TEXAS STATE VITA

I. Academic/Professional Background

A. Name and Title

Name: Dr. Yihong Chen Title: Professor

B. Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
PHD	2002	University of Texas at Austin	Electrical and Computer Engineering	
MENG	1996	Xidian University	Electromagnetic Field Engineering	
BENG	1993	Xidian University	Electromagnetic Field Engineering	

C. University Experience

Position	*University*	*Comments*	*Dates*
Professor	Texas State University	San Marcos	September 2021 - Present
Associate professor	Texas State University	San Marcos	September 2015 - August 2021
Assistant professor	Texas State University	San Marcos	September 2009 - August 2015
Adjunct professor	The University of Texas at Austin		2006 - 2011

D. Relevant Professional Experience

Position	*Entity*	*Comments*	*Dates*
Senior Research Scientist	Omega Optics Inc.		2005 - 2009
Research Scientist	Omega Optics Inc.		2002 - 2005

II. TEACHING

A. Teaching Honors and Awards:

Award / Honor Recipient: Teaching Award of Honor, Texas State Alumni Association. June 2020

Image-1.jpeg

Additional Comments: In recognition of Exemplary Service During the COVID-19 Crisis in Spring 2020

B. Courses Taught:

Texas State University:

EE 3350 - ELECTRONICS I

EE 3370 - SIGNALS & SYSTEMS

EE 4350 - ELECTRONICS II

EE 4354 - FLEXIBLE ELEC

EE 4390 - EE DESIGN I

EE 4391 - EE DESIGN II

EE 4399H - FLEXIBLE ELEC

EE 5350 - ADV ELEC CIR DES

EE 5398A - ANTE THEO DESI APP

ENGR 4395 - INDEPENDENT STUDY ENGINEERS

ENGR 5199B - THESIS

ENGR 5399A - THESIS

ENGR 5399B - THESIS

ENGR 5599B - THESIS

MSEC 7103 - RESEARCH MSEC

MSEC 7199 - DISSERTATION

MSEC 7203 - RESEARCH MSEC

MSEC 7299 - DISSERTATION

MSEC 7303 - RESEARCH MSEC

MSEC 7699 - DISSERTATION

MSEC 7999 - DISSERTATION

TECH 5399A - THESIS

TECH 5399B - THESIS

The University of Texas at Austin:

EE339 - Solid-state Electronic Devices

C. Directed Student Learning (i.e. theses, dissertations, exit committees, etc.):

Supervisor / Chair, Master's Thesis, Status: In Progress. (August 22, 2022 - Present). Ingram School of Engineering.
Student(s): Charles Morales, Graduate.

Supervisor / Chair, Master's Thesis, Status: In Progress. (August 24, 2021 - Present). Ingram School of Engineering.
Student(s): John Frerich, Graduate.

Member, Master's Thesis, "In-Vitro Detection of a Plant Pathogen using an Inkjet-Printed Graphene Electrochemical Aptasensor", Status: In Progress. (August 2021 - Present). Ingram School of Engineering - Mechanical and Manufacturing Engineering.
Student(s): Musa Mannan, Graduate.

Member, Master's Thesis, "ELECTRICALLY CONDUCTIVE CONCRETE BY ADDING RECYCLED CARBON FIBER", Status: In Progress. (August 2021 - Present). Ingram School of Engineering - Civil Engineering.
Student(s): Precious Aduwenye, Graduate.

Member, Master's Thesis, "Wide Range Optical Stability Study of Ionic Based Hybrid Perovskites and Their Ionic Liquid Components for Solar Cells", Status: In Progress. (August 2021 - Present). Physics.
Student(s): Selena Najar, Graduate.

Member, Dissertation, Status: In Progress. (August 2020 - Present). Physics.
Student(s): Nischal Khakurel, Doctoral, Ph.D.

Member, Dissertation, Status: In Progress. (August 2019 - Present).
Student(s): Adeniji Adetayo, Doctoral, Ph.D.

Member, Dissertation, "Interfacial Properties of NiO/(InxGa1−x)2O3 Heterostructures for Vertical Device Applications", Status: In Progress. (August 2019 - Present).
Student(s): Ahad Talukder, Doctoral, Ph.D.

Member, Dissertation, Status: In Progress. (August 2019 - Present).
Student(s): Brian Samuels, Doctoral, Ph.D.

Member, Dissertation, "Manufacturing of filaments and 3D printed magnetic polymer composite: Structural, Morphological and Magnetic properties analysis", Status: In Progress. (August 2019 - Present).
Student(s): Tanjina Ahmed, Doctoral, Ph.D.

Supervisor / Chair, Dissertation, Status: In Progress. (January 2018 - Present).
Student(s): Chandan Howlader, Doctoral, Ph.D.

Supervisor / Chair, Dissertation, Status: In Progress. (August 2017 - Present).
Student(s): Bhagyashree Mishra, Doctoral, Ph.D.

Member, Dissertation, Status: In Progress. (August 2016 - Present).
Student(s): Zaid Almusaied, Doctoral, Ph.D.

Member, Dissertation, "MAGNETIC CHRACTRERIZATION OF THE HARD-MAGNETIC POLYMER COMPOSITE 3D-PRINTER FILAMENT FOR THE DEVELOPMENT OF MAGNETIC FIELD ASSISTED ADDITIVE MANUFACTURING (MFAAM)", Status: Completed. (August 2019 - January 2023). Physics.
Student(s): Tanjina Ahmed, Doctoral, Ph.D.

Member, Master's Thesis, Status: Completed. (August 2020 - August 2022). Ingram School of Engineering.
Student(s): Ahad Talukder, Graduate.

Member, Master's Thesis, "Magnetic Characterization of Fe/PLA 3-D Printed Filaments and Fe-Doped Ga2O3 Thin Films", Status: Completed. (August 2020 - August 2022). Physics.
Student(s): Lauren Henderson, Graduate.

Supervisor / Chair, Master's Thesis, Status: Completed. (September 2020 - July 2022). Ingram School of Engineering.
Student(s): Benjamin Schneider, Graduate.

Supervisor / Chair, Dissertation, Status: Completed. (August 2017 - April 2022).
Student(s): Mahmuda Monne, Doctoral, Ph.D.

Supervisor / Chair, Senior Design, Status: Completed. (August 2020 - May 2021).
Student(s): Patrick Hernandez, Undergraduate.
Anthony Meza, Undergraduate.
Thomas Paveglio, Undergraduate.
Kyle Pennington, Undergraduate.

Supervisor / Chair, Senior Design, Status: Completed. (August 2020 - May 2021).
Student(s): Patrick Schneider, Undergraduate.
Undergraduate.
Undergraduate.
Undergraduate.

Member, Master's Thesis, Status: Completed. (August 2019 - May 2021). Ingram School of Engineering.
Student(s): Sree Sourav Das, Graduate.

Member, Master's Thesis, Status: Completed. (August 2018 - November 2020). Ingram School of Engineering.
Student(s): Michael LePere, Graduate.

Supervisor / Chair, Internship, "Design and development of high-output and high-capacitance vehicle mounted eGenerator", Status: Completed. (June 1, 2020 - August 10, 2020).
Student(s): Abid Ahmad, Graduate.

Additional Comments: Referred and supervised Abid to do internship at a local company.

Supervisor / Chair, Internship, "Printing process development of nanomaterials", Status: Completed. (June 15, 2020 - August 4, 2020).
Student(s): Bhagyashree Mishra, Doctoral.

Additional Comments: Referred and supervised Bhagyashree to do internship at a local company.

Supervisor / Chair, Master's Thesis, Status: Completed. (August 2018 - July 2020). Ingram School of Engineering.
Student(s): Abid Ahmad, Graduate.

Member, Dissertation, Status: Completed. (August 2016 - July 2020).
Student(s): Dalim Mia, Doctoral, Ph.D.

Supervisor / Chair, Senior Design, Status: Completed. (August 2019 - May 2020).
Student(s): Kirby Williams, Undergraduate.
Gunner Colantoni, Undergraduate.
Samantha Greene, Undergraduate.
Hanna Gescheidle, Undergraduate.

Member, Master's Thesis, Status: Completed. (April 2020).
Student(s): Duy Nguyen, Graduate.

Supervisor / Chair, Internship, "3D Printed Silver Ink Development", Status: Completed. (June 1, 2019 - December 31, 2019).
Student(s): Mahmuda Monne, Doctoral.

Additional Comments: Referred and supervised Mahmuda to do internship at a local company.

Supervisor / Chair, Senior Design, "NASA Intelligent Lighting Control System", Status: Completed. (August 2018 - May 2019).
Student(s): Zachary Fox, Undergraduate.
Ignacio Gomez, Undergraduate.
Krystopher Frederick, Undergraduate.
Kazuyuki Witt, Undergraduate.

Supervisor / Chair, Senior Design, "NASA 3D Printed EMI Shield", Status: Completed. (January 2018 - December 2018).
Student(s): Daniel Valle, Undergraduate.
Isabella Collins, Undergraduate.
Robert Castorena, Undergraduate.
Josh Long, Undergraduate.

Additional Comments: The team won Keysight's "Outstanding Project" award. I helped the team with the design idea, sample characterization and final testing of the system. The team lead Daniel was recruited by Boeing immediately after graduation. He emailed me recently that “I use things I learned every day from that project in my job now”.

Supervisor / Chair, Master's Thesis, Status: Completed. (August 2016 - July 2018).
Student(s): Mohi Jewel, Graduate.

Supervisor / Chair, Senior Design, "NXP Hexiwear Smart Baby Monitor", Status: Completed. (August 2017 - May 2018).
Student(s): James Lopez, Undergraduate.
Roberto Deanda, Undergraduate.
Jordan Walker, Undergraduate.
Burak Zeybek, Undergraduate.

Member, Master's Thesis, Status: Completed. (2016 - December 2017).
Student(s): Ooha Manda, Graduate.

Member, Dissertation, Status: Completed. (July 2017).
Student(s): Susmita Ghose, Doctoral, Ph.D.

Supervisor / Chair, Master's Thesis, Status: Completed. (July 2017).
Student(s): Evarestus Enuka, Graduate.

Supervisor / Chair, Master's Thesis, Status: Completed. (July 2017).

Student(s): Mahmuda Monne, Graduate.

Member, Dissertation, Status: Completed. (April 2017).
Student(s): Shafiqur Rahman, Doctoral, Ph.D.

Member, Dissertation, Status: Completed. (December 2016). Texas State University.
Student(s): Lichen Xiang, Doctoral, Ph.D.

Member, Dissertation, Status: Completed. (June 2016). Texas State University.
Student(s): Jiachen Xue, Doctoral, Ph.D.

Member, Dissertation, Status: Completed. (April 2016). Texas State University.
Student(s): Javad Rezanezhad Gatabi, Doctoral, Ph.D.

Supervisor / Chair, Supervise Visiting Scholar, Status: Completed. (October 2014 - October 2015).
Student(s): Jun Yu, Doctoral.

Additional Comments: Supervise Visiting Scholar

Member, Dissertation, Status: Completed. (July 2015). Texas State University.
Student(s): Kunal Bhatnagar, Doctoral, Ph.D.

Supervisor / Chair, Supervise Visiting Scholar, Status: Completed. (August 2012 - December 2014).
Student(s): Zhuo Wang, Doctoral.

Additional Comments: Supervise Visiting Scholar

Supervisor / Chair, Supervise Visiting Scholar, Status: Completed. (October 2013 - October 2014).
Student(s): Gongkai Wang, Doctoral.

Additional Comments: Supervise Visiting Scholar

Supervisor / Chair, Supervise Visiting Scholar, Status: Completed. (August 2013 - July 2014).
Student(s): Shuhong Gong, Doctoral.

Additional Comments: Supervise Visiting Scholar

Member, Dissertation, Status: Completed. (June 2014). Texas State University.
Student(s): Ray Cook, Doctoral, Ph.D.

Supervisor / Chair, Master's Thesis, Status: Completed. (May 2014). Texas State University.
Student(s): Xuesong Yang, Graduate.

Supervisor / Chair, Senior Design, "Ingestible Pill Sensor", Status: Completed. (August 2012 - May 2013).
Student(s): Postler Nicholas, Undergraduate.
Janelle Garza, Undergraduate.

Additional Comments: 1st place in EE senior design competition

Supervisor / Chair, Senior Design, "Ingestible Pill Sensor", Status: Completed. (August 2012 - May 2013).
Student(s): Sheleg Gil, Undergraduate.
Carlos Hernandez, Undergraduate.

Supervisor / Chair, Senior Design, "RFID", Status: Completed. (August 2010 - May 2011).
Student(s): Arnaldo Cruz, Undergraduate.

Member, Dissertation, Status: Completed. (November 2010). University of Texas at Austin.
Student(s): Daniel Pham, Doctoral, Ph.D.
Additional Comments: University of Texas at Austin

Member, Dissertation, Status: Completed. (July 2009). University of Texas at Austin.
Student(s): Harish Subbaraman, Doctoral, Ph.D.

D. Courses Prepared and Curriculum Development:

EE3350 Electronics I, Curriculum Development, Texas State University: March 2020 - Present.

EE5350 Advanced Electronic Circuit Design, Curriculum Development, Texas State University: 2015 - Present.

EE4353 Advanced CMOS Tech, Curriculum Development, Texas State University: 2013 - Present.

EE4399H Flexible Electronic, Curriculum Development, Texas State University: 2011 - Present.

EE3370 Signals and Systems, Curriculum Development, Texas State University: 2010 - Present.

EE4350 Electronics II, Curriculum Development, Texas State University: 2009 - Present.

EE5398A Antenna Theory, Design and Application, Curriculum Development, Texas State University. Taught: August 2017 - Present.

EE339 Solid-state Electronic Devices, Curriculum Development, University of Texas at Austin: 2006 - Present.

F. Other:

Guest Lecture, Additive Manufacturing Course, Texas State University. United States. 29. (November 2017).

Student Accomplishments:

Award:

Finalist for 2019 Rice Business Plan Competition. "Kosmil Energy," Program Manager. Status: In Progress. (April 4, 2019).
Student(s): Mahmuda Monne, Doctoral.

Supervisor, Graduate College Scholarship. Texas State University. (March 2019).
Student(s): Mahmuda Monne, Doctoral.

Additional Comments: Graduate College Scholarship of $4000, 2019-2020.

Supervisor, Keysight's "Outstanding Project" award. Status: Completed. (December 2018). EE.
Student(s): Daniel Valle, Undergraduate.
Isabella Collins, Undergraduate.
Robert Castorena, Undergraduate.
Josh Long, Undergraduate.

Additional Comments: The team won Keysight's "Outstanding Project" award. I helped the team with the design idea, sample characterization and final testing of the system. The team lead Daniel was recruited by Boeing immediately after graduation. He emailed me recently that “I use things I learned every day from that project in my job now”.

Supervisor, First Place Award of MSEC Boot Camp 2 Business plan Competition. (May 2018).
Student(s): Mahmuda Monne, Doctoral.

Additional Comments: Prize money amount $8000

Supervisor, Graduate College Scholarship. Texas State University. (March 2018).
Student(s): Mahmuda Monne, Doctoral.

Additional Comments: Graduate College Scholarship of $4000, 2018-2019

Supervisor, First Place Award of MSEC Boot Camp 1 Business plan Competition. Texas State University. (August 2017).
Student(s): Mahmuda Monne, Doctoral.

Additional Comments: Prize money amount $1500

Supervisor, Graduate Research Support Fellowship. Texas State University. (March 2016).
Student(s): Mohi Jewel, Graduate.

Additional Comments: Graduate Research Support Fellowship of $2000, 2017-2018.

Supervisor, Graduate Research Support Fellowship. Texas State University. (March 2016).
Student(s): Mahmuda Monne, Doctoral.

Additional Comments: Graduate Research Support Fellowship of $2000, 2016-2017.

Supervisor, Graduate Merit Fellowship. Texas State University. (March 2015).
Student(s): Mahmuda Monne, Doctoral.

Additional Comments: Graduate Merit Fellowship of $2500, 2015-2016

Supervisor, Graduate College Scholarship. Texas State University. (March 2015).
Student(s): Mahmuda Monne, Doctoral.

Additional Comments: Graduate College Scholarship of $4000, 2015-2016

Supervisor, 1st place in EE Senior Design Competition. "Ingestible Pill Sensor." Status: Completed. (May 2013). EE.
Student(s): Postler Nicholas, Undergraduate.

Fellowship:

Supervisor, the Dwight David Eisenhower Transportation Fellowship. Status: Completed. (December 20, 2021).
Student(s): Benjamin Schneider, Graduate.

Additional Comments: $8500

Supervisor, Doctoral Research Support Fellowship. Texas State University. (August 15, 2021).
Student(s): Chandan Howlader, Doctoral.

Additional Comments: Doctoral Support Scholarship of $5000,

Supervisor, Doctoral Research Support Fellowship. Texas State University. (December 2020).
Student(s): Bhagyashree Mishra, Doctoral.

Additional Comments: Doctoral Support Scholarship of $5000,

Supervisor, Doctoral Research Support Fellowship. Texas State University. (August 2019).
Student(s): Mahmuda Monne, Doctoral.

Additional Comments: Doctoral Support Scholarship of $5000,

Grant:

Supervisor, SPIE Student Author Travel Grant. SPIE Photonics West 2020. Status: Completed. (December 16, 2019).
Student(s): Chandan Howlader, Doctoral.

G. Teaching Professional Development Activities Attended

Institute, "Multicultural Curriculum Transformation and Research Institute 2022." (May 23, 2022 - May 26, 2022).

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

2. Articles:

a. Refereed Journal Articles:

Khakurel, N. J., Amyx, D., Geerts, Y. J., Chen, Y., & Geerts, W. J. (Accepted / In Press). Slot-die Coating of Famamidinium-Cesium mixed Halide Perovskites in Ambient conditions with FAAc additive. *MRS Communications*.

Mishra, B., & Chen, Y. (2022). All-Aerosol-Jet-Printed Carbon Nanotube Transistor with Cross-Linked Polymer Dielectrics. *Nanomaterials*, *12*, 4487. Retrieved from https://doi.org/10.3390/nano12244487 https://doi.org/10.3390/nano12244487

Ahmed, T. N., Belduque, M. C., Chen, Y. (Maggie), Tate, J. S., & Geerts, W. J. (2022). Dynamic Viscosity of Strontium Ferrite-Nylon Composite Below the Melting Temperature. *AIP Advances*, *12*(9), 095223.

https://doi.org/10.1063/5.0098972
https://aip.scitation.org/doi/10.1063/5.0098972

Additional Comments: published on-line, open-acces.

Monne, M. A., & Chen, Y. (2022). High Current On-Off Ratio Inkjet-Printed Flexible Micro-Electro-Mechanical-System (MEMS) Switch. *IEEE Journal on Flexible Electronics*, *1*(3), 167–173. https://doi.org/10.1109/JFLEX.2022.3205559
https://ieeexplore.ieee.org/document/9888235/authors#authors

Henderson, L., Zamora, S., Ahmed, T. N., Belduque Correa, M. C., Tate, J. S., Chen, Y., & Geerts, W. J. (2021). Altering Magnetic Properties of Iron Filament PLA Using Magnetic Field Assisted Additive Manufacturing (MFAAM). *Journal of Magnetism and Magnetic Materials*, *538*. Published. https://doi.org/https://doi.org/10.1016/j.jmmm.2021.168320
https://www.sciencedirect.com/science/article/abs/pii/S0304885321005965
Summary of Hysteresis Measurements-Lauren Henderson-JT 01142020-1.docx

Monne, M. A., Howlader, C. Q., Mishra, B., & Chen, Y. (2021). Synthesis of Printable Polyvinyl Alcohol for Aerosol Jet and Inkjet Printing Technology. *Micromachines*, *12*(220). Retrieved from https://doi.org/10.3390/mi12020220
https://doi.org/10.3390/mi12020220

Ahmad, A., Mishra, B., Foley, A., Wood, L., & Chen, Y. (2021). High Permeability Photosintered Strontium Ferrite Flexible Thin Films. *Micromachines*, *12*(42). https://doi.org/10.3390/mi12010042

Additional Comments: h5-index: 42, IF: 2.740

Howlader, C. Q., Hasan, M., Zakhidov, A., & Chen, Y. (2020). Determining the refractive index and the dielectric constant of PPDT2FBT thin film using spectroscopic ellipsometry. *Optical Materials*, *110*. Published. https://doi.org/10.1016/j.optmat.2020.110445
https://doi.org/10.1016/j.optmat.2020.110445

Monne, M., Grubb, P. M., Stern, H. P., Subbaraman, H., Chen, R. T., & Chen, Y. (2020). Inkjet-Printed Graphene-Based 1 × 2 Phased Array Antenna. *Micromachines*, *11*(9), 863. https://doi.org/https://doi.org/10.3390/mi11090863
https://www.mdpi.com/2072-666X/11/9/863/htm

Additional Comments: h5-index: 42, IF: 2.740

Jewel, M., Monne, M., Mishra, B., & Chen, Y. (2020). Inkjet-Printed Molybdenum Disulfide and Nitrogen-Doped Graphene Active Layer High On/Off Ratio Transistors. *Molecules*, *25*(5), 1081.

https://doi.org/https://doi.org/10.3390/molecules25051081
https://www.mdpi.com/1420-3049/25/5/1081

Additional Comments: h5-index: 92, IF: 3.267

Mokhtari-Koushyar, F., Grubb, P., Chen, Y., & Chen, R. (2019). A Miniaturized Tree-Shaped Fractal Antenna Printed on a Flexible Substrate: A Lightweight and Low-Profile Candidate With a Small Footprint for Spaceborne and Wearable Applications. *IEEE Antenna and Propagation Magazine*, *61*(3), 60–66. https://doi.org/10.1109/MAP.2019.2907878
https://ieeexplore.ieee.org/document/8701578/authors#authors

Additional Comments: IF: 3.804, h5-index: 32

Jewel, M., Mahmud, M., Monne, M., Zakhidov, A., & Chen, Y. (2019). Low Temperature Atomic Layer Deposition of Zirconium Oxide for Inkjet Printed Transistor Applications. *RSC Advances*, *9*(4), 1841 – 1848.

Additional Comments: h5-index: 104, IF: 3.049

Monne, M., Lan, X., & Chen, Y. (2018). Material Selection and Fabrication Processes for Flexible Conformal Antennas. *International Journal of Antennas and Propagation*, *2018*. Published. https://doi.org/https://doi.org/10.1155/2018/9815631
https://www.hindawi.com/journals/ijap/2018/9815631/

Additional Comments: h5-index: 22, IF: 1.437

Monne, M., Lan, X., Zhang, C., & Chen, Y. (2018). Inkjet-Printed Flexible MEMS Switches for Phased-Array Antennas. *International Journal of Antennas and Propagation*, *2018*. Published. https://doi.org/https://doi.org/10.1155/2018/4517848
https://www.hindawi.com/journals/ijap/2018/4517848/

Additional Comments: h5-index: 22, IF: 1.347

Lan, X., Lu, X., Chen, Y., Scherrer, D., Chung, T., Lai, R., & Tice, J. (2017). Direct On-wafer 3D Aerosol Jet Printing with High Reliability. *IEEE Transactions on Components, Packaging and Manufacturing Technology*, *7*(8), 1369–1376. Retrieved from http://ieeexplore.ieee.org/xpl/aboutJournal.jsp?punumber=5503870
http://ieeexplore.ieee.org/xpl/aboutJournal.jsp?punumber=5503870

Additional Comments: h5-index: 32, IF: 2.31, citation: 11

Wang, Z., Liu, Z., Akter Monne, M., Wang, S., Yu, Q., & Chen, Y. (2016). Interfacial Separation and Electrochemical Delamination of CVD-growth Multi-layer graphene for recyclable use of copper powder. *RSC Advances*, *6*, 24865 – 24870.

Additional Comments: h5-index: 105, IF: 3.119

Xiang, L., Wang, Z., Liu, Z., Weigum, S. E., Yu, Q., & Chen, Y. (2016). Inkjet Printed Flexible Biosensor Based on Graphene Field Effect Transistor. *IEEE Sensors Journal*, *16*(23), 8359–8364. Retrieved from http://ieeexplore.ieee.org/document/7564437/ http://ieeexplore.ieee.org/document/7564437/

Additional Comments: h5-index 78, IF: 3.076

Cook, R., Chen, Y., & Beall, G. W. (2015). Highly ordered self –assembling polymer/clay nanocomposite barrier film. *ACS Applied Materials & Interfaces*, *7*(20), 10915–10919.

Additional Comments: h5-index: 160, IF: 8.758

Wang, G., Wang, Z., Liu, Z., Xue, J., Xin, G., Yu, Q., … Chen, Y. (2015). Annealed graphene sheets decorated with silver nanoparticles for flexible inkjet printing. *Chemical Engineering Journal*, *260*, 582–589.

Additional Comments: h5-index 134, IF: 10.652

Gong, S., Wei, D., Xue, X., & Chen, Y. (2014). Study on the Channel Model and BER Performance of Single-Polarization Satellite-Earth MIMO Communication Systems at Ka Band. *IEEE Transactions on Antenna and Propagation*, *62*(10), 5282–5297.

Additional Comments: Established in 1952, this is the most prestigious journal in antenna research. IF: 4.435, h5-index: 77

Wang, Z., Yang, X., & Chen, Y. (2014). Assembly of Patterned Graphene Film Aided by Wetting/non-wetting Surface on Liquid Interface. *IEEE Transactions on Nanotechnology*, *13*(3), 589–593.

Additional Comments: IF: 2.857, h5-index: 34

Wang, Z., Cook, A. F., Yang, X., Liu, Z., Yu, Q., & Chen, Y. (2013). Graphene-based flexible field effect transistor with inkjet printed silver electrodes. *Current Nanoscience*, *9*(5), 635–637.

Additional Comments: IF: 1.586, h5-index: 19

Subbaraman, H., Pham, D. T., Xu, X., & Chen, Y. (2013). Ink-Jet Printed Two Dimensional Phased-Array Antenna on a Flexible Substrate. *IEEE Antennas and Wireless Propagation Letters*, *12*, 170–173. https://doi.org/10.1109/LAWP.2013.2245292

Additional Comments: IF: 3.51, h5-index 58

Chen, Y. (2012). Hybrid Photonic True-time Delay Modules for Quasi-continuous Steering of 2-D Phased-array Antennas. *IEEE/OSA Journal of Lightwave Technology*, *31*(6), 910–917.

Additional Comments: Ranked 4th among Optics & Photonics journals by Google Scholar.

Gu, G., Ling, Y., Liu, R., Vasinajindakaw, P., Lu, X., Jones, C. S., … Renn, M. (2011). All-Printed Thin-Film Transistor Based on Purified Single-Walled Carbon Nanotubes with Linear Response. *Journal of Nanotechnology*, *2011*(823680).

Additional Comments: IF: 1.354, h5-index: 18

Chen, Y., Pham, D., Subbaraman, H., Lu, X., & Chen, R. T. (2011). Conformal Ink-Jet Printed C-Band Phased-Array Antenna Incorporating Carbon Nanotube Field-Effect Transistor Based Reconfigurable True-Time Delay Lines. *IEEE Transactions on Microwave Theory and Techniques*, *60*(1), 179–184.

Additional Comments: IF: 3.756, h5-index 56

Chen, Y., Subbaraman, H., & Chen, R. T. (2011). One stage pulse compression at 1554nm through highly anomalous dispersive photonic crystal fiber. *Optics Express*, *19*(22), 21809–21817.

Additional Comments: Ranked 1st by Eigenfactor, ranked 2nd by total citations in the field of optics and photonics. h5-index: 99, IF: 3.561

Pham, D. T., Subbaraman, H., Chen, Y., Xu, X., & Chen, R. T. (2011). Light Weight and Conformal 2-bit, 1x4 Phased-Array Antenna with CNT-TFT Based Phase-Shifter on a Flexible Substrate. *IEEE Transactions on Antennas and Propagation*, *59*(12), 4553–4558.

Additional Comments: Established in 1952, this is the most prestigious journal in antenna research.

Pham, D., Subbaraman, H., Chen, Y., Xu, X., & Chen, R. (2011). Self-Aligned Carbon Nanotube Thin-Film-Transistors on Flexible Substrates with Novel Source-Drain Contact and Multi-layer Metal Interconnection. *IEEE Transactions on Nanotechnology*, *11*(1), 44–50.

Additional Comments: h5-index: 34, IF: 2.292

Dou, X., Chen, X., Chen, Y., Wang, X., Jiang, W., & Chen, R. T. (2010). Ultra-compact Laser beam Steering device using holographically formed two dimensional photonic crystal. *Journal of Nanoscience and Nanotechnology*, *10*(3), 1650–1655.

Additional Comments: h5-index: 44, IF: 1.354

Vaillancourt, J., Zhang, H., Vasinajindakaw, P., Xia, H., Lu, X., Han, X., … Renn, M. (2008). All Ink-jet-printed Carbon Nanotube Thin-film Transistor on a Polyimide Substrate with an Ultrahigh Operating Frequency of over 5GHz. *Applied Physics Letters*, *93*(24), 243301.

Additional Comments: h5-index of 101, IF: 3.521

Subbaraman, H., Chen, Y., & Chen, R. T. (2008). Photonic dual RF Beam Reception of an X-band Phased Array Antenna using Photonic Crystal Fiber based True-Time-Delay Beamformer. *Applied Optics*, *47*(34), 6448–6452.

Additional Comments: h5-index: 46, IF: 2.18

Subbaraman, H., Chen, Y., & Chen, R. T. (2008). Photonic Crystal Fiber Based True-Time-Delay Beamformer for Multiple RF Beam Transmission and Reception of an X-Band Phased Array Antenna. *IEEE Journal of Lightwave Technology*, *26*(15), 2803–2809.

Additional Comments: Ranked 4th among Optics & Photonics journals by Google Scholar.

Subbaraman, H., Chen, Y., & Chen, R. T. (2008). Reply to comment on Design of a broadband highly dispersive pure silica photonic crystal fiber. *Applied Optics*, *47*(18), 3330–3332.

Additional Comments: h5-index: 49, IF: 1.961

Chen, Y., Subbaraman, H., & Chen, R. T. (2008). Photonic Crystal Fiber Beamformer for Multiple X-band Phased-Array Antenna Transmissions. *IEEE Photonic Technology Letters*, *20*(5), 375–377.

Additional Comments: h5-index 52, IF: 2.553

Subbaraman, H., Ling, T., Jiang, Y., Chen, Y., Cao, P., & Chen, R. T. (2007). Design of a broadband highly dispersive pure silica photonic crystal fiber. *Applied Optics*, *46*(16), 3264–3268.

Additional Comments: h5-index: 49, IF: 1.961

Howley, B., Wang, X., Chen, Y., & Chen, R. T. (2007). Reconfigurable Delay Time Polymer Planar Lightwave Circuit for an X-band Phased-Array Antenna Demonstration. *IEEE Journal of Lightwave Technology*, *25*(3), 883–890.

Additional Comments: Ranked 4th among Optics & Photonics journals by Google Scholar. IF: 4.162, h5-index 78

Wang, X., Chen, Y., Howely, B., & Chen, R. T. (2007). Phase Error Corrected 4-Bit True Time Delay Module Using Cascaded 2x2 Polymer Waveguide Switch Array. *Applied Optics*, *46*(3), 379–383.

Additional Comments: h5-index: 49, IF: 1.961

Wang, X., Howely, B., Chen, Y., & Chen, R. T. (2006). 4x4 Non-blocking Polymeric Thermo-optic Switch Matrix using the Total Internal Reflection Effect. *IEEE Journal of Selected Topics in Quantum Electronics*, *12*(5), 997–1000.

Additional Comments: IF: 4.681, h5-index: 53

Howley, B., Wang, X., Chen, R. T., & Chen, Y. (2006). Experimental evaluation of curved polymer waveguides with air trenches and offsets. *Journal of Applied Physics*, *100*(2), 023114.

Additional Comments: h5-index: 68, IF: 2.328

Wang, X., Howley, B., Chen, Y., & Chen, R. T. (2006). Polarization-independent All-wave Polymer Based TIR Thermo-optic Switch. *IEEE Journal of Lightwave Technology*, *24*, 1558–1565.

Additional Comments: Ranked 4th among Optics & Photonics journals by Google Scholar.

Jiang, Y., Chen, X., Howley, B., Chen, Y., & Chen, R. T. (2006). Effects of temperature fluctuation on highly dispersive photonic crystal fibers. *Applied Physics Letters*, *88*(011108).

Additional Comments: h5-index: 101, IF: 3.521

Jiang, Y., Shi, Z., Howley, B., Chen, X., Chen, Y., & Chen, R. T. (2005). Delay-time-enhanced photonic crystal fiber array for wireless communications using two-dimensional X-band phased-array antennas. *Optical Engineering*, *44*(12), 125001.

Additional Comments: h5-index: 31, IF: 1.209

Wang, X., Howley, B., Chen, Y., & Chen, R. T. (2005). Crosstalk-Minimized Polymeric 2X2 Thermo-optic Switch. *IEEE Photonics Technology Letters*, *18*(1), 16–18.

Additional Comments: h5-index: 52, IF: 2.553

Shi, Z., Gu, L., Howley, B., Jiang, Y., Zhou, Q., Chen, Y., … Fetterman, H. R. (2005). True-time-delay modules based on a single tunable laser in

conjunction with a waveguide hologram for phased array antenna application. *Optical Engineering*, *44*(8), 084301.

Additional Comments: h5-index: 31, IF: 1.209

Howely, B., Chen, Y., Wang, X., Zhou, Q., Shi, Z., Jiang, Y., & Chen, R. T. (2005). 2-bit Reconfigurable True Time Delay Lines Using 2X2 Polymer Waveguide Switches. *IEEE Photonics Technology Letters*, *17*(9), 1944–1946.

Additional Comments: h5-index: 52, IF: 2.553

Jiang, Y., Howley, B., Shi, Z., Zhou, Q., Chen, R. T., Chen, Y., & Lee, B. C. (2004). Dispersion-enhanced photonic crystal fiber array for a true time-delay structured X-band phased array antenna. *IEEE Photonic Technology Letters*, *17*(1), 187–189.

Additional Comments: h5-index: 52, IF: 2.553

Chen, Y., & Chen, R. T. (2003). K-band phased-array antenna system demonstration using substrate guided wave true-time delay. *Optical Engineering*, *42*(7), 2000–2005.

Additional Comments: h5-index: 52, IF: 1.209

Shi, Z., Jiang, Y., Howley, B., Chen, Y., Zhao, F., & Chen, R. T. (2003). Continuously Delay-Time Tunable-Waveguide Hologram Module for X-band Phased-Array Antenna. *IEEE Photonic Technology Letters*, *15*(7), 972–974.

Additional Comments: h5-index: 52, IF: 2.553

Chen, Y., & Chen, R. T. (2002). A fully Packaged True Time Delay Module for a K-band Phased Array Antenna System Demonstration. *IEEE Photonic Technology Letters*, *14*(8), 1175–1177.

Additional Comments: Number of citations: 89, h5-index: 52, IF: 2.553

Chen, Y. (1999). All Digital QAM Modulation ASIC Design Using Lattice Kit. *Acta Electron.Sin*. Published.

Chen, Y., & Peida, Y. (1999). Research on the performance of AM-VSB CATV system based on EDFA. *Laser Technology*. Published.

Chen, Y., Xiaopin, Z., & Peida, Y. (1999). The BER of QAM Signals and Compromise Between the Performance of AM and QAM Signals in Hybrid AM/QAM Optical Systems. *Chinese Journal of Electronics*. Published.

Additional Comments: h5-index: 21, IF: 1.27

Chen, Y., & Peida, Y. (1999). The optimization of carrier to noise ratio in AM-VSB CATV system based on EDFA. *High Technology Letters*. Published.

Chen, Y., & Peida, Y. (1999). The optimization of EDFA parameters in AM-VSB CATV system. *Laser Technology*. Published.

Chen, Y., & Yan, S. (1997). The new method of broadband matching-SC method. *Journal of China Institute of Communications*, *18*(9), 55–60.

Additional Comments: IF: 2.3, h5-index: 25,

Chen, Y., Yan, S., Liangyong, X., & Weisheng, G. (1997). The real frequency method for the design of broadband antenna impedance matching networks. *Acta Electron.Sin. (China)*, *25*(3), 19–24.

Additional Comments: (included in Electrical & Electronics Abstracts, No.8, 1997)

Chen, Y., Yan, S., Weisheng, G., & Liangyong, X. (1996). Modern methods for the design of broadband matching networks. *Chinese Journal of Radio Science*, *2*, 102–109.

Additional Comments: h5-index: 21, Number of citations: 8

Chen, Y., Yan, S., & Liangyong, X. (1995). Design of a broadband matching network of a sleeve antenna using the real frequency method. *Journal of Xidian University (English Edition)*, *22*, 116–120.

Additional Comments: IF: 5.4, h5-index: 16

3. Conference Proceedings:

a. Refereed Conference Proceedings:

Howlader, C. Q., Geerts, W. J., & Chen, Y. (2023). Selection of hole transport layer for Pb-Sn binary perovskite solar cells. In *Organic, Hybrid, and Perovskite Photovoltaics XXIII* (Vol. 12659, pp. 1265908–1 – 1265908–9). SPIE.

Howlader, C. Q., Geerts, W. J., & Chen, Y. (2022). Fabricate anti-solvent free tin-lead based perovskite solar cells with MAAc additives. In *Organic, Hybrid, and Perovskite Photovoltaics XXIII* (Vol. 12209, pp. 1220905–1 1220905–6). SPIE. Retrieved from https://www.spiedigitallibrary.org/proceedings/Download?urlId=10.1117%2F12.2634371&d ownloadType=proceedings%20article&isResultClick=True https://www.spiedigitallibrary.org/proceedings/Download?urlId=10.1117%2F12.2634371&d ownloadType=proceedings%20article&isResultClick=True

Howlader, C. Q., Khakurel, N., Amyx, D. W., Geerts, W. J., Gibson, G., & Chen, Y. (2022). Pin-hole free MAPb0.75 Sn0.25(I0.5Br0.5)3 films spin casted without antisolvent by adding MAAc additive to Perovskite ink. In *Renewable Energy and Power Quality Journal* (Vol. 20, pp. X–1–5). Retrieved from https://www.icrepq.com/icrepq22/284-22-howlader.pdf https://www.icrepq.com/icrepq22/284-22-howlader.pdf

Mishra, B., & Chen, Y. (2022). Completely printed, flexible carbon nanotube-based transistor using cross-linked poly vinyl alcohol (PVA) as gate dielectric via Aerosol jet printing. In *Organic and Hybrid Field-Effect Transistors XXI, part of SPIE Organic Photonics + Electronics*. SPIE.

Howlader, C., Hasan, M., Zakidov, A., & Chen, Y. (2020). Optical dispersion study of PPDT2FBT by spectroscopic ellipsometry. In *Photonic West 2020 Organic Photonic Materials and Devices XXII, Proc. SPIE* (Vol. 11277, p. 1127712). SPIE.

Enuka, E., Monne, M., Lan, X., Gambin, V., Koltun, R., & Chen, Y. (2020). 3D inkjet printing of ferrite nanomaterial thin films for magneto-optical devices. In *Photonic West 2020 Quantum Sensing and Nano Electronics and Photonics XVII,, Proc. SPIE* (Vol. 11288, p. 112881K). SPIE. https://doi.org/10.1117/12.2542181

Jewel, M. U., & Chen, Y. (2018). All Inkjet-Printed High On/Off Ratio Two-Dimensional Materials-based Field Effect Transistor. In *2018 IEEE 18th International Conference on Nanotechnology (IEEE-NANO 2018)* (pp. 1–4). IEEE. https://doi.org/10.1109/NANO.2018.8626364

Monne, M., Jewel, M. U., Wang, Z., & Chen, Y. (2018). Graphene-Based 3D Printed Single Patch Antenna. In *SPIE Nanoscience + Engineering 2018, Low-Dimensional Materials and Devices 2018, Proc. SPIE* (Vol. 10725, p. 107250C). SPIE. https://doi.org/https://doi.org/10.1117/12.2323546 https://www.spiedigitallibrary.org/conference-proceedings-of-spie/10725/107250C/Graphene-based-3D-printed-single-patch-antenna/10.1117/12.2323546.short?SSO=1

Monne, M., Zaid, A., Mia, M. D., Khanal, J., Zakhidov, A., & Chen, Y. (2018). Anti-Reflective Coating for Flexible Devices using Plasma Enhanced Chemical Vapor Deposition Technique. In *2018 International Conference on Optical MEMS and nano photonics (OMN)*.

Monne, M. A., Enuka, E., Wang, Z., & Chen, Y. (2017). Inkjet Printed Graphene-based Field-effect Transistors on Flexible Substrate. In *Optics and Photonics on Low-Dimensional Materials and Devices 2017, Proc. SPIE* (Vol. 10349, p. 1034905). SPIE. https://doi.org/10.1117/12.2280039 http://spie.org/Publications/Proceedings/Paper/10.1117/12.2280039

Enuka, E., Monne, M., Lan, X., Gambin, V., Koltun, R., Tice, J., & Chen, Y. (2017). Method of preparing a polar based magnetic ink suitable for inkjet printing and characterization of Ni and Mn ferrite thin film. In *Advances in Functional Materials 2017*.

Jun Yu, W., Li, Z., Wang, Z., Yang, Y., Chen, Y., & Tang, Z. (2016). Ink-jet Printing and Characterization of Tin Oxide Thin Film on Micro-hotplate for Gas Sensing Application. In *The 16th international meeting on chemical sensors*.

Lan, X., Chen, Y., Lu, X., Chan, W., Yu, J., Yamamoto, N., & Tan, M. (2016). 3-D Inkjet Printed Ultra-wideband Equi-angular Spiral Antennas. In *66th Electronic Components and Technology Conference (ECTC)* (pp. 823–828).

Yang, X., & Chen, Y. (2013). Anomalous dispersive photonic bandgap fiber for ultra short pulse compression. In *Photonic West 2013 on Optical Components and Materials X, Proc. SPIE* (Vol. 8621, p. 86210X). SPIE.

Pham, D., Subbaraman, H., & Chen, Y. (2011). Phase shifter using carbon nanotube thin-film transistor for flexible phased-array antenna. In *Photonic West 2011 on RF and Millimeter-Wave Photonics, Proc. SPIE* (Vol. 7936, p. 793604).

Pham, D., Subbaraman, H., Chen, Y., Xu, X., & Chen, R. T. (2010). Bending Tests of Carbon Nanotube Thin-Film Transistors on Flexible Substrate. In *SPIE Conference 2010 on Carbon Nanotube, Graphene, and Associated Devices III, Proc. SPIE* (Vol. 7761, p. 77610R).

Dou, X., Chen, X., Chen, Y., Xiaolong Wang, A., Jiang, W., & Chen, R. T. (2009). Vertically stacked square lattice photonic crystals for Large Angle Optical Beam Steering. In *IEEE/LEOS winter topical meeting on nanophotonics* (pp. 24–25).

Chen, Y., Lu, X., Subbaraman, H., & Chen, R. T. (2009). Fully printed phased-array antenna for space communications. In *Micro-and Nanotechnology Sensors, Systems, and Applications, Proc. SPIE* (Vol. 7318, p. 731814).

Chen, Y., Subbaraman, H., & Chen, R. T. (2009). Dual-concentric-core Photonic Crystal Fiber with -5400ps/nm/km Dispersion Coefficient. In *Optical Fiber Communication Conference and Exposition (OFC) and The National Fiber Optic Engineers Conference (NFOEC)* (p. OTuC5).

Additional Comments: Cited by 7
This is the most prestigious international conference in optical communication.

Subbaraman, H., Chen, Y., & Chen, R. (2009). Packaging and system demonstration of an X-band phased array antenna utilizing highly dispersive photonic crystal fiber based true-time-delay. In *Photonics Packaging, Integration, and Interconnects IX, Proc. SPIE* (Vol. 7221, p. 722107). SPIE.

Dou, X., Chen, X., Chen, Y., Wang, X., Jiang, W., & Chen, R. T. (2009). Packaging consideration of two-dimensional polymer-based photonic crystals for laser beam steering. In *Photonics Packaging, Integration, and Interconnects IX* (Vol. 7221, p. 722104). https://doi.org/10.1117/12.811708

Subbaraman, H., Chen, Y., & Chen, R. T. (2009). Spurious-Free Dynamic Range (SFDR) improvement in a true-time-delay system based on highly dispersive photonic crystal fiber. In *2009 IEEE/LEOS Winter Topicals Meeting Series* (pp. 58–59).

Subbaraman, H., Chen, Y., & Chen, R. T. (2008). Simultaneous dual RF beam reception of an X-band phased array antenna utilizing highly dispersive photonic crystal fiber based true-time-delay. In *Asia Optical Fiber Communication and Optoelectronic Exposition and Conference* (p. SaJ2). Optical Society of America.

Chen, Y., Subbaraman, H., & Chen, R. T. (2008). Highly dispersive photonic crystal fiber for beamforming. In *Optoelectronic Devices and Integration II, Proc. SPIE* (Vol. 6838, p. 683801). SPIE.

Chen, Y., Yuan, D., Liu, J., & Han, X. (2007). Nanoscale Dipole Antennas Based On Long Carbon Nanotubes. In *2007 7th IEEE Conference on Nanotechnology (IEEE NANO)* (pp. 846–849).

Subbaraman, H., Cao, P., Chen, Y., & Chen, R. T. (2007). The Design and Fabrication of a Highly Dispersive Photonic Crystal Fiber for Phased Array Antenna Systems. In *OSA Topical Conference on Nanophotonics (NANO)* (p. 72).

Jiang, Y., Ling, T., Chen, Y., & Chen, R. T. (2006). Photonic Crystal Fiber Array for True-Time-Delay Structured X-band Phased Array Antenna Systems. In *Topical Meeting / Nanophotonics Topical Meeting (IPRA / NANO 2006)* (p. NFC2). Optical Society of America.

Wang, X., Howley, B., Chen, Y., Basile, P., & Chen, R. T. (2006). Fully-integrated 4-bit True Time Delay Module using Polymer Optical Switches and Waveguide Delay Lines. In *Integrated Photonics Research and Applications (IPRA) Topical Meeting/ Nanophotonics (NANO) Topical Meeting* (p. IMF4).

Howley, B., Wang, X., Chen, Y., & Chen, R. T. (2006). Integrated Polymer Optoelectronic Time Delay Device for an X-band Phased Array Antenna System. In *Optoelectronic Integrated Circuits VIII, Proc. SPIE* (Vol. 6124, p. 61240Z).

Chen, Y., Howley, B., Wang, X., Basile, P., & Chen, R. T. (2006). 2-D Scalable Optical Controlled Phased-Array Antenna System. In *Photonics Packaging and Integration VI, Proc. SPIE* (Vol. 6126, p. 61260I). SPIE.

Chen, Y., Howley, B., Wang, X., Basile, P., & Chen, R. T. (2005). Integration of Optical Components for Time Delay Module in Advanced Radar Applications. In *International Conference on Optical communications and networks (ICOCN)*.

Jiang, W., Tian, C., Jiang, Y., Chen, Y., Lu, X., & Chen, R. T. (2005). Superprism effect and light refraction and propagation in photonic crystals. In *Photonic Crystal Materials and Devices III, Proc. SPIE* (Vol. 5733, pp. 50–57).

Wang, X., Howley, B., Chen, Y., Zhou, Q., Chen, R. T., & Basile, P. (2005). Polymer Based Thermo-optic Switch for Optical True Time Delay. In *Integrated Optics: Devices, Materials, and Technologies IX, Proc. SPIE* (Vol. 5728, pp. 60–67).

Howley, B., Wang, X., Zhou, Q., Chen, Y., & Chen, R. T. (2005). Polymer Waveguides and Thermo-Optic Switches for an Optical True Time Delay Phased Array Antenna. In *Photonics Packaging and Integration V, Proc. SPIE* (Vol. 5731, pp. 12–19).

Jiang, W., Zou, J., Wu, L., Chen, Y., Tian, C., Howley, B., … Chen, R. T. (2004). Theoretical and experimental study of photonic-crystal-based structures for optical communication applications. In *Photonic Crystal Materials and Devices II, Proc. SPIE* (Vol. 5360, pp. 190–198).

Shi, Z., Gu, L., Jiang, Y., Howley, B., Chen, Y., & Chen, R. T. (2004). Holographic-grating-based optical-controlled true-time-delay devices. In *Emerging Optoelectronic Applications, Proc. SPIE* (Vol. 5363, pp. 39–44).

Chen, Y., Wu, K., Zhao, F., Gicherl, K., & Chen, R. T. (2004). Reconfigurable True-Time Delay for Wideband Phased-Array Antennas. In *Emerging Optoelectronic Applications, Proc. SPIE* (Vol. 5363, pp. 125–130).

Chen, Y., Wu, K., Zhao, F., & Chen, R. T. (2004). Loss Compensated Photonic True-time Delay for Phased-array Antenna. In *IEEE Antenna and*

Propagation Symposium and USNC/URSI National Radio Science Meeting (Vol. 4, pp. 4324–4327).

Shi, Z., Jiang, Y., Howley, B., Chen, Y., & Chen, R. T. (2003). Wavelength-controlled hologram-waveguide modules for continuous beam scanning in a phased-array antenna system. In *Photonic Integrated Systems, Proc. SPIE* (Vol. 4998, pp. 162–169).

Jiang, W., Tian, C., Wu, L., Chen, Y., & Chen, R. T. (2003). Abnormal propagation and interface refraction of light in a photonic crystal and their applications. In *Photonic Crystal Materials and Devices, Proc. SPIE* (Vol. 5000, pp. 251–256).

Chen, Y., & Chen, R. T. (2002). A K-band phased array antenna system employing photonic true-time delay module. In *Proceeding of IEEE/LEOS International Conference on Application of Photonic Technology (ICAPT), Quebec, Canada*.

Chen, Y., Zhang, X., & Chen, R. T. (2002). Substrate-Guided-Wave Hologram Based Continuously Variable True-Time-Delay Module for Microwave Phased-Array Antennas. In *Optoelectronic Interconnects, Integrated Circuits, and Packaging, Proc. SPIE* (Vol. 4652, pp. 249–254).

Chen, Y., & Chen, R. T. (2001). Photonic true time delay module for high-frequency broadband phased array antenna. In *Optoelectronic Interconnects VIII, Proc. SPIE* (Vol. 4292, pp. 190–196).

Li, B., Chen, Y., Jiang, N., Fu, Z., & Chen, R. T. (2000). Photonic Phased-array Antenna System based on Detector-switched Optical Blass Matrix True-time Delay Steering and Heterodyne RF Generation. In *Applications of Photonic Technology 4, 2000 International Conference on Application of Photonic Technology (ICAPT 2000), Proc. SPIE* (Vol. 4087, pp. 1004–1007).

Li, B., Chen, Y., Fu, Z., & Chen, R. T. (2000). Substrate-guided Wave Optical True-time Delay Feeding Network for Phased-array Antenna Steering. In *Optoelectronic Integrated Circuits IV, Proc. SPIE* (Vol. 3950, pp. 256–265).

Chen, Y. (1999). The application of EDFA in AM/QAM lightwave access systems. In *National Photoelectric Devices and Integrate Technology Conference*.

Chen, Y. (1998). Compromise Between the Performance of AM and QAM Signals in Hybrid Multi-channel AM/QAM Fiber Optic Systems. In *International Symposium on Communication Technology'98* (pp. S35–05).

Additional Comments: IEEE Catalog Number: 98EX243

Chen, Y., & Yong, Z. (1998). Nonlinear distortion and BER of QAM channels in AM/M-QAM hybrid optical transmission systems. In *Fiber Optic Components and Optical Communication II, Proc. SPIE* (Vol. 3552, pp. 311–317).

5. Reports:

Chen, Y. (2020). *Final Report - Conformal, Peel-and-Stick Ferrite Waveguide Embedded in Road Striping*. USDOT.

Additional Comments: Technical report submitted to USDOT.

Chen, Y. (2020). *Report 2 - Conformal, Peel-and-Stick Ferrite Waveguide Embedded in Road Striping*. USDOT.

Additional Comments: Technical report submitted to USDOT.

Chen, Y. (2019). *Report 1 - Conformal, Peel-and-Stick Ferrite Waveguide Embedded in Road Striping*. USDOT.

Additional Comments: Technical report submitted to USDOT.

Chen, Y. (2017). *Final report - Fully Printed Flexible 4-bit 2D 16-Element (4x4) Graphene-Based Phased Array Antenna System*. NASA.

Additional Comments: Technical Final report submitted to NASA

Chen, Y. (2017). *Report 8 - Fully Printed Flexible 4-bit 2D 16-Element (4x4) Graphene-Based Phased Array Antenna System*. NASA.

Additional Comments: Technical report submitted to NASA

Chen, Y. (2017). *Report 7 - Fully Printed Flexible 4-bit 2D 16-Element (4x4) Graphene-Based Phased Array Antenna System*. NASA.

Additional Comments: Technical report submitted to NASA

Chen, Y. (2016). *Report 6 - Fully Printed Flexible 4-bit 2D 16-Element (4x4) Graphene-Based Phased Array Antenna System*. NASA.

Additional Comments: Technical report submitted to NASA

Chen, Y. (2016). *Report 5 - Fully Printed Flexible 4-bit 2D 16-Element (4x4) Graphene-Based Phased Array Antenna System*. NASA.

Additional Comments: Technical report submitted to NASA

Chen, Y. (2016). *Report 4 - Fully Printed Flexible 4-bit 2D 16-Element (4x4) Graphene-Based Phased Array Antenna System*. NASA.

Additional Comments: Technical report submitted to NASA

Chen, Y. (2016). *Report 3 - Fully Printed Flexible 4-bit 2D 16-Element (4x4) Graphene-Based Phased Array Antenna System*. NASA.

Additional Comments: Technical report submitted to NASA

Chen, Y. (2015). *Report 2 - Fully Printed Flexible 4-bit 2D 16-Element (4x4) Graphene-Based Phased Array Antenna System*. NASA.

Additional Comments: Technical report submitted to NASA

Chen, Y. (2015). *Report 1 - Fully Printed Flexible 4-bit 2D 16-Element (4x4) Graphene-Based Phased Array Antenna System*. NASA.

Additional Comments: Technical report submitted to NASA

10. Other Works in Print:

Editorials:

Chen, Y., Miranda, F., Lan, X., & Lu, X. (2018). *Flexible and Conformal Antennas and Applications*. *International Journal of Antennas and Propagation* (Vol. 2018). Hindawi. https://doi.org/https://doi.org/10.1155/2018/6367571

Magazine / Trade Publications:

Chen, Y. (2004). Photonic Phased Array Antenna: Overview and Challenges. Published.

B. Works Not in Print:

1. Papers Presented at Professional Meetings:

Ahmed, T. (corresponding author), Belduque Correa, M. C., Chen, M. Y. (Author), Tate, J. S. (Author), Geerts, W. J., joint MMM-Intermag 2022, "Time dependence analysis as a function of temperature of magnetic polymer composite filaments," MMM and Intermag, New Orleans, LA, United States. (January 10, 2022).

Henderson, L. (corresponding author), Ahmed, T. N. (author), Belduque, M. C. (author), Tate, J. S. (author), Chen, Y. (. (author), Geerts, W. J., national APS March Meeting, "Altering Magnetic Properties of Iron Filament PLA Using Magnetic Field Assisted

Additive Manufacturing," APS, virtual, College Park, MD, United States. (March 18, 2021).

Additional Comments: virtual meeting because of Covid Crisis

Ahmed, T. (corresponding author), Henderson, L. (author), Belduque Correa, M. C. (author), Chen, M. Y. (Author), Tate, J. S. (author), Geerts, W. J. (author), International Polyolefins Conference, "Magnetic Field Assisted Additive Manufacturing (MFAAM) of magnetic polymer composite filaments," SPE South Texas Section, virtual. (February 23, 2021).

Henderson, L. (presenting author), Ahmed, T. (co-author), Belduque, M. C. (co-author), Tate, J. S., Chen, Y., Geerts, W. J. (corresponding author), 2020 Texas Section of the American Physical Society at UT Arlington, "Altering Magnetic Properties of Iron Filament PLA Using Magnetic Field Assisted Additive Manufacturing," TSAPS, TSAAPT, Texas section of SPS, UT Arlington, Arlington, TX, United States. (November 12, 2020).

Additional Comments: virtual meeting because of Covid-19 crisis

2. Invited Talks, Lectures, and Presentations:

Chen, Y., SPIE Photonics West - Quantum Sensing and Nano Electronics and Photonics XVII, "3D inkjet printing of ferrite nanomaterial thin films for magneto-optical devices," San Francisco, CA, United States. (February 2020).

Additional Comments: SPIE Photonics West is the world largest photonics conference.

Chen, Y., SPIE Photonics West - Organic Photonic Materials and Devices XXII, "Optical dispersion study of PPDT2FBT by spectroscopic ellipsometry," SPIE, San Francisco, CA, United States. (February 2020).

Additional Comments: SPIE Photonics West is the world largest photonics conference.

Chen, Y., Faculty Speakers Lectures at Round Rock Campus, "High-speed 3D Printed Flexible Electronics and Applications," Texas State University, San Marcos, TX, United States. (April 2, 2019).
Round Rock Campus Faculty Speaker-1.png

Chen, Y., SPIE Nanoscience + Engineering 2018, "Graphene-Based 3D Printed Single Patch Antenna," SPIE, San Diego, CA, United States. (August 2018).

Chen, Y., IEEE-NANO 2018, "All Inkjet-Printed High On/Off Ratio Two-Dimensional Materials-based Field Effect Transistor," IEEE, Ireland. (July 2018).

Chen, Y., 2018 International Conference on Optical MEMS and nano photonics, "Anti-Reflective Coating for Flexible Devices using Plasma Enhanced Chemical Vapor Deposition Technique," IEEE, Switzerland. (July 2018).

Chen, Y., SPIE Optics and Photonics on Low-Dimensional Materials and Devices 2017, "Inkjet Printed Graphene-based Field-effect Transistors on Flexible Substrate," SPIE, San Diego, CA, United States. (August 2017).

Chen, Y., Invited Talk, "Materials, Devices and Applications in 3D Printed Flexible Electronics," Northrop Grumman, Los Angeles, CA, United States. (August 2017).

Chen, Y., Advances in Functional Materials, "Method of preparing a polar based magnetic ink suitable for inkjet printing and characterization of Ni and Mn ferrite thin film," San Francisco, CA, United States. (August 2017).

Chen, Y., Invited Talk, "Flexible Inkjet Printed Electronics and Applications," Dalian University of Technology. (August 2015).

Chen, Y., Invited Talk, "Flexible Inkjet Printed Electronics and Applications," Xidian University. (August 2015).

Chen, Y., SPIE Photonics West - Optical Components and Materials X, "Anomalous dispersive photonic bandgap fiber for ultra short pulse compression," SPIE, San Jose, CA, United States. (February 2013).

Additional Comments: SPIE Photonics West is the world largest photonics conference.

3. Consultancies:

Consultant for Nanohmics, Inc. on Printed Electronics and Materials. (2021 - Present).

Consultant for Omega Optics, Inc. on flexible phased array antenna program (NASA), and Si-nanomembrane program (AFOSR). (2009 - 2010).

5. Other Works not in Print:

a. Works "submitted" or "under review":

Journal Articles:

Halim, M. A., Karmakar, S., Hamid, M. A., Chandan, C. S. S., Rahaman, I., Urena, M. E., … Beall, G. W. (Submitted / Under Review). Improved Electrochemical Performance in Exfoliated Tetracyanonickelate-based Metal-Organic Framework. *ACS Applied Materials & Interfaces*. (2023)
Revised manuscript_ACS Appl Mater Interfaces-1.pdf

Additional Comments: Manuscript under revision for *ACS Applied Materials & Interfaces*
Impact Factor 9.5

Howlader, C., Chen, Y., & Geerts, W. J. (Submitted / Under Review). Antisolvent free depostion of lead-tin-based MAPbSn1-x(I0.75Br0.25)3 perovskite with a wide range of bandgap variation. *MRS Communications*. (September 15, 2023)

c. Other Works Not in Print:

Keynote / Plenary Addresses:

Chen, Y., Global Summit and Expo on Materials Science and Nanoscience (GSEMSN-2021), "3D printed flexible electronic devices for high frequency applications," Lisbon, Portugal. (September 7, 2021).

Additional Comments: Plenary Address

Chen, Y., 10TH International Conference & Expo On Materials Science And Engineering, "Advancement in flexible electronics with 3D printing of nanomaterials," Osaka, Japan. (June 14, 2021).

Additional Comments: Keynote Talk

Chen, Y., iNano-2020, "Molybdenum Disulfide and Nitrogen-Doped Graphene Heterostructure for printed flexible electronics." (June 17, 2020).

Additional Comments: Keynote Talk

Posters:

Howlader, C. Q. (corresponding author), Khakurel, N. (author), Geerts, W. J. (author), Gibson, G. (author), Chen, Y. (. (author), MRS Fall 2022 conference Boston, "Continuous MASnI3 Perovsite thin films deposited by spin coating without antisolvent treatment," Materials Research Society, Boston, MA, United States. (November 30, 2022).

Patents:

Lan, Xing, Chen, Yihong. "Collapsible Graphene Antennas and Arrays". (Date of Application: 2017).

Chen, Yihong, Monne, Mahmuda Akter. "An uncomplicated method for using polyvinyl alcohol solution as sacrificial material for printing

technology". Number / ID: U.S. Serial No. 63/124,213. (Date of Application: 2020).

Chen, Yihong, Monne, Mahmuda Akter. "A highly optimized method for the design and fabrication of flexible micro-electromechanical system (MEMS) switch by inkjet printing technology". United States. Number / ID: U.S. Serial No. 63/121,799. (Date of Application: 2020).

Subbaraman, Harish, Xu, Xiaochuan, Chen, Yihong, Chen, Ray T. "Method for fabricating and packaging an M x N phased-array antenna on a flexible substrate utilizing ink-jet printing". United States. Number / ID: US9,548,543. (Date Awarded: 2017).

Wang, Zhuo, Chen, Yihong. "Interfacial Separation and Electrochemical Delamination of CVD-growth Multi-layer graphene for recyclable use of copper powder". Number / ID: TX #2014-010. (Date Awarded: 2015).

C. Scholarly / Creative Grants and Contracts:

1. Funded External Grants and Contracts:

Chen, Yihong (Principal), Percent Contribution: 100%. Space Qualified, 3D-Printed, Electronic Assembly Demonstration (SPEAD) Printed Circuit Boards, NASA, Federal, $37,000.00. (Funded: August 3, 2022 - September 2, 2024). Grant.

Geerts, Wilhelmus J (Principal), Percent Contribution: 40%, Tate, Jitendra S (Co-Principal), Percent Contribution: 25%, Chen, Yihong (Co-Principal), Percent Contribution: 25%, Droopad, Ravindranath (Other), Percent Contribution: 5%, Rhodes, Christopher Peter (Other), Percent Contribution: 5%. MRI: Development of triaxial Vibrating Sample Magnetometry for Research and Education, NSF, Federal, $119,461.00. (Submitted: January 19, 2022, Funded: September 2022 - August 2024). Grant.
GeertsChenTate_NSF_MRI_triaxial VSM 2021-1.pdf

Chen, Yihong (Principal), Percent Contribution: 100%. Additive Manufacturing Process Kits for RF Components, DOD - MDA, Federal, $340,000.00. (Funded: May 2022 - May 2024). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Conformal and Compact Tri-band Antenna, MDA, Federal, $45,500.00. (Funded: November 20, 2023 - May 19, 2024). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. RF Attenuation Evaluation, ICON, Private / Foundation / Corporate, $1,000.00. (Funded: October 1, 2023 - March 31, 2024). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Millimeter Wave Imaging with High-Electron-Mobility Transistors, DOD - CBD, Federal, $13,000.00. (Funded: June 14, 2023 - December 14, 2023). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. High Gain Gigawatt Antenna for S and L-bands, AF, Federal, $20,000.00. (Funded: January 9, 2023 - October 10, 2023). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. HIgh-Power, Circularly Polarized Microwave Metalens, Air Force, Federal, $20,000.00. (Funded: January 9, 2023 - October 10, 2023). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Electronically Scanned, Multi-band SATCOM Array, SDA, Federal, $47,000.00. (Funded: September 30, 2022 - September 30, 2023). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Solar Sail Integrated Antenna Technology, NASA, Federal, $65,000.00. (Funded: July 25, 2022 - August 25, 2023). Grant.

Chen, Yihong (Principal), Droopad, Ravindranath (Co-Principal), Stern, Harold P, Stephan, Karl, Tate, Jitendra S, Geerts, Wilhelmus J, Shi, Xijun. Acquisition of Wide Frequency Band Characterization System for Electronic Devices, Antennas, and Intelligent Materials, DOD, Federal, $548,700.00. (Submitted: August 16, 2021, Funded: August 1, 2022 - July 31, 2023). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Aerosol Jet Printing and Evaluation of Innovative Electronic Inks, Electroninks, Inc., Private / Foundation / Corporate, $19,455.00. (Funded: September 1, 2022 - May 31, 2023). Grant.

Asiabanpour, Bahram (Supporting), Chen, Yihong (Principal). Additive Manufacturing Process Kits for RF Components, MDA- SBIR joint proposal with Nanohmics Inc., Federal, $45,000.00. (Submitted: 2020, Funded: 2020 - 2022). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Emerging Low Cost Reconfigurable Electronics, Northrop Grumman, Private / Foundation / Corporate, $10,000.00. (Funded: November 1, 2021 - October 31, 2022). Grant.

Additional Comments: 2021 Industrial Affiliates Program.

Chen, Yihong (Principal), Stephan, Karl (Supporting). Conformal, Peel-and-Stick Ferrite Waveguide Embedded in Road Striping, USDOT SBIR Phase II through Nanohmics, Federal, $125,000.00. (Submitted: June 14, 2020, Funded: September 23, 2020 - September 22, 2022). Grant.

Additional Comments: Total funding from USDOT is $500k. It only allows 50% subcontract. Texas State University got $125k. Beside Texas State University, there are two other subcontractors share $125k - a roadside testing partner and a fabrication scale-up partner.

Chen, Yihong (Principal), Percent Contribution: 100%. Preparation and Evaluation of Graphene Inks, Surgepower Materials, Private / Foundation / Corporate, $3,000.00. (Funded: June 15, 2022 - September 15, 2022). Grant.

Chen, Yihong, Percent Contribution: 100%. Thin Film Characterization, Nanohmics, Private / Foundation / Corporate, $13,535.00. (Funded: June 21, 2021 - June 20, 2022). Gift.

Chen, Yihong (Principal), Percent Contribution: 100%. Aerosol Jet Printing and Evaluation of Innovative Electronic Inks, Electroninks, Inc., Private / Foundation / Corporate, $19,924.84. (Funded: May 1, 2021 - May 31, 2022). Grant.

Chen, Yihong (Principal). Small Form Factor UHF Satcom Patch Antenna, SOCOM SBIR Phase I through Nanohmics, Federal, $43,000.00. (Funded: August 30, 2021 - February 28, 2022). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Emerging Low Cost Reconfigurable Electronics, Northrop Grumman, Private / Foundation / Corporate, $15,000.00. (Submitted: April 2020, Funded: October 8, 2020 - October 31, 2021). Grant.

Additional Comments: 2020 Industrial Affiliates Program.

Geerts, Wilhelmus J (Principal), Percent Contribution: 40%, Chen, Yihong (Co-Principal), Percent Contribution: 10%, Droopad, Ravindranath (Co-Principal), Percent Contribution: 10%, Rhodes, Christopher Peter (Co-Principal), Percent Contribution: 10%, Theodoropoulou, Nikoleta (Co-Principal), Percent Contribution: 10%, Spencer, Gregory F (Other), Percent Contribution: 5%, Tate, Jitendra S (Co-Principal), Percent Contribution: 10%, Smith, Casey Eben (Supporting), Percent Contribution: 5%. MRI: Acquisition of Vibrating Sample Magnetometer for Materials Research and Education, NSF-MRI, Federal, $225,330.00. (Funded: September 1, 2017 - August 30, 2021). Grant.
ProgressReportAugsut2020_NSF_MRI grant submitted-1.docx

Chen, Yihong (Principal), Percent Contribution: 100%. Low-Cost, Broad-Spectrum Antenna for Expanding Rural Broadband Access, USDA SBIR

through Nanohmics, Federal, $30,000.00. (Submitted: October 2019, Funded: September 1, 2020 - April 30, 2021). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Aerosol Jet Printing and Evaluation of Innovative Electronic Inks, Electroninks, Inc., Private / Foundation / Corporate, $25,885.00. (Funded: September 23, 2020 - March 23, 2021). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Broadband Antennas for Photonic Receiver, Navy SBIR through Nanohmics, Federal, $38,000.00. (Submitted: February 26, 2020, Funded: August 7, 2020 - February 3, 2021). Grant.

Chen, Yihong (Principal), Ortiz, Araceli Martinez (Co-Principal). Rise Up for Computer Science at Texas State University, Reboot Representation-National Center for Women & Informational Technology, Private / Foundation / Corporate, $15,693.00. (Funded: July 2019 - September 2020). Gift.

NCWIT 2 page Gift Letter 2019-1.pdf

Chen, Yihong (Principal), Percent Contribution: 100%. Aerosol Jet Printing and Evaluation of Innovative Electronic Inks, Electroninks, Inc., Private / Foundation / Corporate, $18,925.00. (Funded: January 1, 2020 - September 13, 2020). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Emerging low cost reconfigurable electronics, Northrop Grumman, Private / Foundation / Corporate, $10,000.00. (Funded: January 2019 - August 31, 2020). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Emerging low cost reconfigurable electronics, Northrop Grumman, Private / Foundation / Corporate, $17,500.00. (Funded: January 2018 - August 31, 2020). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Conformal, Peel-and-Stick Ferrite Waveguide Embedded in Road Striping, USDOT SBIR through Nanohmics, Federal, $46,000.00. (Submitted: April 22, 2019, Funded: October 15, 2019 - August 15, 2020). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Aerosol Jet Printing and Evaluation of Innovative Electronic Inks, Electroninks, Inc., Private / Foundation / Corporate, $25,840.00. (Funded: July 1, 2019 - December 31, 2019). Grant.

Chen, Yihong (Principal), Weigum, Shannon E (Co-Principal). NSF MRI: Acquisition of an Aerosol Jet 3D Printing System for Flexible Electronic Circuits, Additive Manufacturing and Material Development, National

Science Foundation, Federal, $264,128.00. (Submitted: January 5, 2016, Funded: September 1, 2016 - August 31, 2019). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. 3D Printing of Innovative Electronic Inks, Electroninks, Inc., Private / Foundation / Corporate, $30,333.00. (Funded: July 2018 - June 2019). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Research in ink-jet printable materials, Northrop Grumman, Private / Foundation / Corporate, $15,000.00. (Funded: January 2017 - December 2018). Grant.

Holtz, Mark W (Principal), Percent Contribution: 15%, Chen, Yihong (Supporting), Percent Contribution: 11%, Geerts, Wilhelmus J (Supporting), Percent Contribution: 15%, Droopad, Ravindranath (Supporting), Percent Contribution: 8%, Li, Jian (Co-Principal), Percent Contribution: 5%, Myers, Thomas H (Supporting), Percent Contribution: 8%, Piner, Edwin L (Supporting), Percent Contribution: 8%, Theodoropoulou, Nikoleta (Supporting), Percent Contribution: 15%, Zakhidov, Alexander (Supporting), Percent Contribution: 15%. System of Integrated Characterization of Electronic Devices and Materials, U.S. AFOSR, Federal, $332,086.00. (Funded: August 15, 2017 - August 14, 2018). Grant.

Additional Comments: Dr. Jian Li led the proposal submission. He departed from Texas State University after the award was announced but prior to the grant start date.

Chen, Yihong (Principal), Percent Contribution: 100%. Research in ink-jet printable materials, Northrop Grumman, Private / Foundation / Corporate, $25,000.00. (Funded: May 2016 - May 2018). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Inkjet-printed RF electronics and sensors, Northrop Grumman, Private / Foundation / Corporate, $20,000.00. (Funded: December 2014 - December 2017). Grant.

Chen, Yihong (Principal), Weigum, Shannon E (Supporting). Aerosol Jet Printing System for Additive Manufacturing and Material Development, Department of Defense, Federal, $393,003.00. (Submitted: December 11, 2015, Funded: August 1, 2016 - August 31, 2017). Grant.

Additional Comments: DOD (BAA-W911NF-15-R-0025)

Chen, Yihong (Principal), Percent Contribution: 100%. Fully Printed Flexible 4-bit 2D 16-Element (4x4) Graphene-Based Phased Array Antenna System, NASA, Federal, $225,000.00. (Funded: May 2015 - August 2017). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Flexible Electronics Research, RheoSense, Inc., Private / Foundation / Corporate, $19,800.00. (Funded: July 2017). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Ferromagnetic ink for 3-D printers, Northrop Grumman, $10,000.00. (Funded: January 2016 - December 2016). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Inkjet-printed RF electronics and sensors, Northrop Grumman, $10,000.00. (Funded: January 2016 - December 2016). Grant.

Yu, Qingkai, Chen, Yihong, McClellan, Stanley A. JETS / Sosa STO-S24613 (8-2285), Jacobs Technology Group, Private / Foundation / Corporate, $260,586.00. (Funded: January 2015 - April 2016). Contract.

Chen, Yihong (Principal), Percent Contribution: 100%. Low Cost Flexible Graphene-based Digital Beam Forming Phased-array Antennas, NASA, $62,500.00. (Funded: June 2014 - December 2014). Grant.

Song, In-Hyouk (Principal), You, Byoung Hee (Co-Principal), Piner, Edwin L (Co-Principal), Chen, Yihong (Co-Principal). Acquisition of ICP-RIE Capability at Texas State University - San Marcos, National Research Foundation, Federal, $486,599.00. (Funded: September 1, 2011 - August 31, 2014). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Fully Printed Flexible 4-Bit 2D (4x4) 16-Element Phased Array Antenna for Lunar Surface Communications, NASA, $600,000.00. (Funded: January 2009 - January 2011). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Ge Nanowire-based High Linearity RF Amplifiers, DARPA, $100,000.00. (Funded: April 2010 - October 2010). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. A Multi-band Photonic Phased Array Antenna for High-Date Rate Communication, NASA, $10,000.00. (Funded: February 2010 - August 2010). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Fully Printed Phased-array Antenna with Silicon Nanomembrane-Based 3-D Photonic Crystals for Optical True Time Delay Line, Air Force, $100,000.00. (Funded: September 2009 - March 2010). Grant.

2. Submitted, but not Funded, External Grants and Contracts:

Miyahara, Yoichi (Principal), Smith, Casey Eben (Co-Principal), Geerts, Wilhelmus J (Co-Principal), Holtz, Mark W (Co-Principal), Theodoropoulou, Nikoleta (Co-Principal), Chen, Yihong (Co-Principal), Kim, Namwon (Co-Principal), Martin, Benjamin (Co-Principal), Mahato, Dip Narayan (Co-Principal), Haque, Ariful. MRI: Acquisition of state-of-the-art lithography system for micro/nanometer scale device fabrication in research and education, National Science Foundation, Federal, $551,245.00. (Submitted: November 2023). Grant.

Miyahara, Yoichi (Principal), Satchell, Nathan David (Co-Principal), Holtz, Mark W (Co-Principal), Kim, Namwon (Co-Principal), Martin, Benjamin (Co-Principal), Chen, Yihong (Supporting), Theodoropoulou, Nikoleta (Supporting), Geerts, Wilhelmus J (Supporting), Haque, Ariful (Supporting), Piner, Edwin L (Supporting), Droopad, Ravindranath (Supporting), Mahato, Dip Narayan (Supporting), Smith, Casey Eben (Supporting). MRI: Acquisition of state-of-the-art lithography system for micro/nanometer scale device fabrication in research and education, National Science Foundation, Federal, $569,780.00. (Submitted: November 14, 2023). Grant.

Geerts, Wilhelmus J (Principal), Percent Contribution: 34%, Scolfaro, Luisa M (Co-Principal), Percent Contribution: 33%, Chen, Yihong Maggie (Co-Principal), Percent Contribution: 33%. Methods and Materials for resilient and high-power conversion efficient perovskite solar cells: barriers for ion migration and water diffusion., DOD, Federal, $787,184.00. (Submitted: November 6, 2023). Grant.
DODGeertsScolfaroChenFall2023_ResilientPerovskiteMaterialsandDevices V13 Summary-1.pdf

Haque, Ariful, Droopad, Ravindranath, Holtz, Mark W, Piner, Edwin L, Geerts, Wilhelmus J, Chen, Yihong, Hudnall, Todd W, Wistey, Mark A, Miyahara, Yoichi, Smith, Casey Eben, Mahato, Dip Narayan, Rastogi, Shiva Kumar, Kim, Namwon. Acquisition of a state-of-the-art Photoluminescence Spectrometer for Materials Characterization in Research and Education, Department of Defense, Federal, $434,519.00. (Submitted: September 2023). Grant.

Haque, Ariful (Principal), Droopad, Ravi (Co-Principal), Geerts, Wilhelmus (Co-Principal), Holtz, Mark (Co-Principal), Hudnall, Todd (Co-Principal), Kim, Namwon (Co-Principal), Chen, Maggie (Co-Principal), Miyahara, Yoichi (Co-Principal), Wistey, Mark (Co-Principal), Rastogi, Shiva (Co-Principal), Mahato, Dip (Co-Principal). MRI: Acquisition of a state-of-the-art photoluminescence spectrometer for research and education, National Science Foundation, Federal, $451,881.00. (Submitted: February 2023). Grant.

Miyahara, Yoichi (Principal), Smith, Casey Eben (Co-Principal), Geerts, Wilhelmus J (Co-Principal), Holtz, Mark W (Co-Principal), Theodoropoulou, Nikoleta (Co-Principal), Chen, Yihong (Co-Principal), Kim, Namwon (Co-

Principal), Martin, Benjamin (Co-Principal), Mahato, Dip Narayan (Co-Principal), Haque, Ariful. MRI: Acquisition of state-of-the-art lithography system for micro/nanometer scale device fabrication in research and education, National Science Foundation, Federal, $551,245.00. (Submitted: February 21, 2023). Grant.

Faroughi, Salah Aldin (Principal), Chen, Yihong (Co-Principal), Krause, Samantha Marie (Co-Principal). SITS: Sensing the impacts of climate change on unpredictable volumetric fluctuations in surficial soils, NSF, Federal, $400,000.00. (Submitted: April 2022). Grant.

Shi, Xijun (Principal), Faroughi, Salah (Co-Principal), Wang, Feng (Co-Principal), Chen, Yihong (Co-Principal), Collins, Kristina Henry (Co-Principal). CREST Center for Multifunctional Infrastructures Augmented with Edge Intelligence, National Science Foundation, Federal, $4,000,000.00. (Submitted: September 29, 2021). Grant.

Chen, Yihong (Principal), Percent Contribution: 90%, Yu, Qingkai (Co-Principal), Percent Contribution: 10%. Nanomaterial and Thin Film Transistor Development for High Frequency Printed Flexible Electronics, NSF EPMD, Federal, $408,906.00. (Submitted: July 8, 2020). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Ultra-Compact, Retractable Antenna for Unmanned Undersea Vehicles, Navy SBIR through Nanohmics, Federal, $45,000.00. (Submitted: July 2, 2020). Grant.

Additional Comments: This proposal is under review.

Chen, Yihong (Principal), Percent Contribution: 100%. Frequency-Tunable, Graphene-based Printed Phased Array Antennas, NASA, Federal, $37,500.00. (Submitted: April 20, 2020). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Printed Metasurface for Active Multibeam Radar Shaping, NASA, Federal, $50,000.00. (Submitted: April 20, 2020). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Electronically Steerable Radar Antenna Array, Navy, Federal, $64,500.00. (Submitted: February 26, 2020). Contract.

Chen, Yihong (Principal), Percent Contribution: 100%. Multi-Octave High-Efficiency Active Electronically Scanned Array, Navy, Federal, $79,200.00. (Submitted: February 26, 2020). Contract.

Chen, Yihong (Principal), Percent Contribution: 100%. Compact Phased Array SATCOM System, Army, Federal, $55,275.00. (Submitted: February 26, 2020). Grant.

Chen, Yihong (Principal), Percent Contribution: 80%, Stephan, Karl (Supporting), Percent Contribution: 20%. Printable, Robust Graphene-Based EMI Shielding, Army, Federal, $55,275.00. (Submitted: February 26, 2020). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Direct Write Manufacture of Electronic and RF structures on Curved Surfaces by Reactive Transfer Processing, Army, Federal, $25,000.00. (Submitted: October 2019). Contract.

Chen, Yihong (Principal), Percent Contribution: 100%. Efficient VLF and LF Excitation in the Ionosphere, Air Force, Federal, $45,000.00. (Submitted: October 2019). Contract.

Chen, Yihong (Principal), Percent Contribution: 100%. Ultra-Compact Direction Finding Antenna Arrays, Navy, Federal, $72,000.00. (Submitted: October 2019). Contract.

Dong, Zhijie (Principal), Jimenez, Jesus (Co-Principal), Kim, Namwon (Supporting), Valles Molina, Damian (Supporting), Ikehata, Keisuke (Supporting), Chen, Yihong (Supporting), Koutitas, Georgios. REU Site: Multidisciplinary Research in Data-INFORMED Engineering Problems, National Science Foundation, Federal, $404,658.00. (Submitted: August 28, 2019). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Dual-band Conformal Antennas with High Reliability for Telemetry, NextFlex Project Call 5.0, Private / Foundation / Corporate, $225,000.00. (Submitted: August 15, 2019). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Graphene-based Reliable and Flexible Interconnects for X-band Phased Array Antennas, NextFlex Project Call 5.0, Private / Foundation / Corporate, $200,000.00. (Submitted: August 15, 2019). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. 3D Printed wireless embedded sensor with autonomous quality monitoring capability for hypersonic space vehicles, Air Force, Federal, $45,000.00. (Submitted: June 2019). Contract.

Chen, Yihong (Principal), Percent Contribution: 100%. Broadband IR Obscurant, Army, Federal, $49,650.00. (Submitted: June 2019). Contract.

Chen, Yihong (Principal), Percent Contribution: 100%. Ultra-broadband VLF antenna, Air Force, Federal, $45,000.00. (Submitted: June 2019). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Conformal Peel-and-Stick Ferrite Antenna Appliques for SUAS, Air Force, Federal, $50,000.00. (Submitted: October 24, 2018). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. 3D Inkjet Printed Low Cost Large Area Highly Efficient Graphene Photovoltaics, DOE, Federal, $200,000.00. (Submitted: June 30, 2018). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. 3D Additive Manufacturing Demonstration of Programmable RF Antennas based-on High Dielectric Constant Substrates, Army, Federal, $50,000.00. (Submitted: February 8, 2018). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. A Rapid, Bedside Biosensor Test for Irritable Bowel Syndrome using microRNA Biomarkers in Blood, NIH, Federal, $100,000.00. (Submitted: September 19, 2017). Grant.

Chen, Yihong (Principal). Medical Wearable for First Responder Assessment and Remote Monitoring, DHA, Federal, $50,000.00. (Submitted: June 21, 2017). Contract.

Chen, Yihong (Principal). 3D Printed Miniaturized Reconfigurable Multiband Multibeam Phased Array Antenna Based on Graphene and Ferromagnetic Nanomaterials, NASA, Federal, $75,000.00. (Submitted: January 20, 2017). Contract.

Chen, Yihong (Principal). Fully Printed, Low-Loss Active Phased Array Antenna System for SmallSat, NASA, $200,000.00. (Submitted: 2015). Grant.

Chen, Yihong. Low-cost Flexible Graphene Field Effect Transistor-based Bio-sensors, Air Force, $82,599.00. (Submitted: 2014). Grant.

Chen, Yihong (Principal). Low-cost Graphene-based Radio Frequency Wireless Biological Detection System, NSF Career proposal, Federal, $507,068.00. (Submitted: 2014). Grant.

Chen, Yihong (Principal). Wearable Graphene-based Chemical and Biological Sensors, CBD, $45,449.00. (Submitted: 2014). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Graphene Based Flexible Phased-array Antenna System for Communication, NSF EPMD, $299,989.00. (Submitted: November 3, 2014). Grant.

Chen, Yihong (Principal). Fully graphene-based printable solar-voltaic sheets for conjunctive electrical and crop production", NSF CBET –Energy for Sustainability, $300,000.00. (Submitted: 2013). Grant.

Chen, Yihong (Principal). Graphene synthesis, doping, bandgap-engineering and large area-device fabrication methods for next-generation flexible electronics, NSF Career proposal, $408,564.00. (Submitted: 2013). Grant.

Chen, Yihong (Principal). Low cost high performance quantum dot mid-wave infrared focal plane array, DARPA, $30,000.00. (Submitted: 2013). Grant.

Chen, Yihong (Principal). Low cost High Performance Quantum Dot Mid-Wave Infrared Focal Plane Array, NSF SSS proposal, $150,000.00. (Submitted: 2013). Grant.

Asiabanpour, Bahram (Principal), Yu, Qingkai (Co-Principal), Aslan, Semih (Supporting), Jimenez, Jesus (Supporting), Salamy, H (Supporting), Tate, J (Supporting), Chen, Yihong (Supporting), Chen, Heping (Supporting), Bartlett, L (Supporting), Romanella, S (Supporting). REU Site: Renewable energy generation and water desalination by graphene-based technologies, NSF-REU, Federal, $280,000.00. (Submitted: 2013). Grant.

Chen, Yihong (Principal). Graphene Based Flexible Phased-array Antenna System for Communication, NSF Career proposal, $400,119.00. (Submitted: 2012). Grant.

Chen, Yihong (Co-Principal). PVD and sputtering system, NSF MRI. (Submitted: 2012). Grant.

Chen, Yihong (Co-Principal). Integrating Nanoscale Science, Engineering, and Technology into Undergraduate Engineering Curricula, NSF NUE, $200,000.00. (Submitted: 2011). Grant.

Chen, Yihong. Large Area Graphene for Advanced Touch-screens and Solar Cells, NHARP pre-proposal. (Submitted: 2011). Grant.

Chen, Yihong (Principal). Multi-band multi-beam reconfigurable electronic/optical controlled PAA, NASA SBIR, $30,000.00. (Submitted: 2011). Grant.

Chen, Yihong (Co-Principal). Fabrication Tools for High-K Device, NSF MRI. (Submitted: 2010). Grant.

Chen, Yihong (Co-Principal). ICP-RIE Etch Tool, NSF MRI. (Submitted: 2010). Grant.

Chen, Yihong (Co-Principal). Integrating Nanoscale Science, Engineering, and Technology into Undergraduate Engineering Curricula, NSF NUE, $200,000.00. (Submitted: 2010). Grant.

Chen, Yihong. Carbon nanotube based printed high speed transistor for flexible large area sensors, NHARP. (Submitted: 2009). Grant.

Chen, Yihong. Fully Printed Conformal High Frequency Broadband Multi-beam Phased-array Antenna, Army SBIR, $30,000.00. (Submitted: 2009). Grant.

Chen, Yihong (Principal). High Frequency Flexible Thin Film Transistors Based on Carbon Nanotube, AF STTR, $50,000.00. (Submitted: 2009). Grant.

Chen, Yihong. Ink-jet Printed Flexible Thin-film Solar Cell Based on Si Nanoparticles and Carbon-nanotubes, NHARP. (Submitted: 2009). Grant.

Chen, Yihong (Principal). Wideband Photonic Bandgap Fiber Based Multi-beam Receive Array, MDA SBIR, $30,000.00. (Submitted: 2009). Grant.

3. Funded Internal Grants and Contracts:

Shi, Xijun (Principal), Percent Contribution: 50%, Chen, Yihong (Co-Principal), Percent Contribution: 50%. Multidisciplinary Internal Research Grant Program: Nondestructive Assessment of Additive Dispersion Quality in Conductive Concrete using Electromagnetic Waves, Texas State University, $29,834.00. (Funded: 2021 - 2022). Grant.

Geerts, Wilhelmus J, Percent Contribution: 34%, Tate, Jitendra S, Percent Contribution: 33%, Chen, Yihong, Percent Contribution: 33%. Materials with Intelligence: Magnetic Field Assisted Additive Manufacturing, Texas State University, $16,000.00. (Funded: January 11, 2021 - May 31, 2022). Grant.

Wistey, Mark A, Percent Contribution: 12.5%, Chen, Yihong (Co-Principal), Percent Contribution: 12.5%, Weigum, Shannon E, Percent Contribution: 12.5%, Benavides, Elizabeth Ashley, Percent Contribution: 12.5%, Ngu, Hee Hiong, Percent Contribution: 12.5%, Irvin, Jennifer A, Percent Contribution: 12.5%, Betancourt, Tania, Percent Contribution: 12.5%, Holtz, Mark W, Percent Contribution: 12.5%. FEES and Machine Learning for Diagnostics, Texas State University, Texas State University, $10,000.00. (Funded: March 2019 - March 2020). Grant.

Chen, Yihong (Principal), Percent Contribution: 50%, Yu, Qingkai (Co-Principal), Percent Contribution: 25%, Weigum, Shannon E (Co-Principal), Percent Contribution: 25%. Flexible, Disposable and Highly Sensitive Biosensor Based on Graphene Field Effect Transistor, Texas State University

MIRG program, Texas State University, $25,000.00. (Funded: September 2013 - August 2015). Grant.

Chen, Yihong (Principal), Percent Contribution: 100%. Texas State University One time funding for support of research activities, Texas State University, $26,000.00. (Funded: December 2009 - November 2010). Grant.

4. Submitted, but not Funded, Internal Grants and Contracts:

Chen, Yihong. Flexible Amorphous Silicon Solar Sheets with Graphene Electrodes for Conjunctive Electrical and Crop Harvest, MIRG, $25,000.00. (Submitted: 2013). Grant.

Chen, Yihong. REP, $8,000.00. (Submitted: 2012). Grant.

Chen, Yihong. REP, $8,000.00. (Submitted: 2010). Grant.

Chen, Yihong. REP, $8,000.00. (Submitted: 2009). Grant.

D. Scholarly / Creative Fellowships, Awards, Honors:

Fellowship Recipient: LBJ Institute for STEM Education and Research Faculty Fellow. August 2018 - August 2020

Award / Honor Recipient: Patent Application Initial Award, NASA. January 2011

Award / Honor Recipient: Tech Brief Initial Award, NASA. May 2010

F. Media Recognition:

Internet, The University Star. (November 15, 2019).

Additional Comments: Texas State professors pave way for NASA antennas https://universitystar.com/?s=maggie+chen

Magazine, Texas Monthly. (July 2016).
Texas Monthly p1-1.jpg
Texas Monthly p2-1.jpg
Additional Comments: Technology Leaps from Texas State to the Stars

Magazine, NASA Tech Brief. (July 2013).

Additional Comments: Fully Printed, Flexible, Phased-Array Antenna for Lunar Surface Communication

http://www.techbriefs.com/component/content/article/1291-uncategorised/16773

Magazine, NASA Tech Brief. (June 2010).

Additional Comments: Fully Printed High-Frequency Phased-Array Antenna on Flexible Substrate
http://www.techbriefs.com/component/content/article/8070

Newspaper, USA Today. (November 2016).
USA news p1-1.jpg
USA news p2-1.jpg
Additional Comments: Mars in 2033? Here We Come

IV. SERVICE

A. Institutional

2. College:

Member, College T&P Committee Representative. (September 1, 2021 - August 31, 2023).

Organizer, WISE conference steering committee. (2015 - 2019).

Additional Comments: Annual Women in Science and Engineering (WISE) conference is a very important event for both female and male students with opportunities to network with industry, faculty, and students. I was involved in WISE and Society of Women Engineers (SWE) for a few years. As an organizing committee member, I was involved in the conference planning, getting on board invited speakers, obtaining donation and registration fee coverage from Ingram School of Engineering, promoting the conference among undergraduate, master and Ph.D. students, soliciting posters, organizing the conference, and judging the posters. After conference, the committee had lengthy discussion of the success, room for improvement, and new ideas for future conferences.

Member, REP proposal evaluation committee. (2017 - 2018).

Liaison of Ingram School of Engineering to MSEC PhD program. (May 2018 - August 2018).

Additional Comments: Liaison of Ingram School of Engineering to MSEC PhD program about program change to remove the MS requirement for admission. Working with Dr. Jennifer Irvin on the MS Engineering degree plan.

WISE/SWE support activates. (2013 - 2014).

Additional Comments: Annual Women in Science and Engineering (WISE) conference is a very important event for both female and male students with opportunities to network with industry, faculty, and students. I was involved in WISE and Society of Women Engineers (SWE) for a few years. As an organizing committee member, I was involved in the conference planning, getting on board invited speakers, obtaining donation and registration fee coverage from Ingram School of Engineering, promoting the conference among undergraduate, master and Ph.D. students, soliciting posters, organizing the conference, and judging the posters. After conference, the committee had lengthy discussion of the success, room for improvement, and new ideas for future conferences.

3. Department/School:

Serve on commencement. (2016 - 2023).

Chair, Annual Review Evaluation Committee. (September 1, 2021 - August 31, 2023).

Chair, Personnel Committee. (September 1, 2021 - August 31, 2023).

Serve as library representative for Ingram School of Engineering. (September 1, 2017 - August 31, 2023).

Member, Award Nomination Committee. (2019 - 2021).

Serve on searching committee of an Assistant Professor in Structural Engineering. (September 1, 2020 - August 31, 2021).

Serve on searching committee of MSEC/EE Assistant Professor. (September 1, 2020 - August 31, 2021).

Member, BSME Advisory Team Member. (2019 - 2020).

Member, Scholarship Committee. (2019 - 2020).

Participant, Graduation ceremony. (2019 - 2020).

Serve on searching committee of EE/CE assistant professor. (2016 - 2017).

Serve on searching committee of EE/CE assistant professor. (2015 - 2016).

Serve as library representative for Ingram School of Engineering. (2012 - 2016).

Serve on Bobcat day, Texas State University. (2015).

Serve on WEP (Women in Engineering Program) Introduce a Girl to Engineering Day outreach program representing Texas State University. (2015).

Additional Comments: Women in Engineering Program (WEP) is one of my focuses in department services.

Serve on commencement. (2014 - 2015).

Serve on searching committee of an Assoc/Full Professor in Micro & Nano. (2012 - 2013).

Serve on WEP (Women in Engineering Program) Introduce a Girl to Engineering Day outreach program representing Texas State University. (2010 - 2013).

Serve on Bobcat day. (October 12, 2013).

Serve on two Bobcat days. (2011).

Serve on the Minifab Processing/Equipment Strategy group led by Dr. Larry Larson. (2010 - 2011).

Serve on the Search Committee for MSEC ETF Faculty Position. (2010).

Serve on the Search Committee for MSEC MSEC EE and Bio Faculty Position. (2010).

Presentation during departmental outreach activity of High School Student tour. (2009).

Serve on commencement. (2009).

B. Professional:

Member, IEEE EDS Technical Committee on Electron Materials. (November 2021 - Present).

Additional Comments: <a href="https://eds.ieee.org/about-eds/governance/technical-committees/electronic-materials-

committee">https://eds.ieee.org/about-eds/governance/technical-committees/electronic-materials-committee

Associate Editor, Frontiers in Electronics, London, United Kingdom. (August 25, 2020 - Present).

Editor-in-Chief, AAAFM-Material Communications Journal, Los Angeles, CA, United States. (May 30, 2019 - Present).

Academic Editor, International Journal of Antennas and Propagation. (April 8, 2019 - Present).

Additional Comments: Editorial Board

Associate Editor, Optical Engineering Journal, United States. (2014 - Present).

Additional Comments: This is a prestigious Journal published by SPIE (The International Society for Optical Engineering) from 1962-present.

Chair, Photonics West, conference OE113 Optical Interconnects XX, San Francisco, CA, United States. (February 2018 - February 2023).

Additional Comments: SPIE Photonics West is the world's largest photonics technologies event, consisting of three conferences and two world-class exhibitions. Over 23,000 people attend Photonics West 2019 to learn, connect, and find the latest research and products in biomedical optics, lasers, and biomedical optics, biophotonics, industrial lasers, optoelectronics, microfabrication, MOEMS-MEMS, displays, and more.

Chair and speaker invitation, 10th Annual Congress of Nano Science and Technology-2021 (Nano S&T-2021), Osaka, Japan. (May 19, 2021 - May 21, 2021).

Additional Comments: Nano S&T-2021 covers a wide range of topics related to Breaking Research of Nano Science and Technology, New Nanomaterials, Nanofabrication and Characterization, Nanomedicine and Nanobiotechnology, Nano Electronics, Nano Optics, Nano Photonics and Nanomagnetism, Nanotech for Energy and Environment, Nanotech for Other Applications.

Invited talk, invited by 2020 EMN Osaka Meeting, Osaka, Japan. (July 19, 2020 - July 23, 2020).

Additional Comments: EMN stands for energy, materials and nanotechnology. The EMN grew out of a small workshop series that began in 2008 at a traditional villa in Orlando, Florida. In the past 10 years, the Conference series have been held in 25 countries.

Keynote speaker and organizing committee member, invited by Material Science and Nanostructure Engineering Conference (M&N-2019), Kula Lumpur, Malaysia. (May 13, 2019 - May 14, 2019).

Lead Guest Editor, International Journal of Antennas and Propagation. (2016 - 2018).

Reviewer / Referee, International Journal of Antennas and Propagation. (2016 - 2018).

Conference Committee Member, Asia Communications and Photonics Conference 2018 (ACP 2018), Hangzhou, China. (September 2017 - October 2018).

Reviewer / Referee, Reviewer of J. Phys. D: Appl. Phys. (June 2017).

Reviewer / Referee, Reviewer of IEEE Transactions on Instrumentation & Measurement. (May 2017).

Panelist, NSF ECCS-DMR Joint Panel. (March 23, 2017 - March 24, 2017).

Panelist, NSF 2D-panel. (February 23, 2017 - February 24, 2017).

Reviewer / Referee, Reviewer of Optical Engineering Journal. (2016).

Co-Chair, “Space Settlement” Symposium. (December 2015 - September 2016).

Invited talk invitation, 2016 EMN Summer Meeting, Cancun, Mexico. (June 5, 2016 - June 9, 2016).

Additional Comments: EMN stands for energy, materials and nanotechnology. The EMN grew out of a small workshop series that began in 2008 at a traditional villa in Orlando, Florida. In the past 10 years, the Conference series have been held in 25 countries.

Panelist, NSF 2D-panel. (February 18, 2016 - February 19, 2016).

Additional Comments: Getting involved in NSF panels help me to know and have close contact with well-known researches in the field. During the two days of panel, connections are established, and my work is recognized. I attended three NSF panels, which gave me great experience.

Reviewer / Referee, Reviewer of Chinese Optics Letters. (2013).

Reviewer / Referee, Reviewer of Optics Express. (2013).

Reviewer / Referee, Reviewer of Optics Letters. (2013).

Reviewer / Referee, Reviewer of Optics and Photonics Letters. (2012).

Reviewer / Referee, Reviewer of JEMWA/PIER Journals. (2012).

Reviewer / Referee, Reviewer of the 7th IEEE Conference on Industrial Electronics and Applications (ICIEA). (2012).

Serve on Membership Committee of SPIE. (2010 - 2011).

Conference Committee member, SPIE Optoelectronic Devices and Integration, Photonics Asia. (2010).

Chair, Chair of Workshop/Tutorial, IEEE Nano. (2007).

Chair, Conference Chair, SPIE Optoelectronic Devices and Integration, Photonics Asia. (2007).

Chair, Conference Chair, SPIE Optoelectronic Devices and Integration, Photonics Asia. (2004).

C. Community:

Board Member, Westwood Debate & Speech Boosters, Austin, TX. (January 2018 - May 2020).

D. Organization Memberships:

Senior member of IEEE (The Institute of Electrical and Electronics Engineers) (IEEE). (2009 - Present).

Senior Member of OSA (Optical Society of America) (OSA). (2009 - Present).

Senior member of SPIE (The International Society for Optical Engineering) (SPIE). (2009 - Present).