddy)
- 2. Poster: ICTON'12, Coventry, U.K., July 1-5, 2012**
“Radial Polarization of Periodically Focused Modes in Chains of Dielectric Spheres” (with A. Darafsheh)
- 3. Talk: Photonics West 2012, San-Francisco, CA, Jan. 22-27, 2012.**
“Photonic Nanojet-Induced Modes: Fundamentals and Applications” (with A. Darafsheh, A. Lupu S.A. Burand, K.W. Allen, T.C. Hutchens, and N.M. Fried)
- 4. Talk: MRS Workshop Series – Directed Self-Assembly of Materials, Gaylord Opryland Hotel, Nashville, TN, Sept 28 – Oct 1, 2011.**
“Optical Sorting of Size Matched Microspheres Based on Resonant Radiative Pressure Effects” (with Y. Li, O. Svitelskiy, D. Carnegie, E. Rafailov)
- 5. Poster: ICTON'11, Special Section on Photonic Atoms and Molecules, Stockholm, Sweden, June 26-30, 2011.**
“Chains of Variable Size Spheres for Focusing of Multimodal Beams in Photonics Applications” (with A. Darafsheh)
- 6. Poster: ICTON'11, Special Section on Photonic Atoms and Molecules, Stockholm, Sweden, June 26-30, 2011.**
“A Microfluidic Platform Integrated with Tapered Optical Fiber for Studying Resonant Properties of Compact High Index Microspheres” (with O.V. Svitelskiy, Y. Li, M. Sumetsky, D. Carnegie, E. Rafailov)
- 7. Talk: CLEO 2011, Baltimore, MA, May 1-6, 2011.**
“Ultra-precise Focusing Multimodal Microprobes for Contact Laser Tissue Surgery” (with A. Darafsheh, A. Fardad, N.M. Fried, A.N. Antoszyk, and H.S. Ying)
- 8. Poster: NSF ECCS Grantees Meeting, Honolulu, U.S.A., November 30-December 2, 2010**
“Mesoscale Structures and Photonic Devices based on Coupled Spherical Cavities”
- 9. Poster: CLEO/QELS 2010, San Jose, CA, May 16-21, 2010.**
“Integrated Microsphere Arrays as Compact Focusing Tool for Biomedical and Photonics Applications” (with A. Darafsheh, M.D. Kerr, and K.W. Allen)
- 10. Talk: ICTON 2009, Special Section on Microresonators and Photonic Molecules: Trapping, Harnessing and Releasing Light, Island of São Miguel, Azores, Portugal, June 28-July 2, 2009.**
“Spectroscopy of Coherently Coupled Whispering Gallery Modes in Supermonodisperse Bispheres” (with S. Yang)
- 11. Poster: ICTON 2009, Special Section on Microresonators and Photonic Molecules: Trapping, Harnessing and Releasing Light, Island of São Miguel, Azores, Portugal, June 28-July 2, 2009.**
“Splitting of whispering gallery modes by nanoparticles embedded in high Q microcavities” (with K.R. Hiremath)
- 12. Talk: Photonics West 2009, San Jose, January 24-29, 2009**
“Spectroscopy of Photonic Molecular States in Supermonodisperse Bispheres” (with S. Yang)
- 13. Poster: International Conference ICTON 2007 Special session on *Microresonators and Photonic Molecules: trapping, harnessing and releasing light*, Rome, Italy, July 1-5, 2007**
“High-Quality-Factor Whispering Gallery Modes in Semiconductor Microcavity Pillars with Circular and Elliptical Cross Section” (with S. Yang, S. Lam, B.D. Jones, D. Sanvitto, , D.M. Whittaker, A.M. Fox, and M.S. Skolnick, A. Tahraoui, P.W. Fry, and M. Hopkinson)
- 14. Talk: CLEO/QELS 2007, Baltimore, May 6-11, 2007**
“Percolation of Light in 3D Lattices of Coupled Microspheres” (with S.P. Ashili)

15. **Talk: Photonics West 2007**, San Jose, January 20-26, 2007
16. **Talk: Frontiers in Optics, 90th OSA Annual Meeting**, Rochester, October 8-12, 2006
 “Observation of Light Propagation via Whispering Gallery Modes in 3-D Networks of Coupled Spherical Cavities” (with S.P. Ashili and A.M. Kapitonov), Program, p. 92.
17. **Talk: Frontiers in Optics, 90th OSA Annual Meeting**, Rochester, October 8-12, 2006
 “Observation of Whispering Gallery Resonances in Circular and Elliptical Semiconductor Pillar Microcavities” (with S. Lam, D. Sanvitto, J.A. Timpson, A. Tahraoui, D.M. Whittaker, and M.S. Skolnick), Program, p. 168.
18. **Talk: Topical Meeting of OSA “Information Photonics”**, Charlotte, June 6-8, 2005
 “Optical Delay Lines formed by Circuits of Spherical Cavities with Coupled Whispering Gallery Modes” (with A.V. Kanaev, S.P. Ashili, J.P. Franchak and W. Cai), Program, p. 18.
19. **Talk: CLEO/IQEC 2005 Conference of OSA**, Baltimore, May 22-27, 2005
 “Optical Coupling between Spherical Dielectric Atoms” (with S.P. Ashili, J.P. Franchak, A.V. Kanaev and W. Cai), Abstracts p.127.
20. **Talk: Frontiers in Optics, 88th OSA Annual Meeting**, Rochester, New York, October 10-14, 2004
 “Optical Coupling and Transport Phenomena in Long Chains of Slightly Disordered Spherical Microresonators” (with J.P. Franchak, S.P. Ashili, A.V. Kanaev, W. Cai and S. Deng), Program, p.86.
21. **Talk: CLEO/IQEC 2004 Conference of OSA**, San-Francisco, May 16-21, 2004
 “Resonant Optical Circuits Based on Coupling Between Whispering Gallery Modes in Dielectric Microresonators” (with J.P. Franchak, S.P. Ashili, W. Cai, and M.-A. Hasan), Program, p.149.
22. **Talk: CLEO/IQEC 2004 Conference of OSA**, San-Francisco, May 16-21, 2004
 “Polycrystalline Low Index Contrast Opals: Towards Novel Multimodal Spectroscopy of Diffusive Sources of Light” (with S.P. Ashili, J.P. Franchak, A.J. Saltzman, M.E. Sallivan, D.J. Brady, S.V. Filin, A.I. Puzynin, S.N. Samoilov, and A. Moroz), Program, p. 138.
23. **Talk: Optics in the Southeast 2002 OSA Meeting**, Huntsville, Alabama, 24-25 October 2002
 “Photonic Band Structure Effects in the Reflectivity of Periodically Patterned Waveguides” (with A.D. Bristow, D.M. Whittaker, M.S. Skolnick, A. Tahraoui, and T.F. Krauss), Abstracts, p.28 (2002).
24. **Talk: Optics in the Southeast 2002 OSA Meeting**, Huntsville, Alabama, 24-25 October 2002
 “Interplay of Order and Disorder in the Optical Properties of Opal Photonic Crystals” (with A.M. Adawi, M.S. Skolnick, and D.M. Whittaker), Abstracts, p.38 (2002).
25. **Poster: European Research Conference on Photonic and Electromagnetic Crystal Structures (PECS-3)**, St. Andrews, Scotland, UK, 9-14 June 2001
 “Diffraction and Scattering of Light in Pure and Composite Opals” (with A.M. Adawi, M.S. Skolnick, V.K. Tikhomirov, V. Lyubin, D.G. Lidzey, M. Ariu, and A.L.Reynolds), Abstracts (2001).
26. **Talk: “Chemical Approaches to Photonic Crystals”, Symposium at the 221st National Meeting of the American Chemical Society**, San Diego, California, USA, 1-5 April 2001
 “Optical Properties of Opal Photonic Crystals Infiltrated with Chalcogenide Glasses” (with A.M. Adawi, M.S. Skolnick, V.K. Tikhomirov, and V. Lyubin)
27. **Talk: Int. Workshop “Physics of Light-Matter Coupling in Nitrides”**, Clermont-Ferrand, France, 8-12 October 2000
 “Optical Properties of Inverted Opal Structures” (with A.M. Adawi, M.S. Skolnick, V.K. Tikhomirov, and V. Lyubin), Abstracts, Th-5, 2000.
28. **Poster: NATO Advanced Study Institute**, Crete, Greece, June 19-30 2000,
 “Direct Study of Heavy Photon Dispersions in Photonic Crystal Waveguides” (with R.M. Stevenson, A.D. Bristow, I.S. Culshaw, D.M. Whittaker, M.S. Skolnick, T.F. Krauss, and R.M. De La Rue), Abstracts of NATO ASI 2000.
29. **Talk: Photonics West, SPIE’s Optoelectronics 2000**, San Jose, California, 22-28 January 2000
 “Direct Study of Large Dispersive Effects in Thin Film Photonic Crystals” (with R.M. Stevenson, I.S. Culshaw, D.M. Whittaker, M.S. Skolnick, T.F. Krauss, and R.M. De La Rue), Techn. Abst. Digest, p.19, 2000.
30. **Talk: Condensed Matter and Material Physics Conference**, Leicester, UK, 19-22 December 1999

- “Direct Study of Large Dispersive Effects in Photonic Bandstructure Waveguides” (with R.M. Stevenson, A.I. Tartakovskii, D.M. Whittaker, M.S. Skolnick, T.F. Krauss, and R.M. De La Rue), Abstracts of CMMP’99, p.75.
- 31. Poster: 6th Int. Conference on the Optics of Excitons in Confined Systems**, Ascona, Switzerland, Aug30-Sept2 1999
 “New Band Structure Effects and Anomalous Dispersion in Photonic Crystal Waveguides” (with I.S. Culshaw, D.M. Whittaker R.M. Stevenson, M.S. Skolnick, T.F. Krauss, and R.M. De La Rue), Abstracts of OECS-VI, TuP15, 1999.
- 32. Talk: Semiconductor and Integrated Optoelectronics Conference**, Cardiff, UK, 7-9 April 1999
 “New Band Structure Effects in the Reflectivity of Photonic Crystal Waveguides” (with D.M. Whittaker I.S. Culshaw, R.M. Stevenson, M.S. Skolnick, T.F. Krauss, and R.M. De La Rue), Abstracts of SIOE’99.
- 33. Talk: Workshop on Electromagnetic Crystal Structures, Design, Synthesis, and Applications (WECS)**, California, 6-8 January 1999
 “Band Structure Effects in Reflectivity of 1-D Patterned Photonic Crystal Waveguides” (with M.S. Skolnick, D.M. Whittaker, I.S. Culshaw, R.M. Stevenson, T.F. Krauss, and R.M. De La Rue), Abstracts of WECS, WU3, 1999.
- 34. Poster: Semiconductor and Integrated Optoelectronics Conference**, Cardiff, UK 6-8 April 1998
 “The Use of ‘Honeycomb’ Lattices as Grating Couplers to Study Propagation of Light in Two Dimensional Photonic Band Gap Crystals” (with R.M. Stevenson, O.Z. Karimov, M.S. Skolnick, T.F. Krauss, and R.M. De La Rue), Abstracts of SIOE’98.
- 35. Talk: 24th International Conference on the Physics of Semiconductors**, Jerusalem, Israel 2-9 August 1998
 “Experimental Measurement of Energy Versus Wavevector Dispersion Curves of Semiconductor Two Dimensional Photonic Lattices” (with R.M. Stevenson, O.Z. Karimov, M.S. Skolnick, T.F. Krauss, R.M. De La Rue, and S. Brand), Abstracts of 24th ICPS, Th2-D4, 1998.
- 36. Poster: Condensed Matter and Material Physics Conference**, Exeter, UK, 17-19 December 1997
 “Resonant Raman Scattering from Semiconductor Quantum Microcavities” (with D. Baxter, W.R. Tribe, R.M. Stevenson, M.S. Skolnick, D.J. Mowbray, and J.S. Roberts), Abstracts of CMMP’97, p.103.
- 37. Talk: 23rd International Symposium on Compound Semiconductors**, St.-Petersburg, Russia, 23-27 September 1996
 “Influence of Refractive Index Contrast on Photonic Band Gap in 3-D Periodic SiO₂ Matrices Filled with a Semiconductor” (with Y.A. Vlasov, V.N. Bogomolov, A.A. Kaplyanskii, O.Z. Karimov, D.A. Kurdjukov, and A.V. Prokofiev), Abstracts of ISCS-23, 1996.
- 38. Poster: 23rd International Symposium on Compound Semiconductors**, St.-Petersburg, Russia, 23-27 September 1996
 “Spectroscopy Studies of P-Type GaAs/AlGaAs MQWs Heavily Doped with Carbon” (with O.Z. Karimov, Y.A. Vlasov, E. Mao, S. Dickey, B.W. Kim, and A. Majerfeld), Abstracts of ISCS-23, 1996
- 39. Poster: 23th International Conference on the Physics of Semiconductors**, Berlin, Germany, 21-26 July 1996
 “Spectroscopic Study of 3D Ordered Porous Silica Matrices Filled by Semiconductor Microcrystals: Photonic Band Structure and Radiative Properties” (with Y.A. Vlasov, O.Z. Karimov, A.A. Kaplyanskii, V.N. Bogomolov, A.A. Kaplyanskii, O.Z. Karimov, D.A. Kurdjukov, and A.V. Prokofiev), Abstracts of ICPS-23, 1996.
- 40. Poster: 9th International Symposium on Superlattices, Microstructures and Microdevices**, Liege, Belgium, July 1996
 “Photonic Band Structure of 3D Ordered Silica Matrices” (with Y.A. Vlasov, O.Z. Karimov, A.A. Kaplyanskii, Y.G. Musikhin, N.A. Bert, V.N. Bogomolov, and A.V. Prokofiev), Abstracts of the 9th ISSMM, p.123, 1996.

41. **Talk: 2nd Biennial Russian Semiconductor Physics Conference**, St.-Petersburg, Russia, March 1996
“Photonic Band Gap Effect in Synthetic Opals” (with A.A. Kaplyanskii, V.N. Bogomolov, A.V. Prokofiev, N.A. Bert, Y.G. Musikhin, and Y.A. Vlasov), Abstracts of the 2nd Russian CPS, p.121, 1996.
42. **Talk: 2nd International Workshop “Expert Evolution of New Materials for Technological Applications”**, Parma, Italy 18-20 May 1994
“MQW Probe Technique with Wedge-Like Structures for Characterisation of Post-Growth Processing” (with O.Z. Karimov, Y.A. Vlasov), Abstracts of the 2nd Int. Workshop EXTMATEC 1994, p.20.
43. **Poster: 17th International Conf. on Defects in Semiconductors**, Gmunden, Austria, July 1993
“Exciton Spectroscopy of Near-Surface GaAs/AlGaAs Quantum Wells” (with Y.A. Vlasov), Abstracts of the ICDS-17, 171, 1993.
44. **Poster: 13th General Conf. of Cond. Matter Division of European Physical Society**, Regensburg, Germany, April 1993
“Photoluminescence of Near-Surface GaAs/AlGaAs Quantum Wells” (with Y.A. Vlasov), Abstracts of the 13th General Conference of CMD EPS, (European Conf. Abstracts) 17a, p.1432, 1993.