

**Chunqiang Li**

Associate Professor, Undergraduate Director  
Department of Physics, The University of Texas at El Paso

Physical Science Bldg.  
500 W. University Ave.  
El Paso, TX 79968

Tel: (915)747-7537  
Fax: (915)747-5447  
Email: cli@utep.edu

**Education**

- **Princeton University**  
Ph.D. Electrical Engineering 2006  
Dissertation: “*Femtosecond Optical Spectroscopy and Microscopy with Phase Coherent Pulses*”. Advisor: Warren S. Warren (currently at Duke University)
- **Chinese Academy of Sciences, China**  
M.S. Space Physics 1999
- **Peking University, China**  
B.S. Space Physics 1996

**Employment**

- **The University of Texas at El Paso, El Paso, Texas**  
Associate Professor, Department of Physics, (09/2016-present)
- **The University of Texas at El Paso, El Paso, Texas**  
Assistant Professor, Department of Physics, (08/2010-08/2016)
- **Harvard Medical School, Boston, Massachusetts**  
Research Fellow, Wellman Center for Photomedicine, Massachusetts General Hospital, (09/2006-08/2010)

**Research Interest**

Ultrafast laser spectroscopy and microscopy; nonlinear optics for materials study, cellular and molecular imaging.

**Funding****External (\$1,871,232, as PI: \$1,091,202)**

- NSF, *Development of a scan-less temporal focusing two-photon fluorescence microscope for high-speed three-dimensional imaging*, 08/2014-07/2019.  
Role: PI, amount: \$650,127
- NIH, *Super resolution pump-probe microscopy for biomedical imaging*, 08/2014-04/2017.  
Role: PI, amount: \$441,075
- NSF, *Partners for success (PASS): building partnerships to increase success of underrepresented minorities in physics*, 08/2013-08/2016.  
Role: co-PI, amount: \$210,000

- NSF, *A partnership for minority education and research on black hole and neutron star binaries*, 09/2010-08/2014.  
Role: co-PI, amount: \$570,030

### **Internal (\$75,000)**

- UTEP Undergraduate Research Experiences Development, *Nonlinear Optics in 2D Quantum Materials*, 2021-2022  
Role: PI, amount: \$10,000
- UTEP Interdisciplinary Research, *Laser-induced photochemistry for micro-channels in tissue engineering*, 2014-2016  
Role: co-PI, amount: \$20,000
- UTEP College of Science Pilot Program, *Super resolution two-photon fluorescence resonance energy transfer (FRET) microscopy for imaging molecular interactions in bacterial and viral infections*, 2014  
Role: PI, amount: \$20,000
- UTEP Interdisciplinary Research, *Using hybrid microscopic methods to study highly movable biological objects*, 2013-2014  
Role: PI, amount: \$20,000
- UTEP University Research Initiative, *Imaging cancer cells with two-photon autofluorescence microscopy*, 2011-2012  
Role: PI, amount: \$5,000

### **Patents**

- Lin, C.P., Carlson, A.L., Alt, C., Biss, D.P., Pitsillides, C.M., **Li, C.**, *In vivo flow cytometry based on cellular autofluorescence*, US 8,574,859 B2, (2013).

### **Professional Activities, Memberships and Awards**

- Member of the International Society for Optical Engineer (SPIE), and the Optical Society of America (OSA)
- Reviewer for *Optica*, *Optics Letters*, *Optics Express*, *Biomedical Optics Express*, *OSA Continuum*, *Journal of Biomedical Optics*, *Journal of Biophotonics*, *Scientific Reports*, *Optics and Laser Technology*, *Precision Engineering*, *Sensors & Actuators: A. Physical*, *Light: Advanced Manufacturing*, *Optical Engineering*, *Photonics Research*
- Reviewer for NSF BIO, NSF MPS, Department of Energy
- Advisory Board: NSF MRSEC, member of the advisory board, UT Austin, 2017–
- Organization Committee, Texas Section APS meeting, 2016
- Recipient of Bullock Fellowship, Massachusetts General Hospital
- Recipient of Best Poster Award, Gordon Research Conference, Lasers in Medicine and Biology

### **Publications (peer reviewed)**

1. Paez, A., Sundin, E.M., Navarro, G., Li, X., Boland, T., **Li, C.**, Two-Photon Flow Cytometry with Laser Scanning Two-Dimensional Airy Beams, *Optics Comm.*, 508, 127804, (2022).
2. Deng, C., Wang, Y., Navarro, G., Sun, Y., Cota-Ruiz, K., Hernandez-Viezcas, J. A., Niu, G., **Li, C.**, White, J.C., Gardea-Torresdey, J., Copper oxide (CuO) nanoparticles affect yield, nutritional quality, and auxin associated gene expression in weedy and cultivated rice (*Oryza sativa* L.) grains, *Science of the Total Environment*, 810, 152260, (2022).
3. Gutierrez, G., Sundin, E.M., Nalam, P.G., Zade, V., Romero, R., Nair, A., Sreenivasan, S., Das, D., **Li, C.**, Ramana, C.V., “Interfacial Phase Modulation Induced Structural Distortion, Band Gap Reduction and Nonlinear Optical Activity in Tin (Sn) Incorporated Ga<sub>2</sub>O<sub>3</sub>”, *J. Phys. Chem.*, 125, 20468-20481, (2021).
4. Price, A.D., Aguilar, A.C., Botez, C.E., **Li, C.**, “Optical Second Harmonic Generation Imaging and X-Ray Diffraction of Cs<sub>1-x</sub>Rb<sub>x</sub>H<sub>2</sub>PO<sub>4</sub> Proton Conductor Series”, *J. Appl. Phys.*, 127, 193105, (2020).
5. Prasad, K.S., Abugalyon, Y., **Li, C.**, Xu, F., Li, X., “New method to amplify colorimetric signals of paper-based nanobiosensors for simple & sensitive pancreatic cancer biomarker detection”, *Analyst*, 145, 5113-5117, (2020).
6. Deng, C., Wang, Y., Cota-Ruiz, K., Reyes, A.M., Sun, Y., Peralta-Videa, J., Hernandez-Viezcas, J. A., Turley, R. S., Niu, G., **Li, C.**, Gardea-Torresdey, J., “Bok Choy (*Brassica rapa*) grown in CuO nanoparticles-amended soils exhibits toxicity in a phenotype-dependent manner: translocation, biodistribution and nutritional disturbance”, *Journal of Hazardous Materials*, 398, 122978, (2020).
7. Wang, Y., Deng, C., Cota-Ruiz, K., Peralta-Videa, J.R., Sun, Y., Rawat, S., Tan, W., Reyes, A.M., Hernandez-Viezcas, J.A., Niu, G., **Li, C.**, Gardea-Torresdey, J.L., “Nutrient Improvement in Green Onion (*Allium fistulosum*) Plants by CuO Nanoparticles as Potential Nanofertilizers: A Spectroscopic and microscopic Study”, *Science of the Total Environment*, 725, 138387, (2020).
8. Díaz-Moreno, C.A., Ding, Y., Martinez, L., Hurtado-Macias, A., Rao, S.S., **Li, C.**, López, J., Chianelli, R.R., “Structural, Magnetic and Second Harmonic Generation Properties in Mayan Blue Indigo Nanostructured Pigment”, *Journal of Magnetism and Magnetic Materials*, 499, 166052, (2020).
9. Aguilar, A.C., Diaz-Moreno, C.A., Price, A.D., Goutam, R. K., Botez, C. E., Lin, Y., Wicker, R. B., **Li, C.**, “Non-Destructive Optical Second Harmonic Generation Imaging of 3D Printed Aluminum Nitride Ceramics”, *Ceramics International*, 45, 18871-18875 (2019).
10. Huang, X., Sun, W., Tzeng, T.-L., **Li, C.**, Qian, W., “Fast and fully-automated detection and segmentation of pulmonary nodules in thoracic CT scans using deep convolutional neural networks”, *Computerized Medical Imaging and Graphics*, 74, 25-36 (2019).
11. Bonilla-Bird, N., Paez, A., Reyes, A., Hernandez-Viezcas, J., **Li, C.**, Peralta-Videa, J., and Gardea-Torresdey, J., “Two-Photon Microscopy and Spectroscopy Studies to Determine the Mechanism of Copper Oxide Nanoparticle Uptake by Sweetpotato Roots during Post-harvest Treatment”, *Environmental Science & Technology*, 52, 9954-9963 (2018).
12. Diaz-Moreno, C.A., Lopez, J., Ding, Y., Macias, A.H., **Li, C.**, and Wicker, R., “Multiferroic and Optical Properties of La<sub>0.05</sub>Li<sub>0.85</sub>NbO<sub>3</sub> and LiNbO<sub>3</sub> Nanocrystals”, *Journal of Nanotechnology*, 3721095, (2018).
13. Huang, X., Ding, Y., Xiao, C., Qian, W., **Li, C.**, “Hybrid algorithm based on radial symmetry and weighted least-square ellipse fitting for three-dimensional nanometer particle localization”, *Journal of Biomedical Optics*, 23(3), 036501, (2018).

14. Ornelas, A., Williams, K.N., Hatch, K.A., Paez, A., Aguilar, A.C., Ellis, C.C., Tasnim, N., Ray, S., Dirk, C., Boland, T., Joddar, B., **Li, C.**, Michael, K., “Synthesis and Characterization of a Photocleavable Collagen-Like Peptide”, *Organic & Biomolecular Chemistry*, 16, 1000-1013, (2018).
15. Díaz-Moreno, C.A., Ding, Y., Portelles, J., Heiras J., Hurtado-Macias, A., Syeed, A., Paez, A., **Li, C.**, López, J., Wicker, R., “Optical Properties of Ferroelectric Lanthanum Lithium Niobate”, *Ceramics International*, 44, 4727-4733, (2018).
16. Ding, Y., Aguilar, A.C., **Li, C.**, “Axial scanning with pulse shaping in temporal focusing two-photon microscopy for fast three-dimensional imaging”, *Optics Express*, 25, 33379-33388, (2017).
17. Gu, C., Zhang, D., Wang, D., Yam, Y., **Li, C.**, Chen, S.-C., “Parallel femtosecond laser light sheet micro-manufacturing based on temporal focusing”, *Precision Engineering*, 50, 198-203, (2017).
18. Díaz-Moreno, C.A., Ding, Y., **Li, C.**, Portelles, J., Heiras J., Hurtado-Macias, A., Farias, J.R., González-Hernández, J., M.J. Yacamán, M.J., López, J., “Relaxor ferroelectricity, ferromagnetic and optical second harmonic properties in lanthanum lithium niobate (La<sub>0.05</sub>Li<sub>0.85</sub>NbO<sub>3</sub>) nanoparticles”, *J. of Magnetism and Magnetic Materials*, 433, 262-270, (2017).
19. Huang, X., **Li, C.**, Xiao, C., Sun, W., Qian, W., “A fully-automated multiscale kernel graph cuts based particle localization scheme for temporal focusing two-photon microscopy”, *Proc. of SPIE*, 10137, 101371I, (2017).
20. Hatch, K.A., Ornelas, A., Williams, K.N., Boland, T., Michael, K., **Li, C.**, “Photolysis of a peptide with *N*-peptidyl-7-nitroindoline units using two-photon absorption”, *Biomedical Optics Express*, 7, 4654-4659, (2016).
21. Ding, Y., **Li, C.**, “Dual-color multiple-particle tracking at 50-nm localization and over 100- $\mu$ m range in 3D with temporal focusing two-photon microscopy”, *Biomedical Optics Express*, 7, 4187-4197, (2016).
22. **Li, C.**, Pastila, R. K., Lin, C.P., “Label-free imaging immune cells and collagen in atherosclerosis with two-photon and second harmonic generation microscopy”, *Journal of Innovative Optical Health Sciences*, 9, 164003, (2016).
23. Wang, Y., Ding, Y., Ray, S., Paez, A., Xiao, C., **Li, C.**, “Two-photon flow cytometry with laser scanning Bessel beams”, *Proc. of SPIE*, 9709, 97090F, (2016).
24. Sun, W., Huang, X., **Li, C.**, Xiao, C., Qian, W., “A novel Kalman filter based video image processing scheme for two-photon fluorescence microscopy”, *Proc. of SPIE*, 9788, 97881I, (2016).
25. Acosta, Y., Zhang, Q., Rahaman, A., Ouellet, H., Xiao, C., Sun, J., **Li, C.**, “Imaging Cytosolic Translocation of Mycobacteria with Two-Photon Fluorescence Resonance Energy Transfer Microscopy”, *Biomedical Optics Express*, 5, 3990-4001, (2014).
26. Cao, B., Chakraborty, S., Sun, W., Aghvami, S., Fischer, M.G., Qian, W., Xiao, C., **Li, C.**, “Imaging marine virus *CroV* and its host *Cafeteria roenbergensis* with two-photon microscopy”, *Proc. of SPIE*, 8944, 89440E, (2014).
27. Yaroslavsky, A.N., Patel R., Salomatina, E., **Li, C.**, Lin, C.P., Al-Arashi, M., Neel, V., “High Contrast Mapping of Basal Cell Carcinomas”, *Optics Letters*, 37, 644-646, (2012).
28. Ripplinger, C.M., Kessinger, C.W., **Li, C.**, Kim, W.K., McCarthy, J.R., Weissleder, R., Henke, P.K., Lin, C.P., Jaffer, F.A., “Inflammation Modulates Murine Venous Thrombosis Resolution

- In Vivo: Assessment by Multimodal Fluorescence Molecular Imaging*", *Arteriosclerosis, Thrombosis, and Vascular Biology*, 32, 2616-2624, (2012).
29. Zhao, L., Peralta-Videa, J.R., Varela-Ramirez, A., Castillo-Michel, H., **Li, C.**, Zhang, J., Aguilera, R.J., Keller, A.A., Gardea-Torresdey, J.L., "Effect of surface coating and organic matter on the uptake of CeO<sub>2</sub> NPs by corn plants grown in soil: Insight into the uptake mechanism", *Journal of Hazardous Materials*, 225-226, 131-138, (2012).
  30. Zhao, L., Peralta-Videa, J.R., Ren, M., Varela-Ramirez, A., **Li, C.**, Hernandez-Viezcas, J.A., Aguilera, R.J., Gardea-Torresdey, J.L., "Transport of Zn in a sandy loam soil treated with ZnO NPs and uptake by corn plants: Electron microprobe and confocal microscopy studies", *Chemical Engineering Journal*, 184, 1-8, (2012).
  31. **Li, C.**, Pastila, R.K., Pitsillides, C., Runnels, J.M., Puoris'haag, M., Côté, D., Lin, C.P., "Imaging leukocyte trafficking *in vivo* with two-photon-excited endogenous tryptophan fluorescence", *Optics Express*, 18, 988-999, (2010).
  32. **Li, C.**, Pitsillides, C., Runnels, J.M., Côté, D., Lin, C.P., "Multiphoton microscopy of live tissues with ultraviolet autofluorescence", *IEEE J. Selected Topics in Quantum Electronics*, 16, 516-523, (2010).
  33. **Li, C.**, Wagner, W., Ciocca, M., Warren, W.S., "Multiphoton Femtosecond Two-Dimensional Optical Spectroscopy", *Journal of Chemical Physics*, 126, 164307-312, (2007)
  34. Wagner, W., **Li, C.**, Semmlow, J., Warren, W.S., "Rapid Phase-Cycled Two-Dimensional Optical Spectroscopy in Fluorescence and Transmission Mode", *Optics Express*, 13, 3697-3706, (2005).
  35. Datta, S., **Li, C.**, Forrest, S.R., Volodin, B., Dolgy, S., Melnik, E., Ban, V.S., "Modeling of non-ideal volume Bragg reflection gratings in photorefractive glass using a perturbed transmission matrix approach", *IEEE J. Quant. Electron.*, 40, 580-590, (2004).
  36. Wagner, W., Tian, P., **Li, C.**, Semmlow J., Warren, W.S., "Rapid two-dimensional optical spectroscopy through acoustic-optic pulse shaping", *J. Mod. Optics*, 51, 2655-2663, (2004).
  37. Menon, V., Tong, W., Xia, F., **Li, C.**, Forrest, S.R., "Non-reciprocity of counterpropagating signals in a monolithically integrated Sagnac interferometer", *Optics Lett.*, 29, 513-515, (2003).
  38. Menon, V., Tong, W., **Li, C.**, Xia, F., Glesk, I., Prucnal, P.R., Forrest, S.R., "All Optical Wavelength Conversion Using a Regrowth-Free Monolithically Integrated Sagnac Interferometer", *IEEE Photon. Tech. Lett.*, 15, 254-256, (2003).
  39. Wang, H., **Li, C.**, Forrest, S.R., "A fully integratable, 1.55 $\mu$ m wavelength, continuously tunable asymmetric twin-waveguide distributed Bragg reflector laser", *IEEE Photon. Tech. Lett.*, 15, 1189-1191, (2003).
  40. Wei, J., Xia, F., **Li, C.**, Forrest, S.R., "High T<sub>0</sub> long wavelength InGaAsN quantum well lasers grown by GSMBE using a solid arsenic source", *IEEE Photon. Tech. Lett.*, 14, 597-599, (2002).

### **Supervised Students and Postdoctoral Researchers**

**Postdoc:** Bin Cao (2012-2014), Tessa Pinon (2013-2014), Meimei Lai (2014-2015), Yongdong Wang (2015- 2016), Yu Ding (2015- 2017)

**Graduate students:** Judith Rivera, Yassel Acosta, Farzaneh Mohajerani, Seyed Aghvami, Arifur Rahaman, Kevin Hatch, Faisal Abedin, Syeed Ahmed, Aurelio Paez, Rajen Goutam, Angela Aguilar, Andres Reyes, Emma Sundin, Gilberto Navarro, Armando Garcia

**Undergraduate students:** Armando Garcia, Christian Honsaker, Aaron Ortega, Kevin Honsaker, Yahir Garay, Angela Aguilar, Andres Reyes, Kuenzang Tashi, Ahmed Ahmed, Gilberto Navarro, Mathew Weaver, Roberto Iturralde, Michael De La Rosa, Diego Ariza Barba, Jahayra J. Chairez, Roberto Iturralde, Matthew Weaver

## **Teaching**

### **Undergraduate**

PHYS 2420 Introductory Mechanics, PHYS 2421 Introductory Electromagnetism, PHYS 3243 Advanced Physics Labs, PHYS 3323 Physical Optics, PHYS 4355 Introduction to Quantum Mechanics, PHYS 4356 Atoms, Molecules and Solids

### **Graduate**

PHYS 5341 Electrodynamics

## **Service**

Physics Department Undergraduate Director	2016-
Physics Department Chair Search Committee	2018-2019
Physics Department Faculty Search Committee	2013-2016
Physics Department Graduate Admission Committee	2014-2016
College of Science Best Thesis-Best Dissertation Committee	2013-2015
College of Science Secondary Education Mapping Committee	2014
UTEP Dodson Research Grant Reviewer	2014
UTEP Campus Office of Undergraduate Research Initiatives Reviewer	2014

NSF MRSEC, member of the advisory board, UT Austin, 2017–

## **Presentations and Seminars**

1. **Li, C.**, “Temporal and Spatial Control of Femtosecond Laser Pulses for Biomedical Imaging”, Department of Chemistry, Duke University, July 13, 2020
2. Navarro, G., Sundin, E.M., **Li, C.**, “Two-Photon Flow Cytometry with Laser Scanning Two-Dimensional Airy Beams”, UTEP COURI Symposium, Apr 27, 2020 (poster)
3. **Li, C.**, “Two-Photon Photolysis of Photoreactive Biomaterials”, ACS Southwest and Rocky Mountain Regional Meeting, El Paso, Texas, November 15, 2019.
4. Baily, P.T., Del Castillo, H.P., Paez, A., Weaver, M.R., Iturralde, R.P., **Li, C.**, Dirk, C.W., Michael, K., “Exploration of functional groups in N-derivatized nitroindolines”, ACS Southwest and Rocky Mountain Regional Meeting, El Paso, Texas, November 13-16, 2019 (poster)
5. **Li, C.**, “Deep Learning Based Object Detection and Semantic Segmentation in Biomedical Imaging”, Bioinformatics seminar, University of Texas at El Paso, El Paso, Texas, October 25, 2019.
6. Baily, P.T., Del Castillo, H.P., Paez, A., Weaver, M.R., Iturralde, R.P., Reyes, A.M., Cruz, A., **Li, C.**, Michael, K., “Development of a novel versatile crosslinker for the generation of a photodegradable hydrogel”, UTEP COURI Symposium, Aug 3, 2019 (poster)

7. Navarro, G., Paez, A., **Li, C.**, “Two-Photon Light-Sheet Microscopy with Airy Beams”, UTEP COURI Symposium, Aug 3, 2019 (poster)
8. Iturralde, R.P., Reyes, A.M., **Li, C.**, “Two-Photon Fluorescence Imaging of Plant Tissue Immune Response”, UTEP COURI Symposium, Aug 3, 2019 (poster)
9. **Li, C.**, “Deep Learning for Super Resolution Fluorescence Microscopy Image Reconstruction”, UTEP Physics Seminar, Apr 12, 2019 (talk)
10. Paez, A., Goutam, R.K., Reyes, A.M., **Li, C.**, “Two-photon flow cytometry with 2D Airy beam light sheet”, SPIE Photonics West, San Francisco, California, Feb. 2-Feb. 7 2019 (talk).
11. Huang, X., Qian, W., **Li, C.**, “Deep Matching: Deep learning improves resolution in localization microscopy”, SPIE Photonics West, San Francisco, California, Feb. 2-Feb. 7 2019 (talk).
12. Reyes, A.M., Price, A.D., **Li, C.**, “Analysis of rutile and anatase TiO<sub>2</sub> nanoparticles with two-photon microscopy and x-ray diffraction”, UTEP IDR Symposium, El Paso, Texas, Nov. 5, 2018.
13. Goutam, R.K., Paez, A., **Li, C.**, “Two-photon flow cytometry with 2D Airy beam sheet”, UTEP IDR Symposium, El Paso, Texas, Nov. 5, 2018.
14. Ahmed, A., **Li, C.**, “Denoising and single particle detection in microscopic image processing”, UTEP COURI Symposium, El Paso, Texas, Aug. 4, 2018.
15. Reyes, A.M., Paez, A., **Li, C.**, “Two-Photon Flow Cytometry with Laser Scanning 2D Airy Beams”, UTEP COURI Symposium, El Paso, Texas, Apr. 21, 2018.
16. Aguilar A.C., **Li, C.**, “Pump-probe spectroscopic studies of surface plasmon resonance of gold nanorods”, Texas APS Meeting, Richardson, Texas, Oct. 20-21, 2017.
17. Reyes, A.M., Ding, Y., Paez, A., **Li, C.**, “Two-photon flow cytometer with non-diffracting beams”, Texas APS Meeting, Richardson, Texas, Oct. 20-21, 2017.
18. Aguilar, A.C., Ding, Y., **Li, C.**, “Pump-Probe Spectroscopic Studies of Surface Plasmon Resonance in Gold Nanorods”, COURI Symposium, University of Texas at El Paso, El Paso, Texas, Apr 29, 2017.
19. **Li, C.**, “Nonlinear Optical Microscopy for Deep Imaging, Super Resolution, and Tissue Engineering”, Department of Biomedical Engineering, University of Connecticut Health Center, Farmington, Connecticut, Apr 6, 2017.
20. **Li, C.**, “Optical Microscopy Development for Deeper Penetration and Super Resolution”, PREM Seminary”, University of Texas at El Paso, El Paso, Texas, Mar 23, 2017.
21. Huang, X., **Li, C.**, Xiao, C., Sun, W., Qian, W., “A fully-automated multiscale kernel graph cuts based particle localization scheme for temporal focusing two-photon microscopy”, SPIE Medical Imaging, Orlando, Florida, Feb. 11-16, 2017.
22. Ding, Y., **Li, C.**, “Multiple-particle 3D tracking within 50nm localization and over 100μm range using temporal focusing two-photon microscopy”, SPIE Photonics West, San Francisco, California, Jan. 28-Feb. 2 2017 (talk)
23. **Li, C.**, Challenges and Opportunities: Deeper Penetration, Higher Imaging Speed, and Finer Resolution for Optical Imaging, National Institute of Biological Sciences, Beijing, China, Dec 19th, 2016.
24. Ding, Y., **Li, C.**, “Dual-color multiple-particle tracking in 3D with temporal focusing two-photon microscopy”, Texas APS Meeting, Las Cruces, New Mexico, Oct. 21 2016 (talk)
25. Wang, Y., Xia, H., Ding, Y., **Li, C.**, “Two-photon flow cytometer with laser scanning Airy beams”, Texas APS Meeting, Las Cruces, New Mexico, Oct. 21 2016 (talk)

26. Paez, A., Hatch, K.A., Ornelas, A., Michael, K., **Li, C.**, “Two-photon photolysis of collagen mimicking peptide”, Texas APS Meeting, Las Cruces, New Mexico, Oct. 21 2016 (poster)
27. Ahmed, S.E., Ding, Y., Gutierrez J., Han, K.-A., **Li, C.**, “Imaging live *Drosophila* brain with two-photon fluorescence microscopy”, Texas APS Meeting, Las Cruces, New Mexico, Oct. 21 2016 (poster)
28. Garay, Y., Wang, Y., **Li, C.**, “Second Harmonic Imaging Using a Bessel Beam Light Sheet”, BUILDing SCHOLARS Symposium, El Paso, Texas, Sep. 30 2016 (poster)
29. Diaz-Moreno, C., Ding, Y., Paez, A., Wang, Y., **Li, C.**, Lopez, J.A., “Optical Second Harmonic and Multiferroic Properties in  $\text{LiNbO}_3$  and  $\text{LiLaNbO}_3$  Nanoparticles”, Materials Science and Engineering (MSE) Congress, Darmstadt, Germany, Sep. 27-29 2016 (poster)
30. Ding, Y., Diaz-Moreno, C., Paez, A., Wang, Y., Lopez, J.A., **Li, C.**, “Optical Second Harmonic Generation Imaging for Ferroelectric Materials Studies”, The Southwest Emerging Technology Symposium. El Paso, Texas, Apr. 9 2016 (talk)
31. Wang, Y., Ding, Y., **Li, C.**, “Two-photon flow cytometer with laser scanning Bessel beams”, SPIE Photonics West, San Francisco, California, Feb. 13-18, 2016 (talk)
32. Honsaker, K., **Li, C.**, “Development of pump-probe microscopy for characterizing two-dimensional materials”, COURI Symposium, University of Texas at El Paso, El Paso, Texas, Aug 1, 2015 (poster)
33. **Li, C.**, “Super resolution spectroscopy and microscopy in materials research”, UTEP NSF PREM Seminar, June 19, 2015 (talk)
34. Honsaker, C., **Li, C.**, “Characterization of Defect States in Monolayer Molybdenum Disulfide with Transient Absorption Microscopy”, COURI Symposium, University of Texas at El Paso, El Paso, Texas, Apr. 18, 2015 (poster).
35. Ornelas, A., Williams, K.N., Rahaman, A., Aghvami, S., **Li, C.**, Boland, T., Michael, K., “Synthesis of an amino-acid building block for the solid-phase peptide synthesis of photoreactive collagen-mimicking peptides”, 3<sup>rd</sup> Annual UTEP Interdisciplinary Research Symposium, El Paso, Texas, March 23-24, 2015 (poster).
36. Acosta, Y., Zhang, Q., Ouelett, H., Sun, J., **Li, C.**, “Imaging tuberculosis cytosolic translocation with two-photon fluorescence resonance energy transfer microscopy”, SPIE Photonics West, San Francisco, California, Feb. 7-12, 2015 (talk)
37. **Li, C.**, “Super resolution optical microscopes: seeing biomolecules one by one”, UTEP Bioinformatics Seminar, Sep.19, 2014 (talk).
38. **Li, C.**, “Innovative Optical Microscopy: Faster Speed and Finer Resolution”, UTEP Physics Department, Sep. 5, 2014 (talk).
39. **Li, C.**, “Femtosecond Laser Spectroscopy to Study Ultrafast Dynamics”, UTEP NSF PREM Seminar, May 30, 2014 (talk).
40. Acosta, Y., Zhang, Q., Sun, J., **Li, C.**, “Two-Photon FRET Microscopy to Quantify Phagosomal Rupture in Macrophages”, Texas Tech 8<sup>th</sup> Annual Research Colloquium, El Paso, Texas, May 8, 2014 (talk).
41. Aghvami, S., Arbogast, M., Xiao, C., **Li, C.**, “Integrating Two Photon Microscopy and Electron Microscopy for Studying the Interaction of CroV and *Cafeteria roenbergensis*”, Texas Tech 8<sup>th</sup> Annual Research Colloquium, El Paso, Texas, May 8, 2014 (poster).
42. Cao, B., Acosta, Y., Honsaker, C., Aghvami, S., Xiao, C., **Li, C.**, “Imaging marine virus CroV and its host *Cafeteria roenbergensis* with two-photon microscopy”, SPIE Photonics West, San Francisco, California, Feb1-6, 2014 (talk).

43. **Li, C.**, “Advanced Optical Microscopy for Biomedical Research”, Chinese University of Hong Kong, Mechanical and Automation Department, Oct 15, 2013 (talk).
44. **Li, C.**, “Advanced Optical Microscopy for Biomedical Research”, UTEP Biology Department, Jun 27, 2013 (talk).
45. Honsaker, C.B., Cao, B., Rivera, J.N., **Li, C.**, “Super Resolution Microscopy with Stimulated Emission and Ground State Depletion”, COURI Symposium, University of Texas at El Paso, El Paso, Texas, Apr. 20, 2013 (poster).
46. **Li, C.**, “Two-photon microscopy for biomedical imaging”, University of Arizona Physics Department Seminar, Mar. 8, 2013 (talk).
47. Rivera, J.N., Cao, B., Honsaker, C.B., **Li, C.**, “Nonlinear Optical Microscopy in Energy Research”, Southwest Energy Science and Engineering Symposium, El Paso, Texas, Apr. 27, 2013 (talk).
48. **Li, C.**, “Two-photon microscopy for biomedical imaging”, remotely given at UT Austin Physics Department, Austin, Texas, Nov. 27, 2012 (talk).
49. **Li, C.**, “Advanced Optical Microscopy for Biomedical Research”, Department of Biology, University of Texas at El Paso, El Paso, Texas, Aug. 31, 2012 (talk).
50. Garcia, A., **Li, C.**, “Nanometer Resolution Optical Microscopy with Stimulated Emission”, COURI Symposium, University of Texas at El Paso, El Paso, Texas, Apr. 21, 2012 (poster).
51. **Li, C.**, “Two-dimensional Laser spectroscopy to study ultrafast dynamics in materials”, Southwest Energy Science and Engineering Symposium, El Paso, Texas, Mar. 24, 2012 (talk).
52. **Li, C.**, Pastila, R.K., Lin, C.P., “Imaging immune response of skin mast cells *in vivo* with two-photon microscopy”, SPIE Photonics West, San Francisco, California, Jan. 21-26, 2012 (invited talk).
53. **Li, C.**, “Nonlinear Optics for Biomedical Imaging” Senior Seminar, Department of Biology, University of Texas at El Paso, El Paso, Texas, Jun. 20, 2011 (talk).
54. Valdez, J., **Li, C.**, “Two-Photon-Excited Tryptophan Fluorescence Microscopy for Leukocytes and Cancer Cells Imaging”, COURI Symposium, University of Texas at El Paso, El Paso, Texas, Apr. 16, 2011 (poster).
55. **Li, C.**, “Optics for Biomedical Imaging”, UNIV 1303, University of Texas at El Paso, El Paso, Texas, Oct. 19, 2010 (talk).
56. **Li, C.**, “Nonlinear Optics for Biomedical Imaging”, Department of Physics, University of Texas at El Paso, El Paso, Texas, Sep. 29, 2010 (talk).
57. **Li, C.**, Pastila, R.K., Pitsillides, C., Runnels, J.M., Puoris'haag, M., Côtê, D., Lin, C.P., “Imaging Leukocyte Trafficking *In Vivo* with Two-Photon-Excited Endogenous Tryptophan Fluorescence”, 35th Meeting of the American Society for Photobiology, Brown University, Providence, Rhode Island, Jun. 12-16, 2010 (talk).
58. **Li, C.**, Pastila, R.K., Zhang, J., Shi, G.-P., Lin, C.P., “Label-free imaging of skin mast cells *in vivo* with two-photon microscopy”, Gordon Research Conference Lasers in Medicine and Biology, Holderness, New Hampshire, Jul. 21-25, 2010 (best poster award, 8 out of ~110).
59. **Li, C.**, Pastila, R.K., Lin, C.P., “Imaging skin mast cells *in vivo* with two-photon autofluorescence microscopy”, SPIE Photonics West, San Francisco, California, Jan. 23-28, 2010 (talk).
60. **Li, C.**, “Nonlinear Optical Microscopy for Biomedical Research”, School of Biomedical Engineering, Science and Health Systems, Drexel University, Philadelphia, Pennsylvania, Feb. 9, 2009 (invited talk).

61. **Li, C.**, Pitsillides, C., Runnels, J.M., Puorishaag, M., Lin, C.P., “Imaging skin tissue in vivo with video-rate two-photon autofluorescence microscopy”, SPIE Photonics West 2009, BiOS Biomedical Optics Symposium, San Jose, California, Jan. 24-29, 2009, (talk).
62. **Li, C.**, Runnels, J.M., Pitsillides, C., Puorishaag, M., Lin, C.P., “Two-photon autofluorescence microscopy for in vivo leukocytes imaging”, SPIE Photonics West 2009, BiOS Biomedical Optics Symposium, San Jose, California, Jan. 24-29, 2009, (talk).
63. **Li, C.**, Pitsillides, C., Runnels, J.M., Puorishaag, M., Lin, C.P., “Two-photon autofluorescence microscopy of skin”, Gordon Research Conference on Lasers in Medicine and Biology, Holderness, New Hampshire, Jul. 20-25, 2008 (poster).
64. **Li, C.**, Côté, D., Henry, F.P., Kochevar, I.E., Lin, C.P., “In vivo optical microscopy of the peripheral nerve myelin sheath and blood-nerve barrier for nerve assessment following injury”, SPIE Photonics Asia, Beijing, China, Nov. 11-15, 2007 (talk).
65. **Li, C.**, Fischer, M., Liu, H., Ye, T., Yurtserver, G., Warren, W.S., “Two-photon absorption microscopy of tissue”, Gordon Research Conference on Lasers in Medicine and Biology, Holderness, New Hampshire, Jul. 2-7, 2006 (poster).