

Referred Conference Proceedings (53)

- 1. Super-Resolution Imaging by High-Index Microspheres Immersed in a Liquid**
A. Darafsheh, M.A. Fiddy, and V.N. Astratov
IEEE Proc. of Int. Conf. on Transparent Opt. Networks – ICTON'12, Special Section on Photonic Atoms and Molecules, Coventry, UK, July 2-5, 2012, 3pp.
- 2. Resonant Optical Propelling of Microspheres – A Path to Selection of Almost Identical Photonics Atoms**
Y. Li, O.V. Svitelskiy, A.V. Maslov, D. Carnegie, E. Rafailov, and V.N. Astratov, IEEE Proc. of Int. Conf. on Transparent Opt. Networks – ICTON'12, Special Section on Photonic Atoms and Molecules, Coventry, UK, July 2-5, 2012, 4pp.
- 3. Radial Polarization of Periodically Focused Modes in Chains of Dielectric Spheres**
A. Darafsheh and V.N. Astratov, IEEE Proc. of Int. Conf. on Transparent Opt. Networks – ICTON'12, Special Section on Photonic Atoms and Molecules, Coventry, UK, July 2-5, 2012, 4pp.
- 4. Photonic Nanojet-Induced Modes: Fundamentals and Applications**
A. Darafsheh, A. Lupu S.A. Burand, K.W. Allen, T.C. Hutchens, N.M. Fried, and V.N. Astratov, in Proc. of SPIE 2012, Integrated Optics: Devices, Materials, and Technologies XVI, edited by J.E. Broquin, G.N. Conti, Proc. of SPIE, vol. 8264, 8 pp., Phot. West, Jan. 22-27 (2012), paper 82640X.
- 5. Evanescent Light Fields Coupling Effects and Optical Propelling of Microspheres in Water Immersed Fiber Couplers**
Y. Li, O. Svitelskiy, D. Carnegie, E. Rafailov, and V. N. Astratov, in Laser Resonators, Microresonators, and Beam Control XIV, edited by A.V. Kudryashov, A.H. Paxton, V.S. Ilchenko, L. Aschke, K. Washio, Proc. of SPIE, vol. 8236, 8pp., Phot. West, Jan 22-27 (2012), paper 82361P.
- 6. “Beam Tapering Effect” in Microsphere Chains: From Geometrical to Physical Optics**
K.W. Allen, A. Darafsheh, and V.N. Astratov, in Laser Resonators, Microresonators, and Beam Control XIV, edited by A.V. Kudryashov, A.H. Paxton, V.S. Ilchenko, L. Aschke, K. Washio, Proc. of SPIE, vol. 8236, 8pp., Phot. West, Jan 22-27 (2012), paper 823622.
- 7. Microsphere Chain Fiber Tips for Multimode Filtering of Erbium:YAG Laser Beam during Contact Tissue Ablation**
T. C. Hutchens, A. Darafsheh, H. S. Ying, V. N. Astratov, and N. M. Fried, in Optical Fibers and Sensors for Medical Diagnostics and Treatment Applications XII, edited by I. Gannot, Proc. of SPIE, vol. 8218, 8 pp., Phot. West, Jan. 22-27 (2012), paper 821803.
- 8. Optical Sorting of Size Matched Microspheres Based on Resonant Radiative Pressure Effects**
Y. Li, O. Svitelskiy, D. Carnegie, E. Rafailov, and V.N. Astratov, in Proc. of the MRS Workshop Series – Directed Self-Assembly of Materials, Sept 28 – Oct 1, 2011, Gaylord Opryland Hotel, Nashville, TN, p. 3.
- 9. Chains of Variable Size Spheres for Focusing of Multimodal Beams in Photonics Applications**
A. Darafsheh and V.N. Astratov, IEEE Proc. of Int. Conf. on Transparent Opt. Networks – ICTON'11, Special Section on Photonic Atoms and Molecules, Stockholm, Sweden, We.P.2, June 2011, 4pp.
- 10. Photonic Nanojet-Induced Modes: From Physics to Applications**
K.W. Allen, A. Darafsheh, and V. N. Astratov, IEEE Proc. of Int. Conf. on Transparent Opt. Networks – ICTON'11, Special Section on Photonic Atoms and Molecules, Stockholm, Sweden, Tu.C4.2, June 2011, 4pp.
- 11. A Microfluidic Platform Integrated with Tapered Optical Fiber for Studying Resonant Properties of Compact High Index Microspheres**
O.V. Svitelskiy, Y. Li, M. Sumetsky, D. Carnegie, E. Rafailov, and V.N. Astratov, IEEE Proc. of Int. Conf. on Transparent Opt. Networks – ICTON'11, Special Section on Photonic Atoms and Molecules, Stockholm, Sweden, We.P.1, June 2011, 4pp.
- 12. Splitting and Lasing of Whispering Gallery Modes in Quantum Dot Micropillars**

- B.D. Jones, M. Oxborrow, V.N. Astratov, M. Hopkinson, A. Tahraoui, M.S. Skolnick, and A.M. Fox, OSA/CLEO, Baltimore, May 1-6, QWH7 (2011), 2pp.
- 13. Ultra-precise Focusing Multimodal Microprobes for Contact Laser Tissue Surgery**
A. Darafsheh, A. Fardad, N. M. Fried, A. N. Antoszyk, H. S. Ying, and V. N. Astratov, OSA/CLEO, Baltimore, May 1-6, AME3 (2011), 2pp.
 - 14. Focusing Capability of Integrated Chains of Microspheres in the Limit of Geometrical Optics**
A. Darafsheh, K.W. Allen, A. Fardad, N. M. Fried, A. N. Antoszyk, H. S. Ying, and V. N. Astratov, in Laser Resonators and Beam Control XIII, edited by Alexis V. Kudryashov, Alan H. Paxton, Vladimir S. Ilchenko, Lutz Aschke, Proc. of SPIE, vol. 7913, 7pp., Feb. 2011, paper 79131A.
 - 15. Characterization of High Index Microsphere Resonators in Fiber-Integrated Microfluidic Platforms**
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 - 16. Focusing Microprobes Based on Integrated Chains of Microspheres**
V.N. Astratov, A. Darafsheh, M.D. Kerr, K.W. Allen, and N.M. Fried, Proc. of Progress in Electromagnetics Research Symposium, Cambridge, U.S.A., July 5-8, 419-423 (2010).
 - 17. Light Focusing Microprobes for Biomedical and Photonics Applications Based on Integrated Microsphere Arrays**
A. Darafsheh, O.V. Svitelskiy, and V.N. Astratov
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 - 18. Integrated Microsphere Arrays as Compact Focusing Tool for Biomedical and Photonics Applications**
A. Darafsheh, M.D. Kerr, K.W. Allen, and V.N. Astratov, Proc. of CLEO/QELS, San Jose, CA, JWA63, 2pp., May 16-21 (2010).
 - 19. Integrated Microsphere Arrays: Light Focusing and Propagation Effects**
A. Darafsheh, M.D. Kerr, K.W. Allen, N.M. Fried, A.N. Antoszyk, H.S. Ying, and V.N. Astratov, in Optoelectronic Integrated Circuits XII, edited by Louay A. Eldada, El-Hang Lee, Proc. of SPIE, vol. 7605, 9pp., Feb. 2010, paper 76050R.
 - 20. Fundamentals and Applications of Microsphere Resonator Circuits**
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 - 21. Spectroscopy of Coherently Coupled Whispering Gallery Modes in Supermonodispersive Bispheres**
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 - 22. Splitting of Whispering Gallery Modes by Nanoparticles Embedded in High Q Microcavities**
K.R. Hiremath and V.N. Astratov, IEEE Proc. of Int. Conf. on Transparent Opt. Networks – ICTON'09, Special Section on Microresonators and Photonic Molecules: Trapping, Harnessing and Releasing Light, Island of São Miguel, Azores, Portugal, June 28-July 2, Tu.P.12, 4pp. (2009).
 - 23. Spectroscopy of Photonic Molecular States in Supermonodispersive Bispheres**
S. Yang and V.N. Astratov, Proc. of SPIE, Vol. 7194, paper 719411-1, Photonics West 2009, San Jose, January 24-29, 9pp., (2009).
 - 24. Whispering Gallery Modes in Quantum Dot Micropillar Cavities**
B. D. Jones, V. N. Astratov, R. Oulton, S. Lam, D. Sanvitto, D. M. Whittaker, A. M. Fox, M. S. Skolnick, P W Fry and M Hopkinson, Proc. of CLEO/QELS, CTuW7, San Jose, CA, 2pp., May 4 (2008).

- 25. Whispering Gallery Modes in Quantum Dot Micropillar Cavities**
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- 26. Optical Transport Phenomena in Coupled Spherical Cavities**
V.N. Astratov, S.P. Ashili, and S. Yang, IEEE Proc. of Int. Conf. on Transparent Opt. Networks – ICTON'07, Special Section on Microresonators and Photonic Molecules: Trapping, Harnessing and Releasing Light, Vol. 3, 65-70, Rome, Italy, July 1-5 (2007).
- 27. High-Quality-Factor WG Modes in Semiconductor Microcavity Pillars with Circular and Elliptical Cross Section**
V.N. Astratov, 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, IEEE Proc. of Int. Conf. on Transparent Opt. Networks – ICTON'07, Special Section on Microresonators and Photonic Molecules: Trapping, Harnessing and Releasing Light, Vol. 4, 170-172, Rome, Italy, July 1-5 (2007).
- 28. Percolation of Light in 3D Lattices of Coupled Microspheres**
 V.N. Astratov and S.P. Ashili, Proc. of CLEO/QELS, QTuJ3, Baltimore, 2pp., May 6-11 (2007).
- 29. Optical Properties of Mesoscopic Systems of Coupled Microspheres**
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- 30. Observation of Whispering Gallery Resonances in Circular and Elliptical Semiconductor Pillar Microcavities**
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- 31. Nanojet-Induced Modes in 1D Chains of Microspheres**
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- 32. Integrated Circuits of Coupled Microspheres for Optoelectronics Applications**
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- 33. Optical Delay Lines formed by Circuits of Spherical Cavities with Coupled Whispering Gallery Modes**
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- 34. Encapsulated Microsphere Arrays for Applications in Photonic Circuits**
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- 35. Optical Coupling between Spherical Dielectric Atoms**
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- 36. Resonant Optical Circuits Based on Coupling Between Whispering Gallery Modes in Dielectric Microresonators**
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- 37. Polycrystalline Low Index Contrast Opals: Towards Novel Multimodal Spectroscopy of Diffusive Sources of Light**
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- 38. Emission Properties of Two-Dimensional Photonic Crystal Microcavities**

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