

Hebin Li

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Curriculum Vitae

CURRENT POSITION

Assistant Professor	Department of Physics, Florida International University, Miami, Florida, USA	2013 - present
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EDUCATION

Ph.D. in Physics	Texas A&M University	2004 – 2010
Thesis:	Coherent Control of Laser Field and Spectroscopy in Dense Atomic Vapor	
Advisor:	Prof. Marlan Scully	
B.S. in Physics	Wuhan University, China	1997 – 2001

RESEARCH EXPERIENCE

Research Associate with Prof. Steven Cundiff	Jan. 2010 – Aug. 2013
<i>JILA, University of Colorado and National Institute of Standards and Technology</i>	
• Interatomic interactions and dynamics of atomic vapor with 2DFT spectroscopy • Coherent nonlinear response of semiconductor nanostructures with 2DFT spectroscopy • Development of 3D Fourier-transform spectroscopy	

Research Assistant with Prof. Marlan Scully	Jun. 2004 – Jan. 2010
<i>Department of Physics, Texas A&M University</i>	
• Phase dynamics and coherent effects in field-atom interactions • Control of laser field and atomic medium with atomic coherence and interference • Atomic excess noise and intensity correlation in coherent medium • Dipole-dipole interactions in dense atomic vapor	

OTHER EMPLOYMENT EXPERIENCE

R&D Engineer, Project Manager	Jan. 2003 – Dec. 2003
<i>Wuxi Zhongxing Optoelectronics Technology Co. (WXZTE), Wuxi, China</i>	
• Led a R&D team to develop optical transceivers for optical fiber communications, and an automated test and tune system for the optical module production	

R&D Engineer	Jul. 2001 – Jan. 2003
<i>Wuhan Telecommunication Devices Co. (WTD), Wuhan, China</i>	
• Developed high speed optical transceivers and test system for optical fiber telecommunications	

PROFESSIONAL SERVICE EXPERIENCE

- Referee for scientific journals including Physical Review Letters, Physical Review A, Optics Letters, Optics Express, Applied Optics, Journal of the Optical Society of America B, Journal of Physics B, Scientific Reports, Journal of Physical Chemistry, Nanoscale (2009 – present)
- NSF Proposal reviewer (2015, 2017, 2018), panelist (2017, 2018), and ACS PRF proposal reviewer (2016)
- Internal referee of pre-submission articles for NIST employees (Jan. 2010 – Aug. 2013)
- Session organizer for the 45th Winter Colloquium on the Physics of Quantum Electronics (PQE 2015)
- Faculty mentor for the FIU Research Experience for Teachers program (2014 – 2016)
- Faculty advisor for the FIU student chapter of the OSA (2015 – present); Founder and president of Texas A&M University student chapter of the OSA (2008 – 2009)
- Science advisor to the Laser Show at Philip and Patricia Frost Museum of Science
- Volunteer with “JILA Physics Frontier Center (PFC) Partnerships for Informal Science Education in the Community (PISEC)” outreach program (Spring 2012)
- Member of graduate student admission committee, Department of Physics, University of Colorado (Spring 2011)

RESEARCH GRANTS

1. “*Many-body dipole-dipole interactions in atomic ensembles,*” National Science Foundation (NSF), PHY #1707364, 08/01/2017 ~ 07/31/2020, \$360,000, PI: Hebin Li
2. “*Acquisition of an ultrafast amplified laser system for research and education in material science,*” Army Research Office (ARO), 09/11/2017 ~ 09/10/2018, \$404,835, PI: Hebin Li

PUBLICATIONS

Book chapter

1. H. Li, Y.V. Rostovtsev, “*Beating diffraction limit using dark states,*” in Advances in Lasers and Electro Optics, IN-TECH, 2010. ISBN: 978-953-307-088-9.

Peer-reviewed journal articles

1. S. Yu, M. Titze, Y. Zhu, X. Liu, and H. Li,
“Observation of five-atom Dicke state in an atomic vapor,”
In preparation.
2. M. Titze, B. Li, X. Zhang, P.M. Ajayan, and H. Li,
“Intrinsic coherence time of trions in monolayer MoSe₂ measured via two-dimensional coherent spectroscopy,”
Submitted.
3. Y. Hu, F. Zhang, M. Titze, B. Deng, H. Li*, and G.J. Cheng*,
“Straining effects in MoS₂ monolayer on nanostructured substrates: temperature dependent photoluminescence and exciton dynamics,”
Nanoscale 10, 5717 (2018).

4. M. Titze, and H. Li,
“Interpretation of optical three-dimensional coherent spectroscopy,”
Physical Review A 96, 032508 (2017).
5. R. Singh, M. Richter, G. Moody, M.E. Siemens, H. Li, and S.T. Cundiff,
“Localization dynamics of excitons in disordered semiconductor quantum wells,”
Physical Review B 95, 235307 (2017).
6. H. Li and S.T. Cundiff,
“2D Coherent Spectroscopy of Electronic Transitions,”
Advances in Atomic, Molecular, and Optical Physics 66, 1 (2017).
7. F. Gao, Y. Gong, M. Titze, R. Almeida, P.M. Ajayan, and H. Li,
“Valley trion dynamics in monolayer MoSe₂,”
Physical Review B 94, 245413 (2016).
8. F. Gao, S.T. Cundiff, and H. Li,
“Probing dipole-dipole interaction in a rubidium gas via double-quantum 2D spectroscopy,”
Optics Letters 41, 2954 (2016).
9. R. Singh, G. Moody, M.E. Siemens, H. Li, and S.T. Cundiff,
“Quantifying spectral diffusion by direct measurement of the correlation function for excitons in semiconductor quantum wells,”
Journal of the Optical Society of America B 33, C137 (2016).
10. G. Nardin, T.M. Autry, G. Moody, R. Singh, H. Li, and S.T. Cundiff,
“Multi-dimensional coherent optical spectroscopy of semiconductor nanostructures: Collinear and non-collinear approaches,”
Journal of Applied Physics 117, 112804 (2015).
11. A.P. Spencer, H. Li, S.T. Cundiff, and D.M. Jonas,
“Pulse propagation effects in optical 2D Fourier-transform spectroscopy: Theory,”
Journal of Physical Chemistry A 119, 3936 (2015).
12. A.E. Almand-Hunter, H. Li, S.T. Cundiff, M. Mootz, M. Kira, and S.W. Koch,
“Quantum droplets of electrons and holes,”
Nature 506, 471 (2014).
13. G. Moody, I.A. Akimov, H. Li, R. Singh, D.R. Yakovlev, G. Karczewski, M. Wiater, T. Wojtowicz, M. Bayer, and S.T. Cundiff,
“Coherent Coupling of Excitons and Trions in a Photoexcited CdTe/CdMgTe Quantum Well,”
Physical Review Letters 112, 097401 (2014).
14. G. Nardin, G. Moody, R. Singh, T.M. Autry, H. Li, F. Morier-Genoud, and S.T. Cundiff,
“Coherent excitonic coupling in an asymmetric double InGaAs quantum well,”
Physical Review Letters 112, 046402 (2014).
15. H. Li, A.P. Spencer, A. Kortyna, G. Moody, D.M. Jonas, and S.T. Cundiff,
“Pulse propagation effects in optical 2D Fourier-transform spectroscopy: Experiment,”

16. R. Singh, T.M. Autry, G. Nardin, G. Moody, H. Li, K. Pierz, M. Bieler, and S.T. Cundiff,
“Anisotropic homogeneous linewidth of the heavy hole exciton in (110)-oriented GaAs quantum wells,”
Physical Review B 88, 045304 (2013).
17. G. Moody, R. Singh, H. Li, I.A. Akimov, M. Bayer, D. Reuter, A.D. Wieck, A.S. Bracker, and D. Gammon, and S.T. Cundiff,
“Biexcitons in semiconductor quantum dot ensembles,”
Physica Status Solidi (b) 250, 1753 (2013).
18. G. Moody, R. Singh, H. Li, I.A. Akimov, M. Bayer, D. Reuter, A.D. Wieck, and S.T. Cundiff,
“Correlation and dephasing effects on the non-radiative coherence between bright excitons in an InAs quantum dot ensemble measured with 2D spectroscopy,”
Solid State Communications 163, 65 (2013).
19. H. Li, A.D. Bristow, M.E. Siemens, G. Moody, and S.T. Cundiff,
“Unraveling quantum pathways using optical 3D Fourier-transform spectroscopy,”
Nature Communications 4, 1390 (2013).
20. H. Li, G. Moody, and S.T. Cundiff,
“Reflection optical two-dimensional Fourier-transform spectroscopy,”
Optics Express 21, 1687 (2013).
21. G. Moody, R. Singh, H. Li, I.A. Akimov, M. Bayer, D. Reuter, A.D. Wieck, and S.T. Cundiff,
“Fifth-order nonlinear optical response of excitonic states in an InAs quantum dot ensemble measured with 2D spectroscopy,”
Physical Review B 87, 045313 (2013).
22. G. Moody, R. Singh, H. Li, I.A. Akimov, M. Bayer, D. Reuter, A.D. Wieck, A.S. Bracker, D. Gammon, and S.T. Cundiff,
“Influence of confinement on biexciton binding in semiconductor quantum dot ensembles measured with 2D spectroscopy,”
Physical Review B 87, 041304 (2013). [Rapid]
23. D. B. Turner, P. Wen, D. H. Arias, K. A. Nelson, H. Li, G. Moody, M. E. Siemens, and S. T. Cundiff,
“Persistent exciton-type many-body interactions in GaAs quantum wells measured using two-dimensional optical spectroscopy,”
Physical Review B 85, 201303 (2012). [Rapid]
24. X. Dai, M. Richter, H. Li, A.D. Bristow, C. Falvo, S. Mukamel, and S.T. Cundiff,
“Two-dimensional double-quantum spectra reveal collective resonances in an atomic vapor,”
Physical Review Letters 108, 193201 (2012).
25. S. T. Cundiff, A. D. Bristow, M. E. Siemens, G. Moody, H. Li, D. Karauskaj, X. Dai, T. Zhang,
“Optical two-dimensional Fourier-transform spectroscopy of semiconductor nanostructures,”
IEEE Journal of Selected Topics in Quantum Electronics 18, 318 (2012). [Invited]

26. M.E. Siemens, G. Moody, H. Li, A.D. Bristow, and S.T. Cundiff,
“Resonance lineshapes in two-dimensional Fourier transform spectroscopy,”
Optics Express 18, 17699 (2010).
27. P.K. Jha, H. Li, V.A. Sautenkov, Y.V. Rostovtsev, and M.O. Scully,
“Phase dependent interference effects on atomic excitation,”
Optics Communications 284, 2538 (2011).
28. P.K. Jha, Y.V. Rostovtsev, H. Li, V.A. Sautenkov, and M.O. Scully,
“Experimental observation of carrier-envelope-phase effects by multicycle pulses,”
Physical Review A 83, 033404 (2011).
29. G.O. Ariunbold, M.M. Kash, V.A. Sautenkov, H. Li, Y.V. Rostovtsev, G.R. Welch, and M.O. Scully,
“Observation of picosecond UV pulses produced by coherent scattering of IR femtosecond pulses in atomic rubidium vapor,”
Journal of the Optical Society of America B 28, 515 (2011).
30. V.A. Sautenkov, H. Li, M.A. Gubin, Y.V. Rostovtsev, and M.O. Scully,
“Variable spectral filter based on optically saturated selective reflection,”
Laser Physics 21, 153 (2011).
31. H. Li, V.A. Sautenkov, Y.V. Rostovtsev, M.M. Kash, G.R. Welch, P. Anisimov, and M.O. Scully,
“Carrier envelope phase effect on atomic excitation by few-cycle RF pulses,”
Physical Review Letters 104, 103001 (2010).
32. V.A. Sautenkov, H. Li, Y.V. Rostovtsev, and M.O. Scully,
“Ultradispersive adaptive prism based on a coherently prepared atomic medium,”
Physical Review A 81, 063824 (2010).
33. G.O. Ariunbold, M.M. Kash, V.A. Sautenkov, H. Li, Y.V. Rostovtsev, G.R. Welch, and M.O. Scully,
“Observation of picosecond superfluorescent pulses in rubidium atomic vapor pumped by 100-fs laser pulses”
Physical Review A 82, 043421 (2010).
34. H. Li, H. Chen, M.A. Gubin, Y.V. Rostovtsev, V.A. Sautenkov, and M.O. Scully,
“Observation of electromagnetically induced transparency in cesium molecules,”
Laser Physics 20, 1725 (2010).
35. V.A. Sautenkov, T.S. Varzhapetyan, H. Li, D. Sarkisyan, and M.O. Scully,
“Selective reflection of a laser beam from a dilute rubidium vapor,”
Journal of Russian Laser Research 31, 270 (2010).
36. H. Li, V.A. Sautenkov, Y.V. Rostovtsev, G.R. Welch, P.R. Hemmer, and M.O. Scully,
“Electromagnetically induced transparency controlled by a microwave field,”
Physical Review A 80, 023820 (2009).

37. Y.V. Rostovtsev, H. Eleuch, A. Svidzinsky, H. Li, V.A. Sautenkov, and M.O. Scully,
“Excitation of atomic coherence using off-resonant strong laser pulses,”
Physical Review A 79, 063833 (2009).
38. H. Li, V.A. Sautenkov, Y.V. Rostovtsev, and M.O. Scully,
“Excitation dependence of resonance line self-broadening at different atomic densities,”
Journal of Physics B: Atomic, Molecular and Optical Physics 42, 065203 (2009).
39. V.A. Sautenkov, H. Li, Y.V. Rostovstev, G.R. Welch, J.P. Davis, F.A. Narducci and M.O. Scully,
“Using phase dynamics in EIT to probe ground state relaxation in rubidium vapor,”
Journal of Modern Optics 56, 975 (2009).
40. T.S. Varzhapetyan, H. Li, G.O. Ariunbold, V.A. Sautenkov, Y.V. Rostovtsev, and M.O. Scully,
“Intensity correlations in resonance nonlinear magneto-optical rotation,”
Optics Communications 282, 39 (2009).
41. H. Li, V.A. Sautenkov, M.M. Kash, A.V. Sokolov, G.R. Welch, Y.V. Rostovtsev, M.S. Zubairy,
and M.O. Scully,
“Optical imaging beyond the diffraction limit via dark states,”
Physical Review A 78, 013803 (2008).
42. H. Li, V.A. Sautenkov, T.S. Varzhapetyan, Y.V. Rostovtsev, and M.O. Scully,
“Atomic noise spectra in nonlinear magneto-optical rotation in a rubidium vapor,”
Journal of the Optical Society of America B 25, 1702 (2008).
43. H. Li, T.S. Varzhapetyan, V.A. Sautenkov, Y.V. Rostovtsev, H. Chen, D. Sarkisyan and
M.O. Scully,
“Improvement of spectral resolution by using the excitation dependence of dipole–dipole
interaction in a dense atomic gas,”
Applied Physics B: Lasers and Optics 91, 229 (2008).
44. V.A. Sautenkov, H. Li, Y.V. Rostovstev, G.R. Welch, J.P. Davis, F.A. Narducci and M.O. Scully,
“Dynamic control of EIT by changing optical phase,”
Journal of Modern Optics 55, 3093 (2008).
45. G.O. Ariunbold, M.M. Kash, H. Li, V.A. Sautenkov, Y.V. Rostovtsev, G.R. Welch, and M.O.
Scully,
“A model experiment for stand-off sensing,”
Journal of Modern Optics 55, 3273 (2008).
46. V.A. Sautenkov, H. Li, Y.V. Rostovtsev, and M.O. Scully,
“Power spectra and correlations of intensity fluctuations in electromagnetically induced
transparency,”
Journal of Modern Optics 54, 2451 (2007).
47. H. Chen, H. Li, Y. V. Rostovtsev, M. A. Gubin, V. A. Sautenkov and M. O. Scully,
“Near-infrared saturation spectroscopy of cesium molecules using a diode laser,”
Journal of the Optical Society of America B 23, 723 (2006).

Popular science articles

1. A.E. Almand-Hunter, S.T. Cundiff, H. Li, M. Mootz, S.W. Koch, and M. Kira, “Quantum-optical spectroscopy reveals dropletons in quantum wells,” *Optics and Photonics News* 25, 42 (2014).
2. A.E. Almand-Hunter, H. Li, S.T. Cundiff, M. Mootz, M. Kira, and S.W. Koch, “Dropleton – The new semiconductor quasiparticle,” (NPR) 2physics.com (<http://www.2physics.com/2014/04/dropleton-new-semiconductor.html>)
3. H. Li, A.D. Bristow, M.E. Siemens, G. Moody, and S.T. Cundiff, “Determining the system Hamiltonian with optical 3-D spectroscopy,” *Optics and Photonics News* 24, 50 (2013).

INVITED SEMINARS

1. Feb. 2018, Department of Physics, University of South Florida, Tampa, FL
2. Mar. 2017, Department of Physics, Zhejiang University, Hangzhou, China
3. Feb. 2017, Department of Physics, University of Central Florida, Orlando, FL
4. Sep. 2016, Department of Physics, College of William and Mary, Williamsbury, VA
5. Oct. 2015, Department of Mechanical & Materials Engineering, FIU
6. Feb. 2015, Department of Biomedical Engineering, FIU
7. May 2014, Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Science, Shanghai, China
8. May 2014, Division of Quantum Physics and Quantum Information, University of Science and Technology of China, Shanghai, China
9. May 2014, State Key Laboratory of Precision Spectroscopy, East China Normal University, Shanghai, China
10. May 2014, National Time Service Center, Chinese Academy of Sciences, Xi'an, China
11. May 2014, Institute of Opto-Electronics, Shanxi University, Taiyuan, China
12. Apr. 2014, Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, Wuhan, China.
13. Mar. 2013, Department of Physics, University of Minnesota Duluth, Duluth, MN.
14. Mar. 2013, Department of Physics, Queens College, City University of New York, New York, NY.
15. Feb. 2013, Department of Physics, Temple University, Philadelphia, PA.
16. Jan. 2013, Department of Physics, Florida International University, Miami.
17. Jan. 2013, Physics Colloquium, University of Denver, Denver.
18. Oct. 2012, Cornell/Jin bi-group meeting, JILA, University of Colorado.
19. Mar. 2012, School of Science, Xi'an Jiaotong University, Xi'an, China.
20. Mar. 2012, Wuhan Institute of Physics and Mathematics, Chinese Academy of Sciences, Wuhan, China.

21. Sep. 2011, Becker group, JILA, University of Colorado.

CONFERENCE PRESENTATIONS (As Presenter)

Invited

1. H. Li,
“*Optical 2D coherent spectroscopy of valley dynamics in monolayer transition metal dichalcogenide*, ”
Ultrafast Bandgap Photonics III
Orlando, FL, Apr. 16 – 19, 2018
2. H. Li,
“*Many body interaction and correlation in atomic vapors*, ”
TAMU-Princeton-Baylor Summer Symposium on Quantum Science and Engineering
Casper, Wyoming, Jul. 23 – 29, 2017
3. H. Li,
“*Optical Multi-dimensional coherent spectroscopy*, ”
American Chemistry Society 92nd Florida Annual Meeting and Exposition
Tampa, FL, May 5 – 7, 2016.
4. M. Titze, F. Gao, S.T. Cundiff, and H. Li
“*Probing dipole-dipole interactions in a dilute rubidium vapor via double-quantum 2D coherent spectroscopy*, ”
Physics of Quantum Electronics (PQE)
Snowbird, UT, Jan. 4 – 9, 2015.
5. H. Li, A.D. Bristow, M.E. Siemens, G. Moody, and S.T. Cundiff
“*Optical three-dimensional coherent spectroscopy*, ”
Photonics West 2014
San Francisco, CA, Feb. 1 – 6, 2014
6. H. Li
“*Determining system Hamiltonian with optical three-dimensional coherent spectroscopy*, ”
Physics of Quantum Electronics (PQE)
Snowbird, UT, Jan. 5 – 9, 2014
7. H. Li, A.D. Bristow, X. Dai, G. Moody, M.E. Siemens, and S.T. Cundiff
“*Optical multidimensional Fourier transform spectroscopy*, ”
21th International Laser Physics Workshop (LPHYS)
Calgary, Canada, July 23 – 28, 2012
8. H. Li, V.A. Sautenkov, Y.V. Rostovtsev, M.M. Kash, P.M. Anisimov, G.R. Welch, and M.O. Scully
“*Carrier-envelope phase effect of RF pulses: cosine vs sine*, ”
Physics of Quantum Electronics (PQE)
Snowbird, UT, Jan. 3 - 7, 2010

Contributed

1. H. Li, S. Yu, M. Titze, and X. Liu
“Many-body correlation and interaction in atomic vapors probed by optical two-dimensional coherent spectroscopy,” [Poster]
International Conference on Ultrafast Phenomena (UP)
Hamburg, Germany, Jul. 15 – 20, 2018
2. M. Titze, B. Li, P.M. Ajayan, and H. Li
“Intrinsic homogeneous linewidth of trions in monolayer MoSe₂,” [Poster]
Conference on Lasers and Electro-Optics (CLEO)
San Jose, CA, May 13 – 18, 2018
3. S. Yu, M. Titze, X. Liu, and H. Li
“Probing dipole-dipole interaction at cold-atom density range using two-dimensional coherent spectroscopy,” [Talk]
Conference on Lasers and Electro-Optics (CLEO)
San Jose, CA, May 13 – 18, 2018
4. M. Titze, F. Gao, R. Almeida, Y. Gong, P.M. Ajayan, and H. Li
“Ultrafast dynamics of trions in monolayer MoSe₂,” [Poster]
Fundamental Optical Processes in Semiconductors (FOPS)
Stevenson, WA, Aug. 27 – Sep. 1, 2017
5. M. Titze, F. Gao, R. Almeida, Y. Gong, P.M. Ajayan, and H. Li
“Valley trion dynamics in monolayer MoSe₂,” [Poster]
Frontiers in Optics
Rochester, NY, Oct. 17 – 21, 2016
6. F. Gao, M. Titze, R. Almeida, Y. Gong, P.M. Ajayan, H. Li
“Valley dynamics in monolayer MoSe₂ studied by pump-probe spectroscopy,” [Poster]
Fundamental Optical Processes in Semiconductors (FOPS)
Breckenridge, CO, Aug. 2 – 7, 2015
7. H. Li, G. Moody, S.T. Cundiff, and M. Kira
“Many-body interactions in GaAs quantum wells studied by pre-pulse 2DFT spectroscopy,” [Poster]
Conference on Lasers and Electro-Optics (CLEO)
San Jose, CA, June 9 – 14, 2013
8. H. Li, A. Kortyna, G. Moody, and S.T. Cundiff
“Pulse propagation effects in 2DFT spectroscopy,” [Poster]
International Conference on Coherent Multidimensional Spectroscopy (CMDS)
Berlin, Germany, July 16 – 18, 2012
9. H. Li, G. Moody, A.D. Bristow, M.E. Siemens, S.T. Cundiff
“Optical multidimensional spectroscopy of atomic vapor,” [Talk]
International Conference on Ultrafast Phenomena (UP)
Lausanne, Switzerland, July 8 – 13, 2012

10. H. Li, G. Moody, R. Singh, I. A. Akimov, D. R. Yakovlev, M. Bayer, G. Karczewski, T. Wojtowicz, and S. T. Cundiff
"Evidence of exciton-trion coherent interactions in a CdTe/CdMgTe quantum well," [Talk]
 Conference on Lasers and Electro-Optics (CLEO)
 San Jose, CA, May 7 – May 11, 2012
11. H. Li, A.D. Bristow, M.E. Siemens, G. Moody, and S.T. Cundiff
"Experimental determination of Hamiltonian via 3D Fourier-transform spectroscopy," [Talk]
 APS March Meeting,
 Boston, MA, Feb. 27 – Mar. 2, 2012
12. H. Li, A.D. Bristow, M.E. Siemens, G. Moody, and S.T. Cundiff
"Experimental determination of full Hamiltonian via 3D Fourier-transform spectroscopy," [Poster]
 Gordon Conference on Quantum Control of Light and Matter,
 South Hadley, MA, Jul. 31 – Aug. 5, 2011
13. H. Li, A.D. Bristow, M.E. Siemens, G. Moody, and S.T. Cundiff
"Three-dimensional Fourier-transform spectroscopy of potassium vapor," [Talk]
 APS March Meeting,
 Dallas, TX, Mar. 21 - 25, 2011
14. H. Li, X. Dai, A.D. Bristow, M.E. Siemens, D. Karauskaj, and S.T. Cundiff
"Multi-dimensional Fourier-transform spectroscopy of potassium vapor," [Poster]
 International Conference on Coherent Multidimensional Spectroscopy,
 Minneapolis, MN, Aug. 18 - 20, 2010
15. H. Li, V.A. Sautenkov, M.M. Kash, Y.V. Rostovtsev, and M.O. Scully
"Nonlinear optics with radio frequency field" [Talk]
 Frontiers in Optics (FiO)
 Rochester, NY, Oct. 19 - 23, 2008
16. H. Li, V.A. Sautenkov, Y.V. Rostovtsev, G.R. Welch, J.P. Davis, F.A. Narducci, and M.O. Scully
"Phase dynamics of Electromagnetically Induced Transparency" [Poster]
 Frontiers in Optics (FiO)
 Rochester, NY, Oct. 19 - 23, 2008
17. H. Li, V.A. Sautenkov, M.M. Kash, G.R. Welch, Y.V. Rostovstev, and M.O. Scully,
"Subwavelength imaging via dark state," [Talk]
 Lasers and Electro-Optics, Quantum Electronics and Laser Science Conference (CLEO/QELS),
 San Jose, CA, May 4 - 9, 2008
18. H. Li, V.A. Sautenkov, M.M. Kash, G.R. Welch, Y.V. Rostovtsev, and M.O. Scully
"Enhancement of imaging contrast via EIT" [Poster]
 Physics of Quantum Electronics (PQE)
 Snowbird, UT, Jan. 6 - 10, 2008
19. H. Li, V.A. Sautenkov, Y.V. Rostovstev, and M.O. Scully,
"An ultra-dispersive optically controlled atomic gas prism," [Talk]
 Lasers and Electro-Optics, Quantum Electronics and Laser Science Conference (CLEO/QELS),
 Baltimore, MD, May 6 - 11, 2007

20. H. Li, J. P. Davis, V. A. Sautenkov, Y. V. Rostovtsev, G. R. Welch, F. A. Narducci, and M. O. Scully
“*Quantum control of EIT by optical phase,*” [Talk]
APS Texas meeting,
College Station, TX, Oct. 19 - 20, 2007
21. H. Li, H. Chen, Y.V. Rostovtsev, V.A. Sautenkov, and M.O. Scully
“*Variable optical filter based on saturated selective reflection*” [Poster]
Physics of Quantum Electronics (PQE)
Snowbird, UT, Jan. 2 - 6, 2006